

VT 15 Susie Wilson Road to West Street Extension Scoping Update Proposal



October 16, 2017



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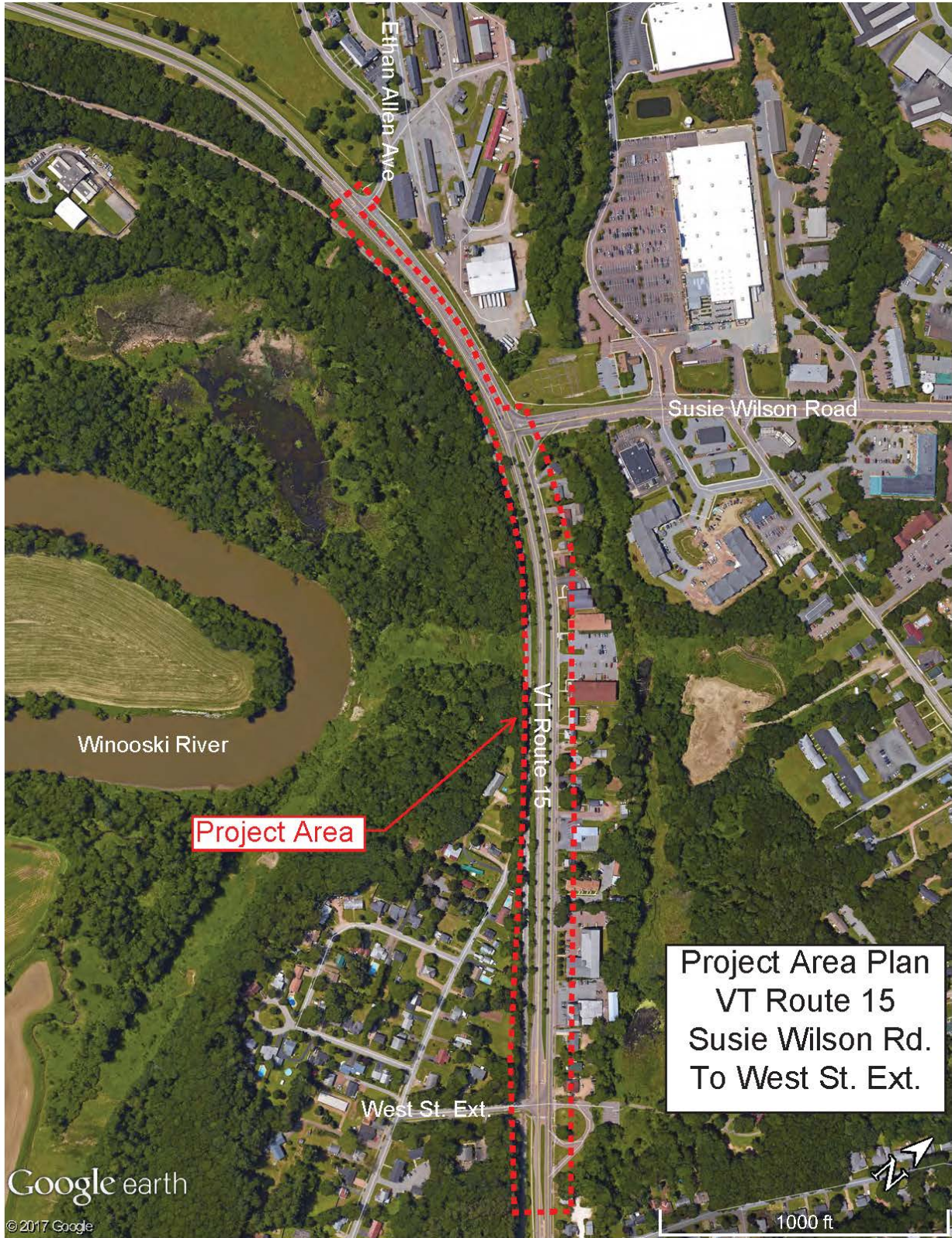
1 Project Description

The VT Route 15 corridor from Winooski to Essex Junction is recognized as a primary transportation corridor that lacks sufficient bicycle facilities. Much progress has been made in recent years to address this. In Essex Junction, from West Street Extension to the Champlain Valley Exposition, bicycle lanes have been added to VT Route 15 by converting the four lane section to a three lane section with a center left turn lane. For the VT Route 15 section from Winooski to Susie Wilson road, a shared use path is currently being designed and needed acquisitions and easements are being pursued. This study focuses on the remaining VT Route 15 section from Susie Wilson Road to West Street Extension. This section was included a previous corridor study which resulted in a two-way cycle track proposed for this section. This alternative was considered problematic since it requires all bicyclists to cross VT Route 15 at Susie Wilson Road and all westbound bicyclists to cross VT Route 15 at West street.

This study will evaluate additional alternatives including the following:

- Eastbound and Westbound separated bicycle lane added with removal or reduction of the existing median
- Eastbound and Westbound separated bicycle lane added with VT Route 15 travel lanes reduced from two to one lane.

It is assumed a two-way cycle track alternative and elimination of the jug handle at West Street extension will not be developed or evaluated. The study area will extend to the Ethan Allen Avenue intersection to consider a VT Route 15 crossing at this intersection and extending an eastbound bicycle lane to Susie Wilson Road. This will remove the need to cross VT Route 15 at Susie Wilson Road. The VT Route 15/Susie Wilson Road intersection is currently being scoped for improvement alternatives by VTrans. For this study, it is assumed the intersection's scoping will include needs for the VT 15 Route bicyclists and this study will be based on exiting intersection conditions. Study alternatives will consider the need to provide for two future southbound left turns lanes from Susie Wilson Road onto VT Route 15.



2 Study Area Scope and Approach

The following utilizes the standard scope provided by the CCRPC for scoping projects. Stantec has included additional detail to clarify the scope for this project.

A. Kick-Off Meeting

Scope: Stantec will meet with CCRPC, Village of Essex Junction, Town of Essex, and a Project Committee as developed by the CCRPC to discuss the project goals, objectives, process, timeliness and deliverables.

Approach/Assumptions: This meeting has occurred on August 17, 2017 as part of the proposal development process.

Deliverables: Meeting agenda, and presentation of existing information.

B. Compile Existing/Future Conditions Data & Develop a Base Map

Scope/Approach/Assumptions: Using the available high resolution orthophotos, the CCRPC will develop an existing conditions base map. The map will include available GIS layers as obtained from the Town/CCRPC and VCGI. These may include tax parcels, environmental resources, stormwater, hazardous waste sites, and utilities. The Village and Town will provide any permitted developments that may affect the corridor. Stantec will also solicit CCTA's plans for the area and indicate existing and/or proposed bus routes, facilities and stops. Stantec will obtain the record plans from the 1960's VT Route 15 construction project.

It is assumed no field survey or digital terrain model will be provided for the project area. The project base map will be based on available orthophotos and Lidar. Stantec will also research the existing highway ROW for VT Route 15. The existing ROW will be shown on the base mapping (Task G). It is assumed Stantec will contact CWD, Fairpoint and Vermont Gas Systems requesting information on any of their existing facilities in the project area. Using the information provided, the general location of the existing facilities will be shown on the base mapping. It is assumed additional field survey to provide utility elevations, such as pipe inverts, will not be required.

For the VT Route 15/Susie Wilson Road and the VT Route 15/ West Street extension intersections, Stantec will collect the available turning movement count information from VTrans and/or the CCRPC and solicit from the Village and Town planning departments specifics on any proposed developments that may influence traffic volumes. Using this information, Stantec will adjust the traffic volumes and perform the existing conditions traffic analysis for 2017 and design year 2027 for the AM and PM peak periods. The traffic analysis will include analyzing reducing the eastbound and westbound lanes from two lanes to one lane. Stantec will also request crash data from VTrans, summarize the data, and highlight the predominating causes.

Stantec will collect and review existing studies. Using the Vermont State Standards, Stantec will develop the project's design criteria.

Deliverables: Existing conditions map and summary of traffic analysis.

C. Local Concerns Meeting

Scope: Stantec, working with the Village, will organize and facilitate a Local Concerns Meeting to hear the public's issues and concerns in order to develop a clear understanding of the purpose and need of the project. This meeting will be hosted by the CCRPC and the Village of Essex Junction with local officials invited. This meeting may be an opportunity to discuss any future maintenance issues or concerns with the proposed project. As an outcome of the local concerns meeting and the project kickoff meeting, the consultant will develop the Project's Draft Purpose and Need Statement. The consultant will generate this statement based on local input and an understanding of existing conditions.

Approach/Assumptions: Stantec will develop a meeting agenda and a slide presentation in close coordination with the CCRPC Project Manager to facilitate the Local Concerns Meeting. The names and addresses of all people, including adjacent property owners, to be notified will be provided by the Village and CCRPC. A direct mailing will be sent out and announcements will be posted via Front Porch Forum by the Village. The presentation will include an existing conditions plan illustrating collected information. This information will be reviewed by the CCRPC and Village and edited for the Local Concerns Meeting. The presentation and agenda will include pertinent discussion items such as: existing traffic operations, safety, crash prone conditions, bicycles, pedestrians, etc. The goal is to facilitate an organized solicitation of concerns. Potential alternatives will also be discussed.

The Stantec team shall prepare minutes of the meetings and distribute them to and the CCRPC Project Manager. Comments received from anyone not present at the meetings, such as ones received via the comment section on the project website, will be attached to the minutes of the meetings. The meeting minutes will focus on the comments received and required action items. Comments will be organized by topic for easy referencing.

Deliverables: Meeting agenda, slide presentation, and meeting minutes.

D. Purpose and Need

Scope: Following the Local Concerns meeting, Stantec will develop a draft Purpose and Need Statement for this project. Stantec understands the importance of the Purpose and Need Statement as it is used to identify and evaluate alternatives and assist with selecting a preferred alternative. Based on our experience with scoping projects, the needs portion typically points out existing issues revealed during the information collection and local concerns tasks. The Purpose and Need Statement will be distributed to the CCRPC Project Manager for review and approval. The Purpose and Need Statement will be discussed at subsequent meetings and throughout the scoping process. Any discussed edits will be included and an updated statement distributed.

Deliverables: Draft and revised Purpose and Need Statement.

E. Develop Conceptual Alternatives

Scope: In cooperation with the Village and CCRPC staff, the consultant will identify potential alternatives utilizing the information compiled for the base plan, and site visit. The consultant will develop typical sections for the different alternatives that show basic dimensions and, if

applicable, where the facility is located within existing road rights of way and in relation to travel lanes, shoulders, existing building faces and other features.

Approach/Assumptions: To develop an accurate evaluation of impacts and costs, the alternatives will be developed using the base mapping. It is assumed the following four long term alternatives (in addition to the Do Nothing) will be developed and evaluated:

- Do Nothing (No-Build)
- Eastbound and Westbound separated bicycle lane added with removal or reduction of the existing median
- Eastbound and Westbound separated bicycle lane added with VT Route 15 travel lanes reduced from two to one lane.
- VT Route 15 Bicycle crossing at Ethan Avenue and eastbound bike lane connection to Susie Wilson Road Intersection.

Short term improvements such as pavement markings will also be considered, discussed and included in the scoping report.

Any widening of the roadway may create new impervious areas potentially requiring storm water treatment. The need for storm water treatment will be included on the evaluation. The proposed improvements will be shown on the base mapping.

Once alternatives are analyzed and alternative sketches are developed, the Stantec team in coordination with the CCRPC and the Village will conduct an alternative presentation meeting to solicit ideas, issues, and concerns.

The alternative plans will include the following:

1. A traffic analysis for the design year that refines the proposed geometric improvements.
2. Plan sheets showing proposed improvements.
3. Existing Right-of-Way.
5. Conceptual cost estimate.

During development of the alternatives, it is assumed one meeting with the CCRPC and Village will be required.

Deliverables: Traffic analysis of alternatives, draft and revised alternative plans, and conceptual cost estimate, Alternatives presentation agenda, presentation and meeting notes.

F. Identify Natural and Cultural Resource Constraints and Permitting Requirements

Scope: This work was performed as part of the previous scoping and will be reference in this scoping report. Stantec will perform a cursory update of natural and cultural resource issues including wetlands, surface waters, flora/fauna, endangered species, storm water, hazardous

material sites, and forest land. Stantec will identify potential impacts on these resources and permitting requirements, including the potential for review under Act 250. When possible, documentation from appropriate state and federal agencies (e.g. Agency of Natural Resources, Department of Fish and Wildlife, Corps of Engineers) will be included to summarize the extent to which resources may or may not be impacted. The consultant will identify any permits that will likely be needed for the project.

Where a closed, subsurface drainage system is proposed (new or addition to existing), an estimate of new, redeveloped and existing contributing surface areas will be included as well as an assessment of what will be required to obtain a stormwater discharge permit. An estimate of the area of disturbance that will result from the project will be included to assess the extent of mitigation that will be required under the National Pollutant Discharge and Elimination of Sediment (erosion prevention and sediment control) permit.

Historic and Archaeological resources will not be reviewed by qualified experts as this was performed in the previous study.

Deliverables: Results of field and research reviews to be incorporated into existing conditions plan.

G. Identify Right-of-Way

Scope: Compile right-of-way and property ownership information along the alignment of the proposed project. This information should identify public/private ownership and any existing easements or restrictions (e.g. Act 250 permits) on affected property. Right-of-way information will be mapped on the same base mapping as the existing conditions.

Approach/Assumptions: Stantec will provide the existing highway right-of-way from their previous research. The Village will provide the names of the property owners in the project area. Stantec will include this information on the plans.

Deliverables: Documentation of research and right-of-way for base map.

H. Identify Utility Conflicts

Scope: Identify and discuss public and private underground and overhead utilities (water, sewer, fiber optics, electric, TV, cable, phone) in the project area. Include a preliminary assessment of whether any relocation will be required and indicate if the relocations may occur outside of the existing Rights of Way. For underground utilities, an assessment should be made of whether they will be impacted by construction of the proposed improvements. The assessment will include identification of owners of potentially impacted utilities.

Approach/Assumptions: Stantec will provide a project plan to area utility companies asking for what existing facilities or proposed expansion or relocation plans they have in the project area and request any location information and condition information they have. This information along with the aerial line information will be shown on the plans. Impacts to existing facilities and potential mitigation will be depicted.

Deliverables: List of utility impacts.

I. Alternatives Evaluation

Scope: The proposed alternatives, including the no build alternative, will be evaluated and the results summarized in an alternatives matrix. The matrix will include transportation impacts (traffic, bike and pedestrian), resource impacts, right-of-way impacts, utility impacts, ability to meet the project purpose and need, estimated cost and any other factors that will help the community evaluate the alternatives being considered. The redesign/redevelopment of the intersection has the potential to improve the community character and this item will be part of the evaluation. The socio-economic impact or benefit of alternatives will be noted.

Approach/Assumptions: A draft will be developed and provided by Stantec to the CCRPC and Village for review prior meeting. Comments will be incorporated for the subsequent presentation to the Village Trustees. The provided information will also include a draft scoping report describing the project, existing conditions, and alternatives.

Deliverables: Recommendation on preferred alternative, evaluation matrix, draft scoping report, PowerPoint of alternatives.

J. Develop Preliminary Cost Estimates

Scope: The consultant will develop preliminary cost estimates for further planning, design, construction and maintenance costs of the project. Cost estimates shall include preliminary bid item quantities. Per foot or lump sum costs will not be an acceptable substitute. The long term alternatives estimates will be based on the assumption that the project will be constructed using a combination of Federal and local funding and will be managed by the local community. The long term alternatives cost estimates will include amounts for construction, engineering, municipal project management and construction inspection. For the short term/interim improvements that are identified, estimates will be provided assuming local funding will be used for their implementation.

Approach/Assumptions: Stantec will utilize the VTrans Estimator database and recent bid results to develop a cost estimate for the preferred alternative. Cost estimates prepared to compare alternatives will be order of magnitude estimates and will not be carried out to the same level of detail as the preferred alternative cost estimate. Cost estimates will be conducted in tandem with the Alternatives Evaluation and be presented to the Project Advisory Committee as part of the alternatives matrix at their meeting under Task I.

Deliverables: Cost estimates for alternatives.

K. Alternatives Presentations

Scope: Stantec and CCRPC staff will present the alternatives considered and seek the Village Trustees endorsement of a preferred alternative.

Approach/Assumptions: The alternatives presentation is planned to be in PowerPoint format.

Deliverables: Alternative presentation in PowerPoint format and meeting notes from alternatives presentation

L. Report Production

Scope: Using information gathered from the activities outlined above and from the meetings with the Village and CCRPC, submit draft and final scoping reports outlining the findings of the study. This report will be an update and reference the previous report.

Approach/Assumptions: It is proposed the report sections be developed as the work is completed. For instance, the Existing Conditions sections and Proposed Alternatives section will be completed prior to the alternatives presentation meeting. This will allow a draft document to be used to update parties interested on the project status. It will also facilitate input on alternatives.

M. Project Team

The proposed Stantec Project Team includes:

Gregory Edwards, PE – Principal / Project Manager

Eric Alling, PE – Senior Engineer

Rick Bryant, PE – Senior Traffic Engineer

Sean Neely – Project Engineer

Polly Harris, Environmental Specialist

3 TASK / LABOR ITEM / COST

The task labor hours estimate can be found on the following page.



55 Green Mountain Drive
South Burlington, VT 05403

TASK-LABOR HOUR SCHEDULE

CCRPC / Village of Essex Junction
VT Route 15 Susie Wilson Road to West Street Extension Scoping Update

September 6, 2017

TASK			Principal / PM/ Sr Traffic Engr.	Sr. Engineer	Project Engr./ Env. Specialist	Technical / Clerical	TOTAL
A. Attend Kick-off meeting and review project scope/schedule							
1.		Develop agenda and presentation and meet with committee	Assume completed				0
B. Collect Existing Data/ Compile Base Mapping							
1.		Field review/inspection/documentation		2	4		6
3		Traffic Analysis - 2 intersections					
	a.	Summarize intersection & traffic volume data. Develop DHV.	2		4		6
	b.	Solicit proposed developments, adjust volumes and document	2		8		10
	c.	Prepare AM/PM traffic analysis	4		24		28
	c.	Update crash history and summarize rate and predominant causes	2		4		6
	d.	Summarize results	2		8		10
5		Collect and review existing studies and Record Drawings		4	2		6
6		Identify and document existing resources	See F.1 Below				
7		Develop base mapping (Coordination, review, and set up)					0
	a.	Collect othophoto and Lidar		1		4	5
	b.	Update base mapping w/collected data		2		8	10
	c.	Collect existing utility information and show in base mapping		2		4	6
8		Review existing studies		2			2
9		Establish design criteria	1	2			3
C. Local Concerns Meeting / Purpose and Need							
1.	a.	Develop list of property owners and stakeholders	Provided By City				
	b.	Notice, prepare for, & attend Local Concerns Meeting	2	2	6		10
2.		Document LCM and distribute notes		1			1
D. Purpose and Need							
1		Develop draft purpose & need statement		2			2
2		Develop final purpose & need statement for Committee endorsement		1			1
E. Development of Conceptual Alternatives							
1		Develop plans and sections of 2 alternatives.	8	16	32	16	72
2		Develop conceptual estimates for alternatives	1	4	8		13
3		Review with Committee (assume 1 mtg.)	3	3			6
F. Identify Natural Cultural Resources Constraints							
1.		Desktop and field review			4	2	6
2.		Include resources on base mapping			1	2	3
3.		Conduct team coordination		2			2
4.		Attend Corp of Engineers coordination meeting	Assume Not Required				
G. Identify Right of Way							0
1		Review VTrans record plans and collect P.O. names		4			4
2		Include on base plans		1		4	5
H. Identify Utility Conflicts							0
				1	4		5
I. Alternative Presentation Meetings							
1.		Prepare evaluation and matrix	1	8	4	1	14
2.		Prepare presentation material & present to committee	4	2		12	18

TASK			Principal / PM/ Sr Traffic Engr.	Sr. Engineer	Project Engr./ Env. Specialist	Technical / Clerical	TOTAL
	3.	Notice, present alternatives & document meeting	4	4			8
	5.	Meet with committee to finalize preferred alternative	3	3			6
J.	Preliminary Cost Estimate						0
	1.	Prepare cost estimate for the preferred alternative		2	4		6
L.	Report Production						
	1.	Compile information & prepare draft scoping report	4	36		8	48
	2.	Submit to CCRPC for review		1			1
	3.	Revise with CCRPC comments		8		2	10
TOTALS			43	116	117	63	339

4 Appendices

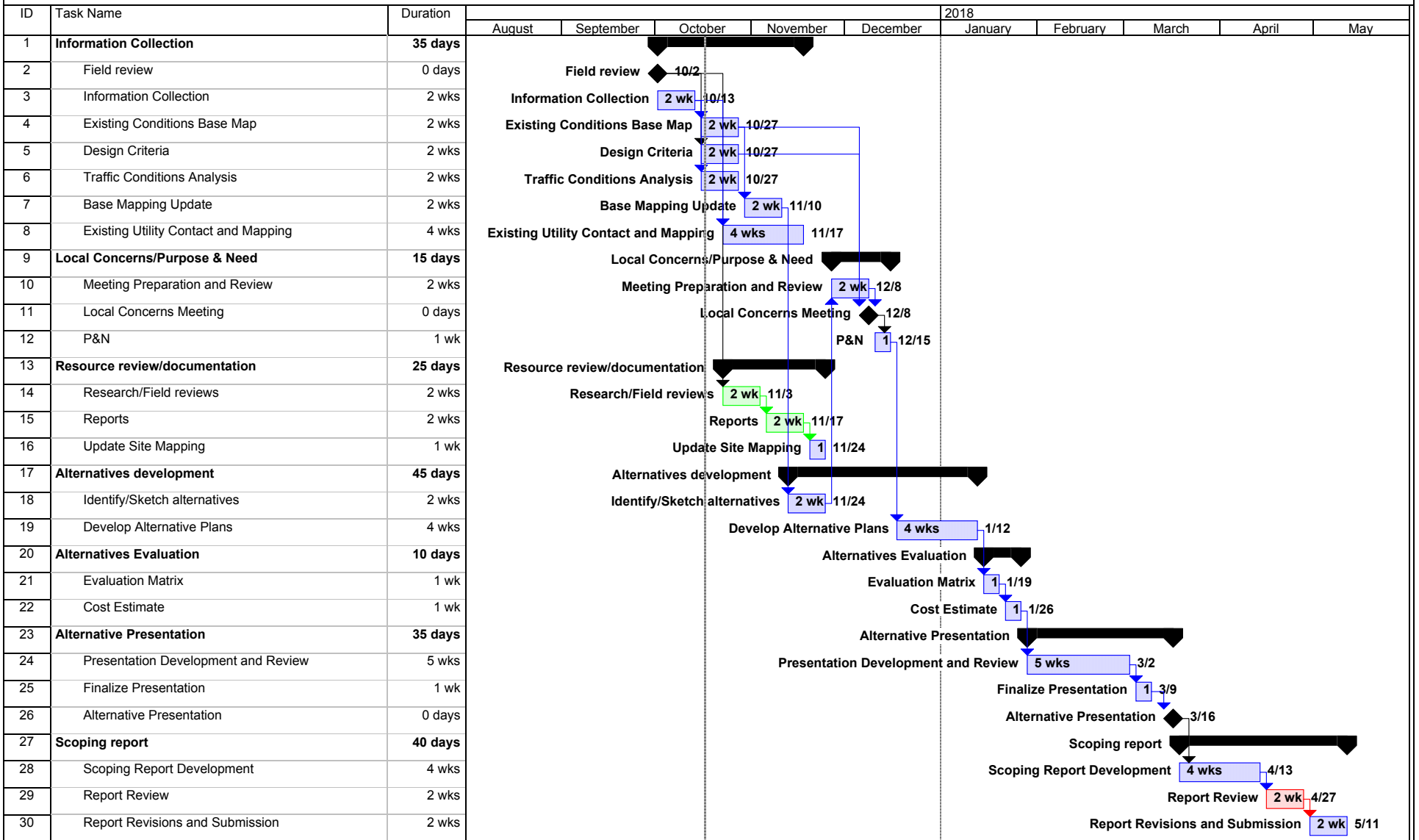
APPENDIX A – PROJECT SCHEDULE

APPENDIX A

Project Schedule

PROPOSED PROJECT SCHEDULE

VT 15 Susie Wilson Road to West Street Extension Scoping



Project: vaot gen'l servs Date: Tue 10/17/17	Task		Summary		Rolloled Up Progress		Deadline	
	Split		Rolloled Up Task		VAOT Task			
	Progress		Rolloled Up Split		Project Summary			
	Milestone		Rolloled Up Milestone		External Milestone			