

# Local Agency Professional Services Lump Sum Consultant Agreement

Agreement Number: CCF05-20

Does this Require DES filing?  Yes  No

Firm/Organization Legal Name (do not use dba's): Q-Free America, Inc.	
Address 4660 La Jolla Village Dr., Suite 500	Federal Aid Number STPUL-HIPUL-9913(019)
UBI Number 604-441-156	Federal TIN 45-4337530
Execution Date The date of the last party to sign.	Completion Date December 31, 2026
1099 Form Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Federal Participation <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Project Title Adaptive Signal Control System Phase 2	
Description of Work <i>Implementation of an Adaptive Signal Control Technology (ASCT) system to operate along four major corridors within Snohomish County and the Cities of Lynnwood, Bothell, Mill Creek and Mountlake Terrace. The ASCT will allow the County to provide realtime changes to the signal timing parameters in response to the variations in demand and traffic conditions.</i>	
<input type="checkbox"/> Yes    % <input checked="" type="checkbox"/> No DBE Participation <input type="checkbox"/> Yes    % <input checked="" type="checkbox"/> No MBE Participation <input type="checkbox"/> Yes    % <input checked="" type="checkbox"/> No WBE Participation <input type="checkbox"/> Yes    % <input checked="" type="checkbox"/> No SBE Participation	Maximum Amount Payable: \$1,005,741.31

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THIS AGREEMENT, made and entered into as shown in the “Execution Date” box on page one (1) of this AGREEMENT, between the, hereinafter called the “AGENCY,” and the “Firm/Organization Name” referenced on page one (1) of this AGREEMENT, hereinafter called the “CONSULTANT.”

WHEREAS, the AGENCY desires to accomplish the work referenced in “Description of Work” on page one (1) of this AGREEMENT and hereafter called the “SERVICES;” and does not have sufficient staff to meet the required commitment and therefore deems it advisable and desirable to engage the assistance of a CONSULTANT to provide the necessary SERVICES; and

WHEREAS, the CONSULTANT represents that they comply with the Washington State Statutes relating to professional registration, if applicable, and has signified a willingness to furnish consulting services to the AGENCY.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

## **I. General Description of Work**

The work under this AGREEMENT shall consist of the above-described SERVICES as herein defined, and necessary to accomplish the completed work for this project. The CONSULTANT shall furnish all services, labor, and related equipment and, if applicable, sub-consultants and subcontractors necessary to conduct and complete the SERVICES as designated elsewhere in this AGREEMENT.

## **II. Scope of Work**

The Scope of Work and projected level of effort required for these SERVICES is described in Exhibit “A” attached hereto and by this reference made a part of this AGREEMENT. The Scope of Work was developed utilizing performance based contracting methodologies.

## **III. General Requirements**

All aspects of coordination of the work of this AGREEMENT with outside agencies, groups, or individuals shall receive advance approval by the AGENCY. Necessary contacts and meetings with agencies, groups, and/or individuals shall be coordinated through the AGENCY. The CONSULTANT shall attend coordination, progress, and presentation meetings with the AGENCY and/or such State, Federal, Community, City, or County officials, groups or individuals as may be requested by the AGENCY. The AGENCY will provide the CONSULTANT sufficient notice prior to meetings requiring CONSULTANT participation. The minimum required hours or days’ notice shall be agreed to between the AGENCY and the CONSULTANT and shown in Exhibit “A.”

The CONSULTANT shall prepare a monthly progress report, in a form approved by the AGENCY, which will outline in written and graphical form the various phases and the order of performance of the SERVICES in sufficient detail so that the progress of the SERVICES can easily be evaluated.

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations, and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

Participation for Disadvantaged Business Enterprises (DBE) or Small Business Enterprises (SBE), if required, per 49 CFR Part 26 shall be shown on the heading of this AGREEMENT. If DBE firms are utilized at the commencement of this AGREEMENT, the amounts authorized to each firm and their certification number will be shown on Exhibit “B” attached hereto and by this reference made part of this AGREEMENT. If the Prime CONSULTANT is a DBE certified firm they must comply with the Commercial Useful Function (CUF) regulation outlined in the AGENCY’s “DBE Program Participation Plan” and perform a minimum of 30% of the total amount of this AGREEMENT. It is recommended, but not required, that non-DBE Prime CONSULTANTS perform a minimum of 30% of the total amount of this AGREEMENT.

In the absence of a mandatory UDBE, the Consultant shall continue their outreach efforts to provide SBE firms maximum practicable opportunities.

The CONSULTANT, on a monthly basis, shall enter the amounts paid to all firms involved with this AGREEMENT into the [wsdot.diversitycompliance.com](http://wsdot.diversitycompliance.com) program. Payment information shall identify any DBE Participation. Non-minority, woman owned DBEs does not count towards UDBE goal attainment.

All Reports, PS&E materials, and other data furnished to the CONSULTANT by the AGENCY shall be returned. All electronic files, prepared by the CONSULTANT, must meet the requirements as outlined in Exhibit “C – Preparation and Delivery of Electronic Engineering and other Data.”

All designs, drawings, specifications, documents, and other work products, including all electronic files, prepared by the CONSULTANT prior to completion or termination of this AGREEMENT are instruments of service for these SERVICES, and are the property of the AGENCY. Reuse by the AGENCY or by others, acting through or on behalf of the AGENCY of any such instruments of service, not occurring as a part of this SERVICE, shall be without liability or legal exposure to the CONSULTANT.

Any and all notices or requests required under this AGREEMENT shall be made in writing and sent to the other party by (i) certified mail, return receipt requested, or (ii) by email or facsimile, to the address set forth below:

**If to AGENCY:**

Name: Gidget Ames  
Agency: Snohomish County  
Address: 3000 Rockefeller Ave, M/S 607  
City: Everett State: WA Zip:98201  
Email: Gidget.ames@snoco.org  
Phone: 425-262-2360  
Facsimile: N/A

**If to CONSULTANT:**

Name: Tom Stiles, P.E. PTOE  
Agency: Q-Free America, Inc.  
Address: 4660 La Jolla Village Dr., Suite 500  
City: San Diego State: CA Zip: 92008  
Email: Tom.stiles@q-free.com  
Phone: 801-440-1174  
Facsimile: 757-546-1832

#### **IV. Time for Beginning and Completion**

The CONSULTANT shall not begin any work under the terms of this AGREEMENT until authorized in writing by the AGENCY. This AGREEMENT may require filing with the Department of Enterprise Services (DES) pursuant to RCW 39.26.140. If such approval is required by DES, this AGREEMENT shall not bind the AGENCY until approved by DES. If the AGREEMENT must be approved by DES, work cannot begin, nor payment made until ten (10) or more working days following the date of filing, and until approved by DES. Any subsequent SUPPLEMENTAL AGREEMENT may also be subject to filing and/or approval from DES. All work under this AGREEMENT shall be completed by the date shown in the heading of this AGREEMENT titled “Completion Date.”

The established completion time shall not be extended because of any delays attributable to the CONSULTANT, but may be extended by the AGENCY in the event of a delay attributable to the AGENCY, or because of unavoidable delays caused by an act of GOD, or governmental actions, or other conditions beyond the control of the CONSULTANT. A prior supplemental AGREEMENT issued by the AGENCY is required to extend the established completion time.

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## V. Payment Provisions

The CONSULTANT shall be paid by the AGENCY for completed SERVICES rendered under this AGREEMENT as provided hereinafter. Such payment shall be full compensation for SERVICES performed or SERVICES rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete SERVICES. The CONSULTANT shall conform to all applicable portions of 48 CFR Part 31 ([www.ecfr.gov](http://www.ecfr.gov)). The estimate in support of the lump sum amount is attached hereto as Exhibits “D” and “E” and by this reference made part of this AGREEMENT.

- A. Lump Sum Agreement: Payment for all consulting SERVICES shall be on the basis of a lump sum amount as shown on page one (1) of this AGREEMENT.
- B. Maximum Amount Payable: The Maximum Total Amount Payable by the AGENCY to the CONSULTANT under this AGREEMENT shall not exceed the amount shown in the heading of this AGREEMENT on page one (1.) The Maximum Amount Payable does not include payment for extra work as stipulated in section XIII, “Extra Work.” No minimum amount payable is guaranteed under this AGREEMENT.
- C. Monthly Progress Payments: The CONSULTANT may submit billings to the AGENCY for reimbursement of costs on a monthly basis. To provide a means of verifying the billed salary costs for the CONSULTANT’s employees, the AGENCY may conduct employee interviews. These interviews may consist of recording the names, titles, salary rates, and present duties of those employees performing work on the SERVICES at the time of the interview.
- D. Final Payment: Final Payment of any balance due the CONSULTANT of the gross amount earned will be made promptly upon its verification by the AGENCY after the completion of the SERVICES under this AGREEMENT, contingent, if applicable, upon receipt of all PS&E, plans, maps, notes, reports, electronic data, and other related documents which are required to be furnished under this AGREEMENT. Acceptance of such Final Payment by the CONSULTANT shall constitute a release of all claims for payment, which the CONSULTANT may have against the AGENCY unless such claims are specifically reserved in writing and transmitted to the AGENCY by the CONSULTANT prior to its acceptance. Said Final Payment shall not, however, be a bar to any claims that the AGENCY may have against the CONSULTANT or to any remedies the AGENCY may pursue with respect to such claims.

The payment of any billing will not constitute agreement as to the appropriateness of any item and at the time of final audit all required adjustments will be made and reflected in a final payment. In the event that such final audit reveals an overpayment to the CONSULTANT, the CONSULTANT will refund such overpayment to the AGENCY within thirty (30) calendar days of notice of the overpayment. Such refund shall not constitute a waiver by the CONSULTANT for any claims relating to the validity of a finding by the AGENCY of overpayment. Per the WSDOT’s “Audit Guide for Consultants,” Chapter 23 “Resolution Procedures,” the CONSULTANT has twenty (20) working days after receipt of the final Post Audit to begin the appeal process to the AGENCY for audit findings.

- E. Inspection of Cost Records: The CONSULTANT and their sub-consultants shall keep available for inspection by representatives of the AGENCY and the United States, for a period of six (6) years after receipt of final payment, the cost records and accounts pertaining to this AGREEMENT and all items related to or bearing upon these records with the following exception: if any litigation, claim or audit arising out of, in connection with, or related to this AGREEMENT is initiated before the expiration of the six (6) year period, the cost records and accounts shall be retained until such litigation, claim, or audit involving the records is completed.

A post audit may be performed on this AGREEMENT. The audit, if any, will be performed by the State Auditor, WSDOT’s Internal Audit Office and /or at the request of the AGENCY’s Project Manager.

## **VI. Sub-Contracting**

The AGENCY permits subcontracts for those items of SERVICES as shown in Exhibit “A” attached hereto and by this reference made part of this AGREEMENT.

The CONSULTANT shall not subcontract for the performance of any SERVICE under this AGREEMENT without prior written permission of the AGENCY. No permission for subcontracting shall create, between the AGENCY and sub-consultant, any contract or any other relationship.

Compensation for this sub-consultant SERVICES shall be based on the cost factors shown on Exhibit “E” attached hereto and by this reference made part of this AGREEMENT.

All reimbursable direct labor, indirect cost rate, direct non-salary costs and fixed fee costs for the sub-consultant shall be negotiated and substantiated in accordance with section V “Payment Provisions” herein and shall be memorialized in a final written acknowledgement between the parties.

All subcontracts shall contain all applicable provisions of this AGREEMENT, and the CONSULTANT shall require each sub-consultant or subcontractor, of any tier, to abide by the terms and conditions of this AGREEMENT. With respect to sub-consultant payment, the CONSULTANT shall comply with all applicable sections of the STATE’s Prompt Payment laws as set forth in RCW 39.04.250 and RCW 39.76.011.

The CONSULTANT, sub-recipient, or sub-consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this AGREEMENT. The CONSULTANT shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the CONSULTANT to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the recipient deems appropriate.

## **VII. Employment and Organizational Conflict of Interest**

The CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the AGENCY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from the AGREEMENT price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

Any and all employees of the CONSULTANT or other persons while engaged in the performance of any work or services required of the CONSULTANT under this AGREEMENT, shall be considered employees of the CONSULTANT only and not of the AGENCY, and any and all claims that may arise under any Workmen’s Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the CONSULTANT’s employees or other persons while so engaged on any of the work or services provided to be rendered herein, shall be the sole obligation and responsibility of the CONSULTANT.

The CONSULTANT shall not engage, on a full- or part-time basis, or other basis, during the period of this AGREEMENT, any professional or technical personnel who are, or have been, at any time during the period of this AGREEMENT, in the employ of the United States Department of Transportation or the AGENCY, except regularly retired employees, without written consent of the public employer of such person if he/she will be working on this AGREEMENT for the CONSULTANT.

## VIII. Nondiscrimination

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, sub-consultants, subcontractors and successors in interest, agrees to comply with the following laws and regulations:

- Title VI of the Civil Rights Act of 1964  
(42 U.S.C. Chapter 21 Subchapter V § 2000d through 2000d-4a)
- Federal-aid Highway Act of 1973  
(23 U.S.C. Chapter 3 § 324)
- Rehabilitation Act of 1973  
(29 U.S.C. Chapter 16 Subchapter V § 794)
- Age Discrimination Act of 1975  
(42 U.S.C. Chapter 76 § 6101 *et. seq.*)
- Civil Rights Restoration Act of 1987  
(Public Law 100-259)
- American with Disabilities Act of 1990  
(42 U.S.C. Chapter 126 § 12101 *et. seq.*)
- 23 CFR Part 200
- 49 CFR Part 21
- 49 CFR Part 26
- RCW 49.60.180

In relation to Title VI of the Civil Rights Act of 1964, the CONSULTANT is bound by the provisions of Exhibit “F” attached hereto and by this reference made part of this AGREEMENT, and shall include the attached Exhibit “F” in every sub-contract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto.

## IX. Termination of Agreement

The right is reserved by the AGENCY to terminate this AGREEMENT at any time with or without cause upon ten (10) days written notice to the CONSULTANT.

In the event this AGREEMENT is terminated by the AGENCY, other than for default on the part of the CONSULTANT, a final payment shall be made to the CONSULTANT which, when added to any payments previously made, shall total the same percentage of the Lump Sum Amount as the work completed at the time of termination is to the total work required for the SERVICES. In addition, the CONSULTANT shall be paid for any authorized extra work completed.

No payment shall be made for any SERVICES completed after ten (10) days following receipt by the CONSULTANT of the notice to terminate. If the accumulated payment made to the CONSULTANT prior to Notice of Termination exceeds the total amount that would be due when computed as set forth in paragraph two (2) of this section, then no final payment shall be due and the CONSULTANT shall immediately reimburse the AGENCY for any excess paid.

If the services of the CONSULTANT are terminated by the AGENCY for default on the part of the CONSULTANT, the above formula for payment shall not apply.

In the event of a termination for default, the amount to be paid to the CONSULTANT shall be determined by the AGENCY with consideration given to the actual costs incurred by the CONSULTANT in performing SERVICES to the date of termination, the amount of SERVICES originally required which was satisfactorily completed to date of termination, whether that SERVICE is in a form or a type which is usable to the AGENCY at the time of termination, the cost to the AGENCY of employing another firm to complete the SERVICES required and the time which may be required to do so, and other factors which affect the value to the AGENCY of the SERVICES performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount, which would have been made using the formula set forth in paragraph two (2) of this section.

If it is determined for any reason that the CONSULTANT was not in default or that the CONSULTANT’s failure to perform is without the CONSULTANT’s or its employee’s fault or negligence, the termination shall be deemed to be a termination for the convenience of the AGENCY. In such an event, the CONSULTANT would be reimbursed for actual costs in accordance with the termination for other than default clauses listed previously.

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The CONSULTANT shall, within 15 days, notify the AGENCY in writing, in the event of the death of any member, partner, or officer of the CONSULTANT or the death or change of any of the CONSULTANT's supervisory and/or other key personnel assigned to the project or disaffiliation of any principally involved CONSULTANT employee. The CONSULTANT shall also notify the AGENCY, in writing, in the event of the sale or transfer of 50% or more of the beneficial ownership of the CONSULTANT within 15 days of such sale or transfer occurring. The CONSULTANT shall continue to be obligated to complete the SERVICES under the terms of this AGREEMENT unless the AGENCY chooses to terminate this AGREEMENT for convenience or chooses to renegotiate any term(s) of this AGREEMENT. If termination for convenience occurs, final payment will be made to the CONSULTANT as set forth in the second and third paragraphs of this section.

Payment for any part of the SERVICES by the AGENCY shall not constitute a waiver by the AGENCY of any remedies of any type it may have against the CONSULTANT for any breach of this AGREEMENT by the CONSULTANT, or for failure of the CONSULTANT to perform SERVICES required of it by the AGENCY. Forbearance of any rights under the AGREEMENT will not constitute waiver of entitlement to exercise those rights with respect to any future act or omission by the CONSULTANT.

## **X. Changes of Work**

The CONSULTANT shall make such changes and revisions in the completed work of this AGREEMENT as necessary to correct errors appearing therein, without additional compensation thereof. Should the AGENCY find it desirable for its own purposes to have previously satisfactorily completed SERVICES or parts thereof changed or revised, the CONSULTANT shall make such revisions as directed by the AGENCY. This work shall be considered as Extra Work and will be paid for as herein provided under section XIII "Extra Work."

## **XI. Disputes**

Any disputed issue not resolved pursuant to the terms of this AGREEMENT shall be submitted in writing within 10 days to the Director of Public Works or AGENCY Engineer, whose decision in the matter shall be final and binding on the parties of this AGREEMENT; provided however, that if an action is brought challenging the Director of Public Works or AGENCY Engineer's decision, that decision shall be subject to judicial review. If the parties to this AGREEMENT mutually agree, disputes concerning alleged design errors will be conducted under the procedures found in Exhibit "J". In the event that either party deem it necessary to institute legal action or proceeding to enforce any right or obligation under this AGREEMENT, this action shall be initiated in the Superior Court of the State of Washington, situated in the county in which the AGENCY is located. The parties hereto agree that all questions shall be resolved by application of Washington law and that the parties have the right of appeal from such decisions of the Superior Court in accordance with the laws of the State of Washington. The CONSULTANT hereby consents to the personal jurisdiction of the Superior Court of the State of Washington, situated in the county in which the AGENCY is located.

## **XII. Legal Relations**

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

The CONSULTANT shall defend, indemnify, and hold the State of Washington (STATE) and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the negligence of, or the breach of any obligation under this AGREEMENT by, the CONSULTANT or the CONSULTANT's agents, employees, sub consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable; provided that nothing herein shall require a CONSULTANT

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to defend or indemnify the STATE and the AGENCY and their officers and employees against and hold harmless the STATE and the AGENCY and their officers and employees from claims, demands or suits based solely upon the negligence of, or breach of any obligation under this AGREEMENT by the STATE and the AGENCY, their agents, officers, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the STATE and/or the AGENCY may be legally liable; and provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT is legally liable, and (b) the STATE and or the AGENCY, their agents, officers, employees, sub-consultants, subcontractors and or vendors, of any tier, or any other persons for whom the STATE and or the AGENCY may be legally liable, the defense and indemnity obligation shall be valid and enforceable only to the extent of the CONSULTANT's negligence or the negligence of the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable. This provision shall be included in any AGREEMENT between CONSULTANT and any sub-consultant, subcontractor and vendor, of any tier.

The CONSULTANT shall also defend, indemnify, and hold the STATE and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable, in performance of the Work under this AGREEMENT or arising out of any use in connection with the AGREEMENT of methods, processes, designs, information or other items furnished or communicated to STATE and/or the AGENCY, their agents, officers and employees pursuant to the AGREEMENT; provided that this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from STATE's and/or the AGENCY's, their agents', officers' and employees' failure to comply with specific written instructions regarding use provided to STATE and/or the AGENCY, their agents, officers and employees by the CONSULTANT, its agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable.

The CONSULTANT's relation to the AGENCY shall be at all times as an independent contractor.

Notwithstanding any determination by the Executive Ethics Board or other tribunal, the AGENCY may, in its sole discretion, by written notice to the CONSULTANT terminate this AGREEMENT if it is found after due notice and examination by the AGENCY that there is a violation of the Ethics in Public Service Act, Chapter 42.52 RCW; or any similar statute involving the CONSULTANT in the procurement of, or performance under, this AGREEMENT.

The CONSULTANT specifically assumes potential liability for actions brought by the CONSULTANT's own employees or its agents against the STATE and/or the AGENCY and, solely for the purpose of this indemnification and defense, the CONSULTANT specifically waives any immunity under the state industrial insurance law, Title 51 RCW. This waiver has been mutually negotiated by the Parties.

Unless otherwise specified in this AGREEMENT, the AGENCY shall be responsible for administration of construction contracts, if any, on the project. Subject to the processing of a new sole source, or an acceptable supplemental AGREEMENT, the CONSULTANT shall provide On-Call assistance to the AGENCY during contract administration. By providing such assistance, the CONSULTANT shall assume no responsibility for: proper construction techniques, job site safety, or any construction contractor's failure to perform its work in accordance with the contract documents.

The CONSULTANT shall obtain and keep in force during the terms of this AGREEMENT, or as otherwise required, the following insurance with companies or through sources approved by the State Insurance Commissioner pursuant to Title 48 RCW.

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## Insurance Coverage

- A. Worker's compensation and employer's liability insurance as required by the STATE.
- B. Commercial general liability insurance written under ISO Form CG 00 01 12 04 or its equivalent with minimum limits of one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) in the aggregate for each policy period.
- C. Business auto liability insurance written under ISO Form CG 00 01 10 01 or equivalent providing coverage for any "Auto" (Symbol 1) used in an amount not less than a one million dollar (\$1,000,000.00) combined single limit for each occurrence.

Excepting the Worker's Compensation Insurance and any Professional Liability Insurance, the STATE and AGENCY, their officers, employees, and agents will be named on all policies of CONSULTANT and any sub-consultant and/or subcontractor as an additional insured (the "AIs"), with no restrictions or limitations concerning products and completed operations coverage. This coverage shall be primary coverage and non-contributory and any coverage maintained by the AIs shall be excess over, and shall not contribute with, the additional insured coverage required hereunder. The CONSULTANT's and the sub-consultant's and/or subcontractor's insurer shall waive any and all rights of subrogation against the AIs. The CONSULTANT shall furnish the AGENCY with verification of insurance and endorsements required by this AGREEMENT. The AGENCY reserves the right to require complete, certified copies of all required insurance policies at any time.

All insurance shall be obtained from an insurance company authorized to do business in the State of Washington. The CONSULTANT shall submit a verification of insurance as outlined above within fourteen (14) days of the execution of this AGREEMENT to:

Name: Gidget Ames  
Agency: Snohomish County  
Address: 3000 Rockefeller Ave, M/S 607  
City: Everett State: WA Zip: 98272  
Email: gidget.ames@snoco.org  
Phone: 425-262-2360  
Facsimile: N/A

No cancellation of the foregoing policies shall be effective without thirty (30) days prior notice to the AGENCY.

The CONSULTANT's professional liability to the AGENCY, including that which may arise in reference to section IX "Termination of Agreement" of this AGREEMENT, shall be limited to the accumulative amount of the authorized AGREEMENT or one million dollars (\$1,000,000.00), whichever is greater, unless the limit of liability is increased by the AGENCY pursuant to Exhibit H. In no case shall the CONSULTANT's professional liability to third parties be limited in any way.

The parties enter into this AGREEMENT for the sole benefit of the parties, and to the exclusion of any third party, and no third party beneficiary is intended or created by the execution of this AGREEMENT.

The AGENCY will pay no progress payments under section V "Payment Provisions" until the CONSULTANT has fully complied with this section. This remedy is not exclusive; and the AGENCY may take such other action as is available to it under other provisions of this AGREEMENT, or otherwise in law.

### **XIII. Extra Work**

- A. The AGENCY may at any time, by written order, make changes within the general scope of this AGREEMENT in the SERVICES to be performed.
- B. If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the SERVICES under this AGREEMENT, whether or not changed by the order, or otherwise affects any other terms and conditions of this AGREEMENT, the AGENCY shall make an equitable adjustment in the: (1) maximum amount payable; (2) delivery or completion schedule, or both; and (3) other affected terms and shall modify this AGREEMENT accordingly.
- C. The CONSULTANT must submit any “request for equitable adjustment,” hereafter referred to as “CLAIM,” under this clause within thirty (30) days from the date of receipt of the written order. However, if the AGENCY decides that the facts justify it, the AGENCY may receive and act upon a CLAIM submitted before final payment of this AGREEMENT.
- D. Failure to agree to any adjustment shall be a dispute under the section XI “Disputes” clause. However, nothing in this clause shall excuse the CONSULTANT from proceeding with the AGREEMENT as changed.
- E. Notwithstanding the terms and conditions of paragraphs (A.) and (B.) above, the maximum amount payable for this AGREEMENT, shall not be increased or considered to be increased except by specific written supplement to this AGREEMENT.

### **XIV. Endorsement of Plans**

If applicable, the CONSULTANT shall place their endorsement on all plans, estimates, or any other engineering data furnished by them.

### **XV. Federal Review**

The Federal Highway Administration shall have the right to participate in the review or examination of the SERVICES in progress.

### **XVI. Certification of the Consultant and the AGENCY**

Attached hereto as Exhibit “G-1(a and b)” are the Certifications of the CONSULTANT and the AGENCY, Exhibit “G-2” Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions, Exhibit “G-3” Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying and Exhibit “G-4” Certificate of Current Cost or Pricing Data. Exhibit “G-3” is required only in AGREEMENT’s over one hundred thousand dollars (\$100,000.00) and Exhibit “G-4” is required only in AGREEMENT’s over five hundred thousand dollars (\$500,000.00.) These Exhibits must be executed by the CONSULTANT, and submitted with the master AGREEMENT, and returned to the AGENCY at the address listed in section III “General Requirements” prior to its performance of any SERVICES under this AGREEMENT.

### **XVII. Complete Agreement**

This document and referenced attachments contain all covenants, stipulations, and provisions agreed upon by the parties. No agent, or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as a supplement to this AGREEMENT.

## **XVIII. Execution and Acceptance**

This AGREEMENT may be simultaneously executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The CONSULTANT does hereby ratify and adopt all statements, representations, warranties, covenants, and AGREEMENT's contained in the proposal, and the supporting material submitted by the CONSULTANT, and does hereby accept this AGREEMENT and agrees to all of the terms and conditions thereof.

## **XIX. Protection of Confidential Information**

The CONSULTANT acknowledges that some of the material and information that may come into its possession or knowledge in connection with this AGREEMENT or its performance may consist of information that is exempt from disclosure to the public or other unauthorized persons under either chapter 42.56 RCW or other local, state or federal statutes ("State's Confidential Information"). The "State's Confidential Information" includes, but is not limited to, names, addresses, Social Security numbers, e-mail addresses, telephone numbers, financial profiles, credit card information, driver's license numbers, medical data, law enforcement records (or any other information identifiable to an individual), STATE and AGENCY source code or object code, STATE and AGENCY security data, non-public Specifications, STATE and AGENCY non-publicly available data, proprietary software, STATE and AGENCY security data, or information which may jeopardize any part of the project that relates to any of these types of information. The CONSULTANT agrees to hold the State's Confidential Information in strictest confidence and not to make use of the State's Confidential Information for any purpose other than the performance of this AGREEMENT, to release it only to authorized employees, sub-consultants or subcontractors requiring such information for the purposes of carrying out this AGREEMENT, and not to release, divulge, publish, transfer, sell, disclose, or otherwise make it known to any other party without the AGENCY's express written consent or as provided by law. The CONSULTANT agrees to release such information or material only to employees, sub-consultants or subcontractors who have signed a nondisclosure AGREEMENT, the terms of which have been previously approved by the AGENCY. The CONSULTANT agrees to implement physical, electronic, and managerial safeguards to prevent unauthorized access to the State's Confidential Information.

Immediately upon expiration or termination of this AGREEMENT, the CONSULTANT shall, at the AGENCY's option: (i) certify to the AGENCY that the CONSULTANT has destroyed all of the State's Confidential Information; or (ii) returned all of the State's Confidential Information to the AGENCY; or (iii) take whatever other steps the AGENCY requires of the CONSULTANT to protect the State's Confidential Information.

As required under Executive Order 00-03, the CONSULTANT shall maintain a log documenting the following: the State's Confidential Information received in the performance of this AGREEMENT; the purpose(s) for which the State's Confidential Information was received; who received, maintained and used the State's Confidential Information; and the final disposition of the State's Confidential Information. The CONSULTANT's records shall be subject to inspection, review, or audit upon reasonable notice from the AGENCY.

The AGENCY reserves the right to monitor, audit, or investigate the use of the State's Confidential Information collected, used, or acquired by the CONSULTANT through this AGREEMENT. The monitoring, auditing, or investigating may include, but is not limited to, salting databases.

Violation of this section by the CONSULTANT or its sub-consultants or subcontractors may result in termination of this AGREEMENT and demand for return of all State's Confidential Information, monetary damages, or penalties.

It is understood and acknowledged that the CONSULTANT may provide the AGENCY with information which is proprietary and/or confidential during the term of this AGREEMENT. The parties agree to maintain the confidentiality of such information during the term of this AGREEMENT and afterwards. All materials containing such proprietary and/or confidential information shall be clearly identified and marked as "Confidential" and shall be returned to the disclosing party at the conclusion of the SERVICES under this AGREEMENT.

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The CONSULTANT shall provide the AGENCY with a list of all information and materials it considers confidential and/or proprietary in nature: (a) at the commencement of the term of this AGREEMENT; or (b) as soon as such confidential or proprietary material is developed. "Proprietary and/or confidential information" is not meant to include any information which, at the time of its disclosure: (i) is already known to the other party; (ii) is rightfully disclosed to one of the parties by a third party that is not acting as an agent or representative for the other party; (iii) is independently developed by or for the other party; (iv) is publicly known; or (v) is generally utilized by unaffiliated third parties engaged in the same business or businesses as the CONSULTANT.

The parties also acknowledge that the AGENCY is subject to Washington State and federal public disclosure laws. As such, the AGENCY shall maintain the confidentiality of all such information marked proprietary and/or confidential or otherwise exempt, unless such disclosure is required under applicable state or federal law. If a public disclosure request is made to view materials identified as "Proprietary and/or confidential information" or otherwise exempt information, the AGENCY will notify the CONSULTANT of the request and of the date that such records will be released to the requester unless the CONSULTANT obtains a court order from a court of competent jurisdiction enjoining that disclosure. If the CONSULTANT fails to obtain the court order enjoining disclosure, the AGENCY will release the requested information on the date specified.

The CONSULTANT agrees to notify the sub-consultant of any AGENCY communication regarding disclosure that may include a sub-consultant's proprietary and/or confidential information. The CONSULTANT notification to the sub-consultant will include the date that such records will be released by the AGENCY to the requester and state that unless the sub-consultant obtains a court order from a court of competent jurisdiction enjoining that disclosure the AGENCY will release the requested information. If the CONSULTANT and/or sub-consultant fail to obtain a court order or other judicial relief enjoining the AGENCY by the release date, the CONSULTANT shall waive and release and shall hold harmless and indemnify the AGENCY from all claims of actual or alleged damages, liabilities, or costs associated with the AGENCY's said disclosure of sub-consultants' information.

## **XX. Records Maintenance**

During the progress of the Work and SERVICES provided hereunder and for a period of not less than six (6) years from the date of final payment to the CONSULTANT, the CONSULTANT shall keep, retain and maintain all "documents" pertaining to the SERVICES provided pursuant to this AGREEMENT. Copies of all "documents" pertaining to the SERVICES provided hereunder shall be made available for review at the CONSULTANT's place of business during normal working hours. If any litigation, claim or audit is commenced, the CONSULTANT shall cooperate with AGENCY and assist in the production of all such documents. "Documents" shall be retained until all litigation, claims or audit findings have been resolved even though such litigation, claim or audit continues past the six (6) year retention period.

For purposes of this AGREEMENT, "documents" means every writing or record of every type and description, including electronically stored information ("ESI"), that is in the possession, control, or custody of the CONSULTANT, including, without limitation, any and all correspondences, contracts, AGREEMENT 's, appraisals, plans, designs, data, surveys, maps, spreadsheets, memoranda, stenographic or handwritten notes, reports, records, telegrams, schedules, diaries, notebooks, logbooks, invoices, accounting records, work sheets, charts, notes, drafts, scribbles, recordings, visual displays, photographs, minutes of meetings, tabulations, computations, summaries, inventories, and writings regarding conferences, conversations or telephone conversations, and any and all other taped, recorded, written, printed or typed matters of any kind or description; every copy of the foregoing whether or not the original is in the possession, custody, or control of the CONSULTANT, and every copy of any of the foregoing, whether or not such copy is a copy identical to an original, or whether or not such copy contains any commentary or notation whatsoever that does not appear on the original.

For purposes of this AGREEMENT, “ESI” means any and all computer data or electronic recorded media of any kind, including “Native Files”, that are stored in any medium from which it can be retrieved and examined, either directly or after translation into a reasonably useable form. ESI may include information and/or documentation stored in various software programs such as: Email, Outlook, Word, Excel, Access, Publisher, PowerPoint, Adobe Acrobat, SQL databases, or any other software or electronic communication programs or databases that the CONSULTANT may use in the performance of its operations. ESI may be located on network servers, backup tapes, smart phones, thumb drives, CDs, DVDs, floppy disks, work computers, cell phones, laptops or any other electronic device that CONSULTANT uses in the performance of its Work or SERVICES hereunder, including any personal devices used by the CONSULTANT or any sub-consultant at home.

“Native files” are a subset of ESI and refer to the electronic format of the application in which such ESI is normally created, viewed, and /or modified.

The CONSULTANT shall include this section XX “Records Maintenance” in every subcontract it enters into in relation to this AGREEMENT and bind the sub-consultant to its terms, unless expressly agreed to otherwise in writing by the AGENCY prior to the execution of such subcontract.

In witness whereof, the parties hereto have executed this AGREEMENT as of the day and year shown in the “Execution Date” box on page one (1) of this AGREEMENT.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

*Any modification, change, or reformation of this AGREEMENT shall require approval as to form by the Office of the Attorney General.*

**CONTRACT TEMPLATE ONLY**

**REVIEWED ONLY:**

George B. Marsh  
Deputy Prosecuting Attorney  
Date: 11/25/2020

Agreement Number: CCF05-20

## 1. Project Overview

Under this AGREEMENT the CONSULTANT will deploy and configure an adaptive control system at 32 intersections along the following Snohomish County and Partnering Agencies' ("AGENCY") corridors:

- SR 527/SR522 total of 15 intersections

1. 237<sup>th</sup> St SE / SR 527
2. 240<sup>th</sup> St SE / SR 527
3. 240<sup>th</sup> St SE / 7<sup>th</sup> Ave SE
4. 242<sup>nd</sup> St SE / 7<sup>th</sup> Ave SE
5. 190<sup>th</sup> St / Bothell Way NE
6. Reder Way / Bothell Way NE
7. NE 185<sup>th</sup> St / Bothell Way NE
8. NE 183<sup>rd</sup> St / Bothell Way NE
9. Main St / Bothell Way NE
10. 96<sup>th</sup> Ave NE / SR 522
11. NE 180<sup>th</sup> St / SR 522
12. 98<sup>th</sup> Ave NE / SR 522
13. Bothell Way NE / SR 522
14. Kaysner Way / SR 522
15. Campus Way / SR 522

- 164th St SW total of 17 intersections

1. 164th St SW / 36<sup>th</sup> Ave W
2. 164th St SW / Swamp Creek P&R
3. 164th St SW / Alderwood Mall Parkway
4. Fred Meyer's Access / Alderwood Mall Parkway
5. 164th St SW / 25<sup>th</sup> Ave W
6. 164th St SW / Ash Way
7. Ash Way P&R / Ash Way
8. 164th St SW / SB 1-5 Ramp
9. 164th St SW / NB I-5 Ramp
10. 164th St SW / 14<sup>th</sup> Pl W
11. 164th St SW / 13<sup>th</sup> Ave W
12. 164th St SW / Larch Way
13. 164th St SW / 6<sup>th</sup> Ave W
14. 164th St SW / North Rd
15. 164th St SW / 1<sup>st</sup> Ave SE
16. 164th St SW / 3<sup>rd</sup> Ave SE
17. Main St / Mill Creek Blvd

The CONSULTANT will provide the following equipment and software to create a state-of-the-art transportation system for the AGENCY;

- The CONSULTANT' s Max Software Suite-
  1. MAXTIME adaptive - a locally distributed adaptive software
  2. MAXTIME - Local signal control software
  3. MAXVIEW - Central ATMS Software
- Intelight Hardware
  1. Intelight 2070-1C cards at twenty-seven (27) locations
  2. Intelight 2070 LDX traffic signal controllers at two (2) locations
- FLIR TrafiRadar with TIX-Stream EDGE Interface (or equivalent approved by the AGENCY) and associated miscellaneous mounting and installation hardware

The following equipment has been identified as beneficial to the project but is optional and had not been budgeted for. If there are cost savings in other areas of the project, and if directed to by the AGENCY, the CONSULTANT will provide the following equipment to further enhance the state-of-the-art transportation system for the AGENCY;

- GTT 764 Phase Selector Cards at up to twenty-two (22) intersections.
- Conflict Monitors at up to twenty-nine (29) intersections.
- CCTV Cameras at up to nine (9) intersections
- CCTV Video encoders at up to (4) locations

## 2. Scope of Services

### A. Detector and Communications Evaluation and Requirements for Detection Capability

The CONSULTANT will perform a brief value engineering study to review existing detection configurations and communications equipment at each project intersection. The study will include evaluation of the as-built drawings provided by the AGENCY and field reviews of the project corridors during peak traffic periods. The purpose of the field review is to evaluate the placement and quality of existing detection and observe "normal" queuing lengths and ensure adequate advanced detection on main street approaches.

Using the information provided, the CONSULTANT shall provide to the AGENCY's Project Manager an Executive Summary of the value engineering study. The summary will include the following:

- o Overview of work performed and identification of any locations where oversaturation may limit the effectiveness of the adaptive system,
- o Locations where existing advanced detector locations are occupied by normal cycle by cycle queueing (inadequate distance between stop-bar and advanced detection),
- o Locations where existing stop-bar detection is malfunctioning or inadequate for adaptive operations,
- o Recommended improvements and changes in detector location or configuration and limitations of the adaptive system if left "as-is."
- o Recommend improvements to support remote communications to the intersections.

### CONSULTANT Deliverables

1. Executive Summary of Detector and Communications Value Engineering Study;
2. Review Meeting with AGENCY to discuss study results and plan of action for corrections and improvements;
3. Furnish additional detection and communications equipment as necessary (based on decisions of AGENCY of Item 2. results);
4. Configure and integrate new advanced detection into existing traffic signal cabinet (Hardware installed by AGENCY).

## **AGENCY Deliverables**

1. Provide support for value engineering study including updated as-builts (if not provided in RFP process), input regarding normal traffic patterns or current congestion "hot-spots" along project corridors;
2. Review Executive Summary and attend a half-day workshop with CONSULTANT to discuss recommendations and implementation of necessary modifications;
3. Provide stop bar detection at all major and minor approaches (if not present);
4. Separate all existing stop bar loops with combined lead-ins for lane by lane detection or replace with alternate detection equipment;
5. Install CONSULTANT furnished detection and communications equipment, if purchased.

## **B. System Installation, Integration, and Deployment**

### ***Controller Upgrade***

The CONSULTANT shall perform timing conversions from the existing controller databases to MAXTIME controller databases. A Washington State Licensed Professional Engineer will oversee the effort and review all timings. Timing databases will be programmed off-site from the AGENCY's existing timing sheets and will be tested in both the Windows and Linux (Local Controller) versions of MAXTIME. While performing intersection timing conversions the following work will be included:

- Check phasing standards and remove old or incomplete data (i.e. incomplete TOD plans that are no longer used).
- Submit a log of timing parameter modifications (changes from the original database to the new converted databases) to the agency for review prior to field deployment.
- Work closely with the AGENCY to quickly resolve any incompatibility or operations issues encountered during timing conversion or testing.

The CONSULTANT will work with AGENCY staff to replace existing 2070 controllers with new 2070 controllers running MAXTIME controller software at all project locations.

### **CONSULTANT Deliverables**

1. Timing conversions for 32 Intersections in Project Scope;
2. Furnish 2070 controllers with MAXTIME intersection control software and MAXTIME adaptive local software;
3. Install new 2070 controllers.

### **AGENCY Deliverables**

1. Controller upgrade and turn-on support;
2. Traffic control associated with intersection upgrade

## **C. System Testing, Configuration, Tuning and Verification**

The CONSULTANT has recently deployed the MAXTIME adaptive, MAXTIME local signal control, and MAXVIEW central ATMS software solution as part of Adaptive Signal Control Phase 1 Project. The CONSULTANT and AGENCY agree that System Requirements verified and accepted during Phase 1 will not require additional verification as part of Phase 2. The System Requirements accepted during Phase 1 are identified as such in Table 2 System Requirements - ASC Phase 2 requirements matrix.



### ***System Verification***

For system requirements not verified or accepted during ASC Phase 1 Project, the CONSULTANT shall provide a Draft Verification Plan to the AGENCY for review 30-days prior to verification testing. The CONSULTANT shall provide all materials, equipment, and staff required to complete the testing and will coordinate testing with the AGENCY's Project Manager. At a minimum, all verification tests will be conducted in the presence of AGENCY staff or AGENCY representatives. The AGENCY may involve other stakeholders or Partnering Agencies to review and observe the test procedure at their own discretion.

### ***Field Reliability Test***

After system requirements are verified, the 30-day field reliability test will commence. During this period the AGENCY shall monitor the adaptive system and may identify system requirements that are not met and alert the CONSULTANT of system variances. Final System Acceptance will be granted on the project once the system completes the field reliability test.

### ***System Variances***

Should any unmet requirements be identified, such variables will be recorded as a system variance. The AGENCY's Project Manager shall determine the magnitude of the system variance and provide documentation to the CONSULTANT. The CONSULTANT's Project Manager will be prepared to provide a proposed solution to resolve the deficiency within seven days of receiving the system variance documentation. The CONSULTANT will work closely with the AGENCY's Project Manager to propose, resolve, and test any solutions to system variations.

#### **CONSULTANT Deliverables**

1. Develop and submit Verification Plan to AGENCY for review;
2. Submit Final Verification Plan to AGENCY with requested changes;
3. Facilitate verification testing;
4. Provide support during reliability testing period.

#### **Agency Deliverables**

1. Provide comments to Draft Verification Plan in a reasonable timeframe;
2. Provide facilities and support staff for verification testing;
3. Provide prompt notification of a system variance during field reliability testing.

### **D. Training and Documentation**

CONSULTANT shall provide training before, during, and after the ASCT deployment so that users will be prepared for the incoming system, while also having the opportunity to receive a review and ask follow up questions after some time using the system.

CONSULTANT shall facilitate three, 1-day (8.5 hrs. total with two, 15 minute breaks and one, half-hour lunch) training courses for the AGENCY and partner agency staff. All training will be scheduled with the AGENCY a minimum of two weeks in advance and will be held at AGENCY facilities. All training documents shall be provided one week in advance of the training. The CONSULTANT will also provide the following remote, web-based training:

- Three, 4-hour sessions during the 1<sup>st</sup> year following system acceptance;
- One 8-hour session during year 2 and additional years thereafter.

Sample training modules are described below, however the CONSULTANT will work with the AGENCY's Project Manager to further cater the courses to the AGENCY's specific needs.

- **Basic MAXTIME** - Train AGENCY and appropriate partner agency staff on the use of MAXTIME software. Training will provide users with sufficient expertise to use and manipulate all the key features and applications within the software, including some advanced features as well.
- **MAXTIME Advanced** - Train AGENCY and appropriate partner agency staff with advanced features and functionality within MAXTIME that are not otherwise covered in the basic courses. Course should be considered a guided workshop for advanced users.
- **MAXTIME adaptive** -Train AGENCY and appropriate partner agency staff on the use of the MAXTIME adaptive software. Training will provide users with sufficient expertise to use and manipulate all the key features and applications within the software. Course to include basic information on operations, troubleshooting, support/repair, configuration, administration, and calibration.
- **MAXTIME adaptive System Review & MAXTIME adaptive Field Training** -Train AGENCY and appropriate partner agency staff on the corridor specific deployment of the MAXTIME adaptive software. Train AGENCY and appropriate partner agency staff on in-field calibration, tuning process, and troubleshooting on the corridor specific deployment of the MAXTIME adaptive software.
- **Basic MAXVIEW** - Train AGENCY and appropriate partner agency staff on the use of MAXVIEW system software. Training will provide users with sufficient expertise to use and manipulate all the key features and applications within the MAXVIEW software.
- **MAXVIEW Advanced** - Train AGENCY and appropriate partner agency staff with advanced features and functionality within MAXVIEW that are not otherwise covered in the basic courses. Course should be considered a guided workshop for advanced users.

The following documentation shall be provided to compliment system deployment, testing, and training:

- Printed course materials,
- Electronic copies of presentations,
- System operations manuals,
- User manuals,
- Troubleshooting guides and technical notes.

### **CONSULTANT Deliverables**

1. Training Syllabi and Documentation for Review 30-Days prior to scheduled training;
2. Three days of training;
3. Associated product documentation for training, use and support of system.

### **E. Software Support**

The CONSULTANT shall provide US-based technical support on an on-call basis from 7:00am to 5:00pm Pacific Standard Time (PST) Monday to Friday, excluding holidays with the ability for support staff to remotely access the adaptive installation to assist in troubleshooting issues. Support and issue resolutions must be provided within the response times specified in the Table 1 below.

The CONSULTANT will make available a telephone and email helpdesk facility for the purposes of:

- a) Assisting the AGENCY with the proper use of the Software;
- b) Determining the causes of errors in the Software; and/or
- c) Fixing errors in the Software as reasonably possible.

The CONSULTANT shall provide routine updates to the software and software environment necessary to preserve the fulfillment of the requirements for a period of 3 years with optional 2-year extension as shown in the Option Items of the Consultant Cost Computations. Thereafter, such support may be continued on an annual basis by mutual consent, at a cost to be negotiated after year five (5).

Software Support can be cancelled with written notice thirty (30 days) prior to the annual support renewal date.

The CONSULTANT must share or describe the nature of each interface or algorithm enhancement with the AGENCY prior to implementation. The cost of all routine support shall be inclusive of the cost provided in the CONSULTANT's proposal.

**Response and Resolution Times**

The CONSULTANT will use all reasonable endeavors to respond to requests for Services made through the helpdesk; and use all reasonable endeavors to resolve issues raised by the AGENCY, promptly and in accordance with Table 1 response time matrix.

All claims under this software agreement must be made via the CONSULTANT’s help-line at 1-833-MAX-HELP (1-888-629-4327), to the project’s dedicated project manager, or <http://support.intelighit-its.com> and a support ticket number (SN) must be obtained. Upon issuance of a support ticket Intelight support engineers will make commercially reasonable efforts as describe above to resolve the issue. If any support related issues cannot be resolved by phone or e-mail, within the timeframes specified below; on-site support will be provided within 48-hours of the System Integrator’s response call or e-mail.

If any support related issues cannot be resolved by phone or e-mail, within the timeframes specified in the attached Table 1; on-site support must be provided within 48-hours of the CONSULTANT's response call or e-mail.

TABLE 1

<b>Severity</b>	<b>Examples</b>	<b>Response Time</b>	<b>Resolution Time</b>
Critical	System is unavailable and users cannot log in. Multiple acceptance test cases fail.	4 hrs	3-5 business days Hotfix Release
Serious	Intersection polling fails repeatedly throughout a 24-hour period or product crashes during commonly used scenarios and acceptance test case fails.	8 hrs	5-10 business days Hotfix Release
Moderate	Product crashes or does not function as expected during edge case or rarely used scenarios but some acceptance test cases fail.	24 hrs	10-20 business days Hotfix Release
Minor	Product occasionally does not work as expected during edge case scenarios that to not block core acceptance test cases.	24 hrs	3-6 months Next Major Release

### ***Hotfix Release***

For the lifetime of the product, when needed to address product defects CONSULTANT will:

- Provide copies of all such software Hotfix Release to the Agency promptly following the general release of the relevant Hotfix Patches to the customers; and,
- Apply such Hotfix Release to the Software promptly following the general release of the relevant Hotfix Release to the customers of the Supplier through remote access

If the hardware or operating system in user by the AGENCY is deemed not to be sufficient for installation of the Hotfix Release, then the AGENCY shall be responsible for the cost of any new hardware or software as may be required.

### ***Major Release Upgrades***

Intelight will for the term of this agreement,

- give to the AGENCY reasonable prior notification of the general release of an Upgrade of the covered software products.
- provide copies of all such software Upgrades to the Agency promptly following the general release of the relevant Upgrade to the AGENCY; and,
- apply such Upgrades to the Software promptly following the general release of the relevant Upgrade to the AGENCY of the Supplier through remote access or on-site support if required.

In the event the AGENCY decides to apply the software upgrade release: If the hardware or operating system in use by the AGENCY is deemed not to be sufficient for installation of the Upgrade release, then the AGENCY shall be responsible for the cost of any new hardware or software as may be required.

### ***Covered Products***

The products listed below installed at the AGENCY site are covered by this Agreement:

- MAXVIEW ATMS: Central Traffic Signal Management System;
- MAXTIME: Local Controller Software;
- MAXTIME adaptive: Local Controller Adaptive System.

### ***Limits of Coverage***

Repair or warranty of any 3<sup>rd</sup> party hardware or software installed as part of the contract will be covered under separate warranty or support agreements.

## **3. Project Schedule**

The Project Schedule attached as Table 2 shall establish a baseline for the major project milestones and deliverables. The schedule may be updated throughout the project upon the mutual consent of the CONSULTANT and AGENCY's Project Managers to accommodate for unforeseen circumstances or contract modifications.

TABLE 2

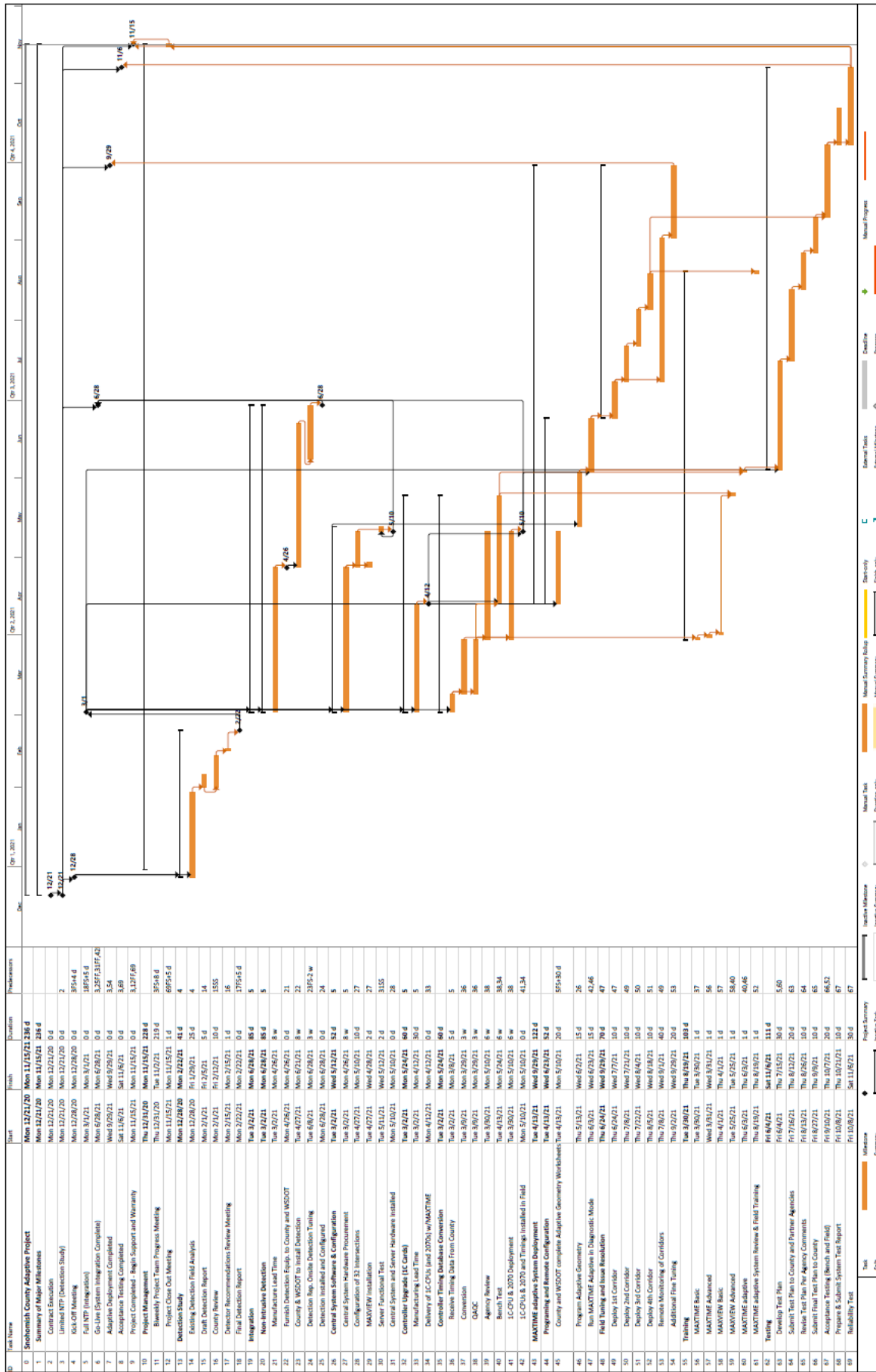


TABLE 3

System Req Reference #	System Requirement Statement	Mandatory (M) Desirable (D)	Status # (1, 2, 3, 4)	Requirement Status Explanation
<b>1. Network Characteristics</b>				
1.0-1.SC	The ASCT shall control a minimum of 32 signals concurrently, but not limited to expansion to 100 signals, that are owned and operated by Snohomish County and WSDOT (Snohomish County Operational Jurisdiction).	M	Ph 1	MAXTIME adaptive supports up to 255 signals concurrently in a single adaptive network. Since MAXTIME adaptive is locally distributed, the number of adaptive networks up to 255 intersections each is not limited.
1.0-2.SC	The ASCT shall support a variable number of signal groups that is user-defined. Initial groupings will be determined during system implementation and calibration.	M	Ph 1	MAXTIME adaptive can support any number of signal groups that are user defined. These can be configured as individual corridors within a single adaptive network, or as separate / isolated adaptive networks.
1.0-2.0-1.SC	The boundaries surrounding signal controllers that operate in a coordinated fashion shall be defined by the user.	M	Ph 1	See 1.0-2.SC
1.0-2.0-2.SC	The ASCT shall control a minimum of 4 groups of signals, and should not be limited to a maximum number of groups.	M	Ph 1	See 1.0-2.SC
1.0-2.0-3	The size of a group shall be user-defined.	M	Ph 1	See 1.0-2.SC
1.0-2.0-4	Each group shall operate independently.	M	Ph 1	See 1.0-2.SC
1.0-2.0-5	The boundaries surrounding signal controllers that operate in a coordinated fashion shall be autonomously altered by the ASCT system according to configured parameters such as traffic volume fluctuations.	D	Ph 1	MAXTIME adaptive can use volume, occupancy, detector failures, communication failures, queue detection, and more to dynamically alter the groups of signal controllers operating in a coordinated fashion.
1.0-2.0-5.0-1	The boundaries surrounding signal controllers that operate in a coordinated fashion shall have the capability to be altered by the system according to a time of day schedule.	D	Ph 1	MAXTIME adaptive can change signal groups via a time of day schedule.
1.0-2.0-5.0-2	The boundaries surrounding signal controllers that operate in a coordinated fashion shall have the capability to be altered by the system according to traffic conditions.	D	Ph 1	See 1.0-2.0-5
1.0-2.0-5.0-3	The boundaries surrounding signal controllers that operate in a coordinated fashion shall have the capability to be altered by the system when commanded by the user.	D	Ph 1	Users can command MAXTIME adaptive to activate a new signal group when desired.
<b>2. Type of Operation</b>				
<b>2.1 General</b>				
<b>2.1.1 Mode of Operation</b>				
2.1.1.0-1	The ASCT shall operate non-adaptively during the presence of an operator defined condition such as low vehicle volumes (e.g. evenings) and special events (e.g. construction closure).	M	Ph 1	MAXTIME adaptive has several conditions that can trigger several changes in operation. All of these are user configurable. The conditions include; volume, phase occupancy, green occupancy, ROcc5, detector failures, number of detector failures, Queue detection, communication failures. The responses include; terminating adaptive and reverting to local TOD, terminating adaptive and reverting to a specific pattern, activating a new signal grouping plan, or using historical
2.1.1.0-2	The ASCT shall operate non-adaptively when adaptive control equipment fails.	M	Ph 1	See 2.1.1.0-2
2.1.1.0-2.0-1	The ASCT shall operate non-adaptively when a user-specified detector fails.	M	Ph 1	See 2.1.1.0-2

2.1.1.0-2.0-2	The ASCT shall operate non-adaptively when the number of failed detectors connected to a signal controller exceeds a user-defined value.	M	Ph 1	See 2.1.1.0-2
2.1.1.0-2.0-3	The ASCT shall operate non-adaptively when the number of failed detectors in a group exceeds a user-defined value.	M	Ph 1	See 2.1.1.0-2
2.1.1.0-2.0-4	The ASCT shall operate non-adaptively when a user-defined communications link fails.	M	Ph 1	See 2.1.1.0-2
2.1.1.0-3	The ASCT shall operate non-adaptively when a user manually commands the ASCT to cease adaptively controlling a group of signals.	M	Ph 1	MAXTIME can be commanded to diagnostic mode or disabled mode by a user command
2.1.1.0-4	The ASCT shall operate non-adaptively when a user manually commands the ASCT to cease adaptive operation.	M	Ph 1	MAXTIME can be commanded to diagnostic mode or disabled mode by a user command
2.1.1.0-5	The ASCT shall operate non-adaptively in accordance with a user-defined time-of-day and day of week schedule.	M	Ph 1	MAXTIME adaptive can be turned on/off based on a time of day schedule.
2.1.1.0-7	The ASCT shall alter the adaptive operation to achieve required group objectives in user-specified conditions.	M	Ph 1	MAXTIME adaptive allows for configurable conditions plans which are customized to meet user objectives
2.1.1.0-7.0-1	When current measured traffic conditions meet user-specified criteria, the ASCT shall alter the state of the signal controllers, maximizing the vehicle and person (e.g. mass transit) throughput of the coordinated route.	M	Ph 1	MAXTIME adaptive utilizes the Link Pivot algorithm to maximize throughput on the coordinated routes based on real-time AoG data. This can be balanced for two-way progression, or to favor a specific direction. When suitable data is not available for link pivot (or when configured to do so permanently), MAXTIME adaptive will optimize offsets using a "geometric mode", wherein real-time data is used to calculate travel time between intersections and identify the optimal offsets. Additionally, MAXTIME adaptive is compatible with the use of MAXTIME local TSP features.
2.1.1.0-7.0-2	When current measured traffic conditions meet user-specified criteria, the ASCT shall alter the state of signal controllers, preventing queues from exceeding the storage capacity at user-specified locations.	M	Ph 1	MAXTIME adaptive can use queue detection to trigger user defined responses to handle those queues and prevent them from exceeding storage capacity.
2.1.1.0-7.0-3	When current measured traffic conditions meet user-specified criteria, the ASCT shall alter the state of signal controllers providing equitable distribution of green times.	M	Ph 1	MAXTIME adaptive uses the Purdue split failure algorithm combined with user defined split equities to distribute green times among phases in the most
2.1.1.0-7.0-4	When current measured traffic conditions meet user-defined criteria, the ASCT shall alter the state of signal controllers providing two-way progression on a coordinated route.	M	Ph 1	See 2.1.1.0-7.0-1
2.1.1.0-8	The ASCT shall provide maximum and minimum phase times, within a user-defined range.	D	Ph 1	MAXTIME adaptive allows users to configure minimum splits and/or maximum splits on a per-phase basis. This can be controlled by time of day. MAXTIME adaptive will not write splits longer than these values. MAXTIME will honor those splits and not allow serving more than that time depending on the force off mode (fixed versus floating) configured.
2.1.1.0-8.0-1	The ASCT shall provide a user-specified maximum value for each phase at each signal controller.	D	Ph 1	See 2.1.1.0-8
2.1.1.0-8.0-1-0-1	The ASCT shall not provide a phase length longer than the maximum value.	D	Ph 1	See 2.1.1.0-8. To ensure a phase does not serve longer than the maximum value, that phase would need to also be programmed as a floating force off.
2.1.1.0-8.0-2	The ASCT shall provide a user-specified minimum value for each phase at each signal controller.	D	Ph 1	See 2.1.1.0-8
2.1.1.0-8.0-2-0-1	The ASCT shall not provide a phase length shorter than the minimum value.	D	Ph 1	See 2.1.1.0-8

2.1.1.0-9	The ASCT shall detect repeated phases that do not serve all waiting vehicles. (These phase failures may be inferred, such as by detecting repeated max-out.)	M	Ph 1	MAXTIME intersection control meets this requirement. When a phase is waiting and not served cycle fail/cycle fault alarms will trigger. Additionally, MAXTIME will automatically revert the controller to free as an attempt to resolve the issue.
2.1.1.0-9.0-1	The ASCT shall alter operations, to minimize repeated phase failures.	M	Ph 1	See 2.1.1.0-9.0 Additionally, a condition can be defined to increase cycle length in response to split failures.
2.1.1.0-10	The ASCT shall determine the order of phases at a user-specified intersection. Conflicting movements shall be prevented from operating concurrently. (The calculation will be based on the optimization function.)	M	Ph 1	MAXTIME adaptive can use a user-defined sequence (fixed of by time of day) or it can be configured to select from a set of user-defined sequences based on the optimal sequence for throughput. These sequences can modify lead/lag operation, add phases, omit phases, or change the order of phases.
2.1.1.0-11	The ASCT shall provide coordination along a route.	M	Ph 1	See 2.1.1.0-7.0-1
2.1.1.0-11.0-1	The ASCT shall coordinate along a user-defined route.	M	Ph 1	MAXTIME adaptive allows users to define the coordinated movement as part of their signal group configuration.
2.1.1.0-11.0-2	The ASCT shall determine the coordinated route based on traffic conditions.	M	Ph 1	Signal groups (and their associated coordinated routes) can be modified based on traffic conditions (volume, phase occupancy, green occupancy, ROcc5).
2.1.1.0-11.0-3	The ASCT shall determine the coordinated route based on a user-defined schedule.	M	Ph 1	Signal groups (and their associated coordinated routes) can be modified based on a time of day schedule
2.1.1.0-11.0-4	The ASCT shall store user-defined coordination routes.	D	Ph 1	Signal groups (and their associated coordinated routes) are saved as part of the adaptive database.
2.1.1.0-11.0-4 .0-1	The ASCT shall implement a stored coordinated route by operator command.	D	Ph 1	A user/operator can implement a previously stored signal group (and their associated coordinated routes) by command.
2.1.1.0-11.0-4 .0-2	The ASCT shall implement a stored coordinated route based on traffic conditions.	D	Ph 1	See 2.1.1.0-11.0-2
2.1.1.0-11.0-4 .0-3	The ASCT shall implement a stored coordinated route based on a user-defined schedule.	D	Ph 1	See 2.1.1.0-11.0-3
2.1.1.0-12	The ASCT shall not prevent the use of phase timings in the local controller set by agency policy.	M	Ph 1	MAXTIME adaptive writes cycles, splits, offsets, and sequences (if defined) to the intersection control software (MAXTIME). MAXTIME continues to honor all other agency timings and configurations including phase times, sequences (if not commanded by adaptive),preemption, overlaps, FYA, backup prevention,etc.
2.1.1.0-13	The ASCT shall allow operator to override one individual intersection to manual operation while keeping others under adaptive operation.	M	Ph 1	A user can command an individual intersection to run a user specified pattern from MAXVIEW and the remaining intersections will automatically dynamically regroup into smaller adaptive networks and continue to run adaptive operation.

### 2.1.2 Allowable Phases

2.1.2.0-1	The ASCT shall not prevent protected/permissive left turn phase operation, Flashing Yellow Arrow (FYA), and right turn overlaps.	D	1 (Verify FYA and Right Turn Overlaps only. All other parts verified in Phase 1.)	See 2.1.1.0-12
2.1.2.0-2	The ASCT shall not prevent the protected left turn phase to lead or lag the opposing through phase based upon user-specified conditions.	D	Ph 1	See 2.1.1.0-10
2.1.2.0-3	The ASCT shall prevent skipping a user-specified phase when the user-specified phase sequence is operating.	D	Ph 1	See 2.1.1.0-12

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2.1.2.0-4	The ASCT shall prevent skipping a user-specified phase based on an event such as during a construction closure.	D	Ph 1	See 2.1.1.0-12
2.1.2.0-5	The ASCT shall prevent skipping a user-specified phase according to a time of day schedule.	D	Ph 1	See 2.1.1.0-12
2.1.2.0-6	The ASCT shall omit a user-specified phase when the cycle length is below a user-specified value.	D	Ph 1	MAXTIME's user logic can omit phases based on when adaptive is active and the active cycle length falls below a user defined value.
2.1.2.0-7	The ASCT shall omit a user-specified phase based on measured traffic conditions.	D	Ph 1	MAXTIME's user logic can omit phases based on volume, occupancy, speed, or 85 <sup>th</sup> percentile speed of sensor zones.
2.1.2.0-9	The ASCT shall omit a user-specified phase according to a time of day schedule	D	Ph 1	See 2.1.1.0-10
2.1.2.0-10	The ASCT shall assign unused time from a preceding phase that terminates early to a user-specified phase as follows: <ul style="list-style-type: none"> <li>• next phase</li> <li>• next coordinated phase</li> <li>• user-specified phase</li> </ul>	D	Ph 1	MAXTIME supports fixed/floating offsets as a fixed configuration, per pattern, or per phase. Fixed forceoff allows phases to accept unused time (skipped or gap-out). Floating forceoff puts unused time on the coordinated phase. If selected as fixed or per pattern, fixed force off will apply all unused time to the next phase while floating forceoff will apply it to the coordinated phase. If programmed per phase, phases that are fixed force off can utilized unused time. Phases that are floating forceoff cannot and will apply the time to the next fixed force off phase or to the coordinated phase, which ever comes first.
2.1.2.0-11	The ASCT shall assign unused time from a preceding phase that is skipped to a user-specified phase as follows: <ul style="list-style-type: none"> <li>• previous phase</li> <li>• next phase</li> <li>• next coordinated phase</li> <li>• user-specified phase</li> </ul>	D	Ph 1	See 2.1.2.0-10. MAXTIME can apply unused time to a previous phase if the appropriate coordinated mode is selected. For example, fixed permissive does not allow early-service of phases. So a phase that skips due to lack of demand would apply its time to the "previous" (currently active) phase.
2.1.2.0-12	The ASCT shall not alter the order of phases at a user-specified intersection.	M	Ph 1	See 2.1.1.0-10
2.1.2.0-13	The ASCT shall inhibit FYA when a conflicting pedestrian phase is active.	M	1	MAXTIME supports negative peds as part of the overlap/FYA programming functionality.

### 2.1.3 Oversaturation

2.1.3.0-1	The ASCT shall detect the presence of queues at preconfigured locations.	M	Ph 1	See 2.1.1.0-7.0-2
2.1.3.0-2	When queues are detected at user-specified locations, the ASCT shall execute user-specified timing plan/operational mode.	D	Ph 1	MAXTIME adaptive can use the queue detection to trigger a pre-configured pattern, diagnostic mode, or disable adaptive.
2.1.3.0-3	When queues are detected at user-specified locations, the ASCT shall execute user-specified adaptive operation strategy.	M	Ph 1	MAXTIME adaptive can use the queue detection to trigger a new signal group and it's subsequent coordinated routes to modify the operation strategy.
2.1.3.0-4	When queues are detected at user-specified locations, the ASCT shall omit a user-specified phase at a user-specified signal controller.	D	Ph 1	MAXTIME user logic can be used to set up queue detectors via the detector's on-time. This can then be used to omit phases.
2.1.3.0-5	The ASCT shall meter traffic into user-specified bottlenecks by storing queues at user-specified locations.	D	Ph 1	MAXTIME adaptive allows users to configure "allowed stops". These allowed stops will be used by the link pivot algorithm to store queues at the allowed stops rather than intersections that do not allow stops, thus mitigating bottle necks.
2.1.3.0-6	The ASCT shall store queues at user-specified locations.	D	Ph 1	MAXTIME adaptive allows users to configure "allowed stops". If the Link Pivot algorithm cannot find any solutions without stops, it apply stops at the allowed stop locations.
2.1.3.0-7	The ASCT shall maintain capacity flow through user-specified bottlenecks.	D	Ph 1	MAXTIME adaptive's parameters for bounding weights, condition plans, split equity plans, split optimization plans, allowed stops, and others can be configured in compliance with the

				meet this goal.
2.1.3.0-8	When queues are detected at user-specified locations, the ASCT shall limit the cycle length of the group to a user-specified value.	D	Ph 1	MAXTIME adaptive's condition plans can be configured with queue detector triggers that call cycle length change (increase or decrease) actions. Each cycle length change allows users to identify the minimum and maximum allowable cycle length.
<b>2.2 Sequence-based Adaptive Coordination</b>				
2.2.0-1	The ASCT shall be capable of sequence-based adaptive coordination where the system adjusts cycle, split, and offset as part of the algorithm decision to optimize signal operations in real-time.	M	Ph 1	MAXTIME adaptive's main purpose is to calculate and optimize cycles, splits, and offsets. MAXTIME adaptive will also evaluate all acceptable sequence numbers as part of this optimization, if configured to so.
2.2.0-3	The ASCT shall calculate phase lengths for all phases at each signal controller to suit the current coordination strategy.	M	Ph 1	Completed in the offset optimization portion of the algorithm. See 2.1.1.0- 7.0-1.
2.2.0-4	The ASCT shall calculate offsets to suit the current coordination strategy for the user-specified reference point for each signal controller along a coordinated route within a group.	M	Ph 1	MAXTIME allows users to specify the reference point of each controller based on phase, and point in the phase (beginning of green, beginning of yellow, beginning of red, end of red).
2.2.0-4.0-1	The ASCT shall apply offsets for the user-specified reference point of each signal controller along a coordinated route.	D	Ph 1	Completed in Cycle Length optimization portion of the algorithm. MAXTIME adaptive's cycle length algorithm first uses Webster's formula to identify the minimum harmonic cycle length within the allowable range. It then uses real-time data to run a time space diagram for every cycle length option between the Webster's Cycle length and the maximum allowed cycle length and rank each option. The most optimal cycle length between the Webster's cycle length and the maximum allowed cycle length will be selected.  The allowed cycle lengths are defined by two parameters; min/max cycle length and min/max cycle length change. The min/max cycle length defines the minimum cycle length and the maximum cycle length that adaptive can use as a whole. The minimum/maximum cycle length change defines the number of seconds the cycle length can decrease/increase (respectively) from the current cycle length during each run of the algorithm.
2.2.0-5	The ASCT shall calculate a cycle length for each cycle based on its optimization objectives (as required elsewhere, e.g., progression, queue management, equitable distribution of green).	M	Ph 1	Accomplished using the Cycle length Min/Max of the adaptive software. See 2.2.0-5
2.2.0-5.0-1	The ASCT shall limit cycle lengths to user-specified values.	M	Ph 1	Accomplished using the Cycle length Min/Max of the adaptive software. See 2.2.0-5
2.2.0-5.0-2	The ASCT shall limit cycle lengths to a user-specified range.	M	Ph 1	Completed in Cycle Length optimization portion of the algorithm. See 2.2.0-5
2.2.0-5.0-3	The ASCT shall calculate optimum cycle length according to the user-specified coordination strategy.	M	Ph 1	Accomplished using the Cycle length Min/Max of the adaptive software. See 2.2.0-5
2.2.0-5.0-4	The ASCT shall limit changes in cycle length to not exceed a user-specified value.	M	Ph 1	Increase and decrease are user defined in the software. See 2.2.0-5
2.2.0-5.0-4.0-1.0-2	The increased limit shall be user-defined.	D	Ph 1	See 2.1.1.0-7.0-1.
2.2.0-5.0-5	The ASCT shall adjust offsets to minimize the chance of stopping vehicles approaching a signal that have been served by a user-specified phase at an upstream signal.	M	Ph 1	Completed in the offset optimization portion of the algorithm. See 2.1.1.0- 7.0-1.

<b>2.4 Single intersection adaptive operation</b>				
2.4.0-1	The ASCT shall be capable of non-coordinated adaptive operation at a single intersection.	D	Ph 1	MAXTIME adaptive supports single intersection operations, wherein the algorithm will adjust splits and cycle lengths based on real-time data.
2.4.0-2	The ASCT shall calculate a cycle length of a single intersection, based on current measured traffic conditions. (The calculation is based on the optimization objectives.)	D	Ph 1	Will adjust Cycle length based off of current traffic data (Split failure, phase vol, occupancy, etc.) as defined by the user.
2.4.0-3	The ASCT shall calculate optimum phase lengths, based on current measured traffic conditions. (The calculation is based on the optimization objectives.)	D	Ph 1	Completed in the Split optimization portion of the algorithm. See 2.1.1.0- 7.0-3.
2.4.0-3.0-1	The ASCT shall limit the difference between the length of a given phase and the length of the same phase during its next service to a user-specified value.	D	Ph 1	MAXTIME adaptive allows users to define Min/Max split changes in a split optimization plan on a per-intersection, per-phase basis.
2.4.0-3.0-2	When queues are detected at user-specified locations, the ASCT shall execute user-specified timing plan/operational mode.	D	Ph 1	See 2.1.3.0-2.
2.4.0-4	The ASCT shall calculate phase order, based on current measured traffic conditions. (The calculation is based on the optimization objectives.)	D	Ph 1	MAXTIME's phase options "conditional service" and "conditional reservice" meet this requirement by allowing phases to conditionally serve and re-serve based on demand.
<b>2.6 Responsiveness</b>				
2.6.0-1	The ASCT shall limit the change in consecutive cycle lengths to be less than a user-specified value.	M	Ph 1	See 2.2.0-5
2.6.0-2	The ASCT shall limit the change in phase times between consecutive cycles to be less than a user-specified value. (This does not apply to early gap-out or actuated phase skipping.)	M	Ph 1	MAXTIME adaptive allows users to define Min/Max split changes in the split optimization plan that will limit the split changes to within the min/max split change. This can be configured on a per-phase, per-intersection basis.
2.6.0-3	The ASCT shall limit the changes in the direction of primary coordination to a user-specified frequency.	M	Ph 1	Direction of coordination is part of corridor plan configuration. Corridor plans can be changed by time of day, or by condition. The time of day schedule can be configured to not change more than desired. Condition plans have a minimum active time parameter that can be used to guarantee a condition plan that changes a corridor plan is active for a minimum amount of time.
2.6.0-4	When a large change in traffic demand is detected, the ASCT shall respond more quickly than normal operation, subject to user-specified limits.	M	Ph 1	MAXTIME adaptive can change condition plans based on conditions. This can allow for the activation of a more aggressive condition plan based on traffic patterns.  Additionally, many MAXTIME adaptive conditions are based on a rolling average of measured values. A large change in traffic demand will move those rolling averages much more than small changes in traffic resulting in quicker changes.
2.6.0-5	The ASCT shall select cycle length based on a user-defined incremental range.	M	Ph 1	See 2.2.0-5
<b>3. External/Internal Interfaces</b>				
3.0-1.0-1.SC	The ASCT shall receive commands from Community Transit's and Sound Transit's planned TSP external systems. On-board transponders on Bus Rapid Transit buses shall be detected by roadside TSP equipment which then forwards the TSP request to the signal controller at each TSP-equipped intersection.	M	1	Accomplished using priority detection in MAXTIME.

3.0-1.0-2.SC	The ASCT shall receive location information from Community Transit's and Sound Transit's CAD/AVL systems. The ASCT system shall modify signal operation to maintain user-defined headway spacing between Bus Rapid Transit buses along the BRT corridors.	D	Ph 1	Accomplished using priority detection in MAXTIME.
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#### 4. Crossing Arterials and Boundaries

4.0-1.0-1	The ASCT shall alter its operation to minimize interruption to the freeway mainline.	M	Ph 1	MAXTIME adaptive allows users to program minimum splits that can be used on freeway off ramps to ensure sufficient storage is always provided. Additionally, conditions can be configured based off of off-ramp detectors to ensure excessive queueing can trigger cycle length increases or changes in optimization strategies.
4.0-1.0-2.SC	The ASCT shall operate a fixed cycle length to match the cycle length of an adjacent system.	D	Ph 1	MAXTIME adaptive can run in offsets/splits mode where it only adaptively changes the splits and offsets while mimicking a fixed pattern or TOD pattern. The mimic pattern can be used to fix the cycle length to the adjacent system.
4.0-1.0-4.SC	The ASCT shall support adaptive coordination on crossing routes including the existing Intelight MAXTIME-Adaptive ASCT system operating along SR 527.	M	1	MAXTIME adaptive supports the configuration of crossing routes. These crossing routes can be configured each with their own coordinated route. Additionally, MAXTIME can be configured for dual coordination for these crossing routes, if desired.

#### 5. Access and Security

5.0-1	The ASCT shall be implemented with a security policy or policies that address the following selected elements:		Ph 1	
5.0-1.0-1	• Local access to the ASCT	M	Ph 1	MAXTIME adaptive and MAXTIME support direct connection to the controller or through the front panel. Either of these interfaces will enforce username and password for access, if configured to do so. The user name and passwords can be configured locally or centrally. When configured centrally, login attempts will be validated against the central profile server in real-time to provide access.
5.0-1.0-2	• Remote access to the ASCT	M	Ph 1	MAXTIME and MAXTIME adaptive support accessing the WebUI from a remote location on the network or via VPN. This interface will enforce username and password for access, if configured to do so. The user name and passwords can be configured locally or centrally. When configured centrally, login attempts will be validated against the central profile server in real-time to provide access
5.0-1.0-3	• System monitoring	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-4	• System manual override	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-7	• User login	M	Ph 1	See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-8	• User password	M	Ph 1	See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-9	• Administration of the system	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-14	• System parameters	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-15	• Report generation	M	Ph 1	Reports can be generated from MAXVIEW. MAXVIEW also uses user name and password for access.
5.0-1.0-16	• Configuration	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-17	• Security alerts	M	Ph 1	MAXTIME can be configured to trigger alarms for door ajar.
5.0-1.0-18	• Security logging	M	Ph 1	MAXTIME and MAXTIME adaptive logs all changes made to the databases.

5.0-1.0-19	• Security reporting	M	Ph 1	The logs from 5.0-1.0-18 can be printed to pdf directly from the UI as a report.
5.0-1.0-20	• Database access	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-1.0-21	• Signal controller access	M	Ph 1	Accessed via the WebUI either locally or remotely. See 5.0-1.0-1 and 5.0-1.0-2
5.0-2	The ASCT shall provide monitoring and control access at the following locations:		Ph 1	
5.0-2.0-1.SC	• WSDOT TMC located in Shoreline, WA • Snohomish County Headquarters located in Everett, WA	M	Ph 1	Existing system already on premises
5.0-2.0-2.SC	• WSDOT and Snohomish County Maintenance Facilities	M	Ph 1	Existing system already on premises
5.0-2.0-3.SC	• Workstations on Snohomish County and WSDOT's LAN or WAN including connection for Bothell's City Hall, Community Transit Headquarters, and future regional agencies (i.e. Mill Creek) for monitoring purposes	M	Ph 1	Existing system already on premises
5.0-2.0-5	• Local controllers in cabinets	M	Ph 1	ASCT resides on the local controllers. Monitoring, control, programming and modifications can be accessed via the WebUI either locally or remotely from any device on the network using a web browser.
5.0-2.0-6	• Mobile workstations/handheld devices	M	Ph 1	See 5.0-2.0-5
5.0-2.0-7	• Remote locations via internet	M	Ph 1	See 5.0-2.0-5
5.0-2.0-8	• The ASCT system shall allow permanent modifications to the adaptive signal parameters from either the ASCT central software installed on a client workstation or laptop or at the local controller. The ASCT system shall consist of a local controller software package, a centralized signal software package, and an adaptive component.	M	Ph 1	See 5.0-2.0-5
5.0-3.SC	The ASCT shall comply with the Snohomish County and WSDOT IT policy.	M	Ph 1	Existing system already on premises
5.0-4.SC	The ASCT shall not prevent access to the local signal controller database, monitoring or reporting functions by any installed signal management system.	D	Ph 1	MAXTIME adaptive works alongside the controller and signal management system. All controller and central management functionality will remain unhindered.
5.0-5.SC	The ASCT shall allow permanent modification to the adaptive signal parameters from the ASCT central system and local controller via a workstation or laptop.	D	Ph 1	Accessed via web browser

## 6. Data Log

6.0-1	The ASCT shall log the following events:		Ph 1	
6.0-1.0-1	Time-stamped vehicle phase calls	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-2	Time-stamped pedestrian phase calls	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-3	Time-stamped emergency vehicle preemption calls	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-4	Time-stamped transit priority calls	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-5	Time-stamped railroad preemption calls	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-6	Time-stamped start and end of each phase	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-7	Time-stamped controller interval changes	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-8	Time-stamped start and end of each transition to a new timing plan	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging
6.0-1.0-9	Time-stamped detection actuation per lane	D	Ph 1	Accomplished via MAXTIME and/or MAXVIEW's hi-resolution data logging

6.0-2	The ASCT shall export its systems log in the following formats: <ul style="list-style-type: none"> <li>• UTDF (Synchro)</li> <li>• MS Excel</li> <li>• Text</li> <li>• CSV</li> <li>• XML</li> <li>• PDF</li> <li>• Open source SQL database</li> </ul>	D	Ph 1	Accomplished in MAXVIEW
6.0-3	The ASCT shall store the event log for a minimum of 365 days	D	Ph 1	MAXVIEW can store all high resolution data as long as the server is appropriately sized to do so.
6.0-4	The ASCT shall store results of all signal timing parameter calculations for a minimum of 365 days.	D	Ph 1	MAXVIEW can store all high resolution data as long as the server is appropriately sized to do so.
6.0-5	The ASCT shall store the following measured data in the form used as input to the adaptive algorithm for a minimum of 365 days: <ul style="list-style-type: none"> <li>• Volume</li> <li>• Occupancy</li> <li>• Queue length</li> <li>• Phase utilization</li> <li>• Arrivals in green</li> <li>• Green band efficiency</li> <li>• Split times (cycle-by-cycle basis)</li> <li>• Transit headways</li> </ul>	M	Ph 1	MAXVIEW can store all high resolution data as long as the server is appropriately sized to do so. MAXVIEW uses this data to provide full integration of the Utah DOT ATSPM reporting tool. Reports can be pulled for user-specified increments of time. The reports available within the ATSPM tool and/or MAXVIEW's device event detail reports include all the metrics required.
6.0-6	The ASCT system shall archive all data automatically after a user-specified period not less than 365 days.	D	Ph 1	See 6.0-3. MAXVIEW allows users to configure how long high resolution data will be stored, with no limit to the parameter. This can be configured separately for different types of events (i.e. detector events, phase events, cabinet events).
6.0-7	The ASCT shall provide data storage for a system size minimum of 200 signal controllers with the potential for expansion for up to 500 traffic signal controllers. The data to be stored shall include the following: <ul style="list-style-type: none"> <li>• Controller state data</li> <li>• Reports</li> <li>• Log data</li> <li>• Security data</li> <li>• ASCT parameters</li> <li>• Detector status data</li> </ul>	M	Ph 1	See 6.0-6. MAXVIEW has been demonstrated on systems as large as 7,500 intersections.
6.0-8	The ASCT shall calculate and report relative data quality including: <ul style="list-style-type: none"> <li>• The extent data is affected by detector faults</li> <li>• Other applicable items</li> </ul>	D	Ph 1	MAXVIEW's detector fault logs will provide the user a report of all failed detectors on their adaptive system which are affecting the adaptive data.
6.0-9	The ASCT shall report comparisons of logged data when requested by the user: <ul style="list-style-type: none"> <li>• Day-to-day</li> <li>• Hour-to-hour</li> <li>• Cycle-to-cycle</li> <li>• Hour of day to hour of day</li> <li>• Hour of week to hour of week</li> <li>• Day of week to day week</li> <li>• Day of year to day of year</li> </ul>	D	Ph 1	MAXVIEW can pull reports for different time intervals and then compared to reports of other time intervals.
6.0-10	The ASCT shall store data logs in a standard database.	D	Ph 1	MAXVIEW stores all data using SQL database management
6.0-11	The ASCT shall report stored data in a form suitable (i.e. printable documentation) to provide explanations of system behavior to troubleshoot the system.	D	Ph 1	MAXVIEW can export to printable format
6.0-12	The ASCT shall store the following data in user-specified increments for split monitoring on a cycle-by-cycle basis: <ul style="list-style-type: none"> <li>• Volume</li> <li>• Occupancy</li> <li>• Queue length</li> <li>• Splits</li> </ul>	D	Ph 1	See 6.0-5
6.0-13	The ASCT shall identify changes made to the system with time stamp and user/agency information.	D	Ph 1	MAXVIEW tracks all changes made from MAXVIEW or MAXTIME by user, date, and time stamp.

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7. Advanced Controller Operation				
7.0-1	When specified by the user, the ASCT shall serve a vehicle phase more than once for each time the coordinated phase is served.	D	Ph 1	Sequences can be used to double-serve non-coordinated phases. Additionally, MAXTIME has a phase option for "conditional reserve" that can be used for this functionality.
7.0-2	The ASCT shall provide a minimum of 8 phase overlaps.	M	Ph 1	MAXTIME supports 32 phase overlaps
7.0-3	The ASCT shall accommodate a minimum of 16 phases at each signal.	M	Ph 1	MAXTIME supports 40 phases
7.0-4	The ASCT shall accommodate a minimum of 4 rings at each signal.	M	Ph 1	MAXTIME supports 16 rings
7.0-5	The ASCT shall accommodate a user-defined number of phases per ring.	M	Ph 1	MAXTIME supports 40 phases per ring
7.0-6	The ASCT shall provide a minimum of 8 different user-defined phase sequences for each signal.	D	Ph 1	MAXTIME supports 20 sequences
7.0-6.0-1	Each permissible phase sequence shall be user-assignable to any signal timing plan.	D	Ph 1	MAXTIME adaptive supports this by assigning a phase sequence by programming a fixed mimic sequence or TOD mimic sequence.
7.0-6.0-2	Each permissible phase sequence shall be executable by a time-of-day schedule.	D	Ph 1	See 2.1.1.0-10
7.0-6.0-3	Each permissible phase sequence shall be executable based on measured traffic conditions	D	Ph 1	MAXTIME adaptive allows users to list each permissible phase sequence as an option for adaptive to choose. Adaptive will choose the best sequence based off the measured traffic conditions.
7.0-7	The ASCT shall not prevent a phase/overlap output by time-of-day.	D	Ph 1	MAXTIME adaptive will mimic the controllers phase and overlap programming by TOD and thus will not prevent any phase or overlap output from occurring.
7.0-8	The ASCT shall not prevent a phase/overlap output based on an external input.	D	Ph 1	See 7.0-7
7.0-9	The ASCT shall not prevent the phases to be designated as coordinated phases.	D	Ph 1	Coordinated phases are configured in MAXTIME. MAXTIME adaptive mimics coord phases by TOD
7.0-10	The ASCT shall have the option for a coordinated phase to be released early based on a user-definable point in the phase or cycle.	D	Ph 1	MAXTIME supports early coord gap out which allows coord phases to be released early by a user-specified amount of time. MAXTIME adaptive will not inhibit the use of this feature.
7.0-11	The ASCT shall not prevent the controller from displaying FYA left turn or right turn while maintaining adaptive operation.	M	Ph 1	FYA is an overlap. See 7.0-7.
7.0-12	The ASCT shall not prevent the local signal controller from performing actuated phase control using specified extension/passage timers as assigned to user-specified vehicle detector input channels in the local controller.	D	Ph 1	MAXTIME can be configured call detector tables by TOD. MAXTIME adaptive will mimic these detector parameters.
7.0-12.0-1	The ASCT shall operate adaptively using user-specified detector channels.	D	Ph 1	MAXTIME adaptive's loads a user-configured geometry for adaptive algorithms. This geometry includes the detector channels specified by the user.
7.0-13	When adaptive operation is used in conjunction with non-adaptive coordination, the ASCT shall not prevent a controller serving a cycle length different from the cycles used at adjacent intersections.	D	Ph 1	MAXTIME adaptive will not impact any intersections not configured in its network. As such, it will not prevent adjacent controllers not in the adaptive network from running their own configurations (coordinated or uncoordinated).
7.0-14	The ASCT shall be capable of accommodating the following custom controller features:	M	Ph 1	
7.0-14.0-1	Allow FYA to change to protected-only.	M	Ph 1	MAXTIME's overlap configuration supports this.

7.0-14.0-2	Allow delay in the FYA display during permissive left turn operation.	M	Ph 1	MAXTIME's overlap configuration supports this.
7.0-14.0-3	Allow the operator to permit phases or overlaps by TOD or external input.	M	Ph 1	MAXTIME's TOD schedule combined with MAXTIME adaptive's mimic patterns supports this.
7.0-14.0-4	Allow dynamic max green time to increase or decrease based on max out or gap out termination.	M	Ph 1	MAXTIME's phase timing table supports dynamic max greens.
7.0-14.0-5	Allow operation of external devices using discrete signal outputs.	M	Ph 1	MAXTIME allows the operation of external devices using discrete signal outputs.
7.0-14.0-6	Run free, adaptive, and set timing plans based on set thresholds, external input, DOW and TOD at a signal group or isolated intersection basis.	M	Ph 1	MAXTIME and MAXTIME adaptive combined meet this requirement.
7.0-14.0-7	Operate within various style cabinets, including but not limited to 332 cabinets, 332D, and NEMA, operating along a corridor with multiple lanes and disproportionate lane utilization.	M	Ph 1	Adaptive will work in any cabinet that will accommodate a controller running MAXTIME, including all 33x variations, all NEMA variations, and ITS/ATC cabinets.
7.0-14.0-8	Provide conditional service for all phases including phase selections outside of the p ring structure.	M	Ph 1	MAXTIME supports conditional service and MAXTIME adaptive will not inhibit it.
7.0-14.0-9	Run fully actuated coordination.	M	Ph 1	MAXTIME supports fully actuated coordination.
7.0-14.0-10	Alternate cycle coordination with variable cycles.	M	Ph 1	MAXTIME and MAXTIME adaptive meet this requirement.
7.0-14.0-11.S C	Dynamically group and ungroup lanes such as a shared left-thru lane with split phasing during the morning peak, changing to a through lane only at all other times.	M	Ph 1	MAXTIME can be configured to group and ungroup lanes. MAXTIME adaptive will use mimic plans to mimic this operation.
7.0-15	The ASCT shall operate adaptively while allowing for flexile detector logic (i.e. dummy phases).	M	Ph 1	MAXTIME supports dummy phases and flexile detector logic.
7.0-16	Ability to reserve non-coordinated phases while in coordination.	M	1	See 7.0-1

## 8. Pedestrians

8.0-1	When a pedestrian phase is called, the ASCT shall execute pedestrian phases up to user-specified time before the vehicle green of the related vehicle phase without going out of adaptive operation.	M	Ph 1	MAXTIME supports advanced walk.
8.0-2.SC	When a pedestrian phase is called, the ASCT shall accommodate pedestrian crossing times during adaptive operations.	M	Ph 1	MAXTIME will always accommodate pedestrian crossing times. MAXTIME adaptive can be configured such that it allows oversized peds (in which case the ped call will cause transition but not terminate adaptive), or such that it always covers the peds in the split algorithm.
8.0-4	The ASCT shall execute user-specified exclusive pedestrian phases during adaptive operation.	D	Ph 1	MAXTIME's sequence can be configured to support exclusive pedestrian phases. MAXTIME adaptive will mimic this configuration.
8.0-5.SC	The ASCT shall execute pedestrian recall on user-defined phases in accordance with a time of day schedule.	D	Ph 1	MAXTIME supports recalls by TOD via phase plans. MAXTIME adaptive will mimic these parameters when configured to do so.
8.0-6	The ASCT shall begin a non-coordinated phase later than its normal starting point within the cycle when all of the following conditions exist: <ul style="list-style-type: none"> <li>• The user enables this feature</li> <li>• Sufficient time in the cycle remains to serve the minimum green times for the phase and the subsequent non-coordinated phases before the beginning of the coordinated phase</li> <li>• The phase is called after its normal start time</li> <li>• The associated pedestrian phase is not called</li> </ul>	D	Ph 1	MAXTIME supports this operation.
8.0-7.SC	When specified by the user, the ASCT shall execute pedestrian recall on a pedestrian phase.	D	Ph 1	MAXTIME supports this operation.
8.0-8.SC	When the pedestrian phases are on recall, the ASCT shall accommodate pedestrian timing during adaptive operation.	D	Ph 1	See 8.0-2.SC.

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8.0-9	During preemption system shall not truncate don't walk, but can truncate the walk time.	D	Ph 1	MAXTIME supports configuration of this functionality.
8.0-10	The system operator needs to accommodate the following custom pedestrian features: <ul style="list-style-type: none"> <li>• Walk extension (based on pedestrian volume and actuations)</li> <li>• Pedestrian recycle/re-service</li> <li>• Rest-in-walk</li> <li>• Negative pedestrian overlap</li> <li>• Early start of walk (Leading Pedestrian Interval)</li> <li>• Late start of walk</li> <li>• No pedestrian service on FYA</li> <li>• Pedestrian recall</li> <li>• Secondary walk (for bike off loop)</li> <li>• Pedestrian minus time</li> </ul>	M	1 (Verify Pedestrian Minus Time only. All other parts verified in Phase 1.	MAXTIME supports these features.
8.0-12	The following is a list of custom controller features that shall be accommodated by the ASCT:		Ph 1	
8.0-12.0-1	Allow variable cycle operation (i.e. double or half) to better serve pedestrians.	M	Ph 1	MAXTIME sequences can be configured for double cycling and MAXTIME adaptive will handle that sequence accordingly.
8.0-12.0-2	Allow pedestrian re-cycle and rest in walk capabilities under coordination and free operation.	M	Ph 1	MAXTIME supports this functionality.
8.0-12.0-3	Support extended pedestrian walk/FDW timing.	M	Ph 1	MAXTIME supports this functionality.
8.0-12.0-4	Support accessible pedestrian signals (APS).	M	Ph 1	MAXTIME supports this functionality.
8.0-12.0-5	Support mid-block pedestrian crossing integration.	D	Ph 1	MAXTIME supports mid-block pedestrian crossings. MAXTIME adaptive will accommodate the pedestrian crossing accordingly.
<b>9. Special Functions</b>				
9.0-1	The ASCT shall set a specific state for each special function output based on the occupancy on a user-specified detector. Additional non-intrusive detection shall be implemented at ramp terminals where detection of extended queues will set the ASCT system into a specific state.	M	Ph 1	Accomplished in MAXTIME and condition plans in MAXTIME adaptive
9.0-2	The ASCT shall set a specific state for each special function output based on the current cycle length.	D	Ph 1	MAXTIME's user logic can be configured to activate/deactivate special function outputs based on the current cycle length.
9.0-3	The ASCT shall set a specific state for each special function output based on a time-of-day schedule (i.e. no U-turns).	M	Ph 1	MAXTIME allows users to configure the state of all special function outputs by time of day or user logic.
<b>10. Existing Systems</b>				
10.0-1.SC	The ASCT shall be compatible with the following controller types: <ul style="list-style-type: none"> <li>• 2070</li> </ul>	M	Ph 1	See 7.0-14.0-7
10.0-2	The ASCT shall be compatible with the following detector technologies: <ul style="list-style-type: none"> <li>• Inductive Loop</li> <li>• Video/Thermal Detection</li> <li>• Radar/Microwave</li> <li>• Magnetometer (imbedded/wireless)</li> </ul>	M	Ph 1	MAXTIME adaptive will work with any detector technology.
10.0-3	The ASCT shall be compatible with the following communication systems: <ul style="list-style-type: none"> <li>• Fiber patch panels</li> <li>• Fiber (Ethernet) switches</li> <li>• Fiber (Point-to-Point and Redundant Ring)</li> <li>• Wireless Radio</li> </ul>	M	Ph 1	MAXTIME adaptive will work with any form of Ethernet communications.
10.0-4.SC	The ASCT shall be compatible with the following cabinet types and sizes: <ul style="list-style-type: none"> <li>• Type 332 Cabinets – 67" H x 24" W x 30" D</li> <li>• Type 332D Cabinets – 67" H x 49" W x 30" D</li> </ul>	M	Ph 1	See 7.0-14.0-7

10.0-5.SC	The ASCT shall be compatible with the following local controller software: • Intelight MAXTIME	M	Ph 1	MAXTIME adaptive is compatible with MAXTIME.
10.0-6.SC	The ASCT shall be compatible with the following central signal management system: • Intelight MAXVIEW	M	Ph 1	MAXTIME adaptive is compatible with MAXVIEW.
10.0-7.SC	The ASCT shall be compatible (run in coordination) with the following adaptive signal control system: • Intelight MAXTIME-Adaptive	M	Ph 1	MAXTIME adaptive is compatible with MAXTIME adaptive.

## 11. Railroad and EV Preemption

11.0-1	The ASCT shall maintain adaptive operation at non-preempted intersections during railroad preemption. This requirement will accommodate future expansion as there are no at-grade railroad crossings within the project boundaries.	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any preempt (railroad, LRT, or EVP), including the preempted intersection. MAXTIME adaptive has no impact on the operation of preemption and preemption has no impact on the active state of adaptive. After preemption, the preempted intersection will likely require a transition to get back into coordination with the rest of the network.
11.0-2	The ASCT shall maintain adaptive operation at non-preempted intersections during emergency vehicle preemption.	M	Ph 1	See 11.0-1
11.0-3	The ASCT shall maintain adaptive operation at non-preempted intersections during Light Rail Transit preemption. This requirement will accommodate future expansion as there are no at-grade Light Rail Transit crossings within the project boundaries.	D	Ph 1	See 11.0-1
11.0-4	The ASCT shall resume adaptive control of signal controllers after preemption requests are served.	D	Ph 1	See 11.0-1
11.0-5	The ASCT shall execute user-specified actions at non-preempted signal controllers during preemption. (E.g., inhibit a phase, activate a sign, display a message on a DMS)	D	Ph 1	MAXTIME's peer to peer and user logic can be configured to achieve this operation.
11.0-6	The ASCT shall operate normally at non-preempted signal controllers when special functions are engaged by a preemption event. (Examples of such special functions are a phase omit, a phase maximum recall or a fire route.)	D	Ph 1	MAXTIME's preempt configuration supports special function configuration. See 11.0-2
11.0-7	The ASCT shall release user-specified signal controllers to local control when one signal in a group is preempted. Note: City of Lynnwood prefers a preempted signal to stay in adaptive operation then transition back to coordination within signal group.	M	Ph 1	This is user defined by condition plan. Also, we can have the preempted signal return to coordination immediately and without a transition if desired (using the exit feature: exit coord).
11.0-8	The ASCT shall not prevent the local signal controller from operating in normally detected limited-service actuated mode during preemption.	D	Ph 1	Adaptive does not alter the function of preemption on the local controller
11.0-9	The ASCT shall allow peer to peer custom functionality to coordinate operations with adjacent signals during preemption.	D	Ph 1	MAXTIME supports P2P and custom user logic to achieve desired operations during preemption at any intersection on the network.
11.0-10	The ASCT shall return to adaptive control within a user-specified number of cycles after preemption.	M	Ph 1	See 11.0-1. MAXTIME adaptive does not cease adaptive operations due to a preempt call.

## 12. Transit Priority

12.0-1	The ASCT shall continue adaptive operations of a group when one or more of its signal controllers has a transit priority request.	M	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-2	The ASCT shall advance the start of a user-specified green phase in response to a transit priority request.	M	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to Agreement Number 6

				user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-2.0-1	The advance of start of green phase shall be user-defined.	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-2.0-2	Adaptive operations shall continue during the advance of the start of green phase.	D	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-3	The ASCT shall delay the end of a green phase, in response to a priority request.	M	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-3.0-1	The delay of end of green phase shall be user-defined.	D	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-3.0-2	Adaptive operations shall continue during the delay of the end of green phase.	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-4	The ASCT shall permit at least 2 exclusive transit phases such as at a queue jump.	M	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-4.0-1	Adaptive operations shall continue when there is an exclusive transit phase call.	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-5	The ASCT shall accept a transit priority requests from a signal controller/transit vehicle detector (GTT equipment) providing the same level of TSP control that currently exists. The ASCT shall provide user-defined lockouts for TSP service.	M	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-6	The ASCT shall be capable of receiving transit vehicle information from an external CAD/AVL system. ASCT logic shall use location information to grant or deny TSP requests to maintain a user-defined headway spacing between buses.	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-7.SC	The ASCT shall take into consideration into its signal timing strategy maintaining bus headways along project corridors.	D	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.
12.0-8	The ASCT shall accommodate TSP requests from local bus service in the corridor.	D	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve

				the priority vehicle when it arrives.
12.0-8.0-1	The ASCT shall differentiate Bus Rapid Transit (BRT) and local buses based on respective transponder identifier numbers (database).	D	Ph 1	MAXTIME adaptive will remain active at all intersections during any priority service (LRT, BRT, etc.). MAXTIME adaptive has no impact on the operation of priority demand and priority service has no impact on the active state of adaptive.
12.0-8.0-2	The ASCT shall provide a user-defined tiered level of priority for Bus Rapid Transit (BRT) and local buses.	D	Ph 1	MAXTIME utilizes a priority vehicle's ETA to truncate non priority phases or extend priority phases in an equitable manner up to the minimum/maximum user-defined amount as-needed to serve the priority vehicle when it arrives.

### 13. Failure Events and Fallback

#### 13.1 Detector Failure

13.1.0-1	The ASCT shall take user-specified action in the absence of valid detector data from a user-specified number of vehicle detectors within a group.	D	Ph 1	MAXTIME adaptive's condition plans allows users to configure failures on user-defined detectors or a user-defined number of detectors as a condition trigger. The condition triggers can be used to terminate adaptive operations and revert to local TOD, call a new condition plan (using different detection), use historical data, or trigger a temporary pattern. Condition plans can be configured by TOD. When the condition is true, the defined response will activate in real-time with no interruptions.
13.1.0-1.0-2	The ASCT shall release control to local operations to operate under its own time-of-day schedule.	D	Ph 1	See 13.1.0-1
13.1.0-2	The ASCT shall use the following user-specified alternate data sources for operations in the absence of the real-time data from a detector:		Ph 1	
13.1.0-2.0-1	• Data from a user-specified alternate detector	M	Ph 1	Accomplished in MAXTIME with fail detector
13.1.0-2.0-2	• Stored historical data from the failed detector	M	Ph 1	See 13.1.0-1
13.1.0-2.0-3	The ASCT shall switch to the alternate source in real time without operator intervention.	D	Ph 1	See 13.1.0-1
13.1.0-3	In the event of a detector failure, the ASCT shall issue an alarm to user-specified recipients. This requirement shall be fulfilled by sending the alarm to a designated list of recipients by a designated means (i.e. text or email), or by using an external maintenance management system.	M	Ph 1	MAXTIME supports detector diagnostics to trigger alarms upon detector failures. MAXVIEW supports user notifications for detector failures.
13.1.0-4	All detector failures shall be indicated on the system's operator interface.	M	Ph 1	Accomplished in MAXVIEW
13.1.0-5	In the event of a failure, the ASCT shall log details of the failure in a permanent log.	M	Ph 1	Accomplished in MAXVIEW
13.1.0-6	The permanent failure log shall be searchable, achievable and exportable.	M	Ph 1	Accomplished in MAXVIEW

#### 13.2 Communications Failure

13.2-1	The ASCT shall execute user-specified actions when communications to one or more signal controllers fails within a group.	D	Ph 1	MAXTIME adaptive supports configuration of critical and non-critical intersections. When a critical intersection fails, MAXTIME adaptive will terminate and revert to local-TOD schedule. Non-critical intersection failures will result in adaptive dynamically regrouping the network without the failed intersection. Conditions can be used to terminate adaptive and revert to local TOD if X non-critical intersections fail.
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13.2-1.0-1	In the event of loss of communication to one or more user-specified signal controllers, the ASCT shall be capable of releasing control of all signal controllers within a user-specified group to local control.	M	Ph 1	See 13.2-1
13.2-1.0-2	The ASCT shall switch to user-specified operation in real time without operator intervention.	D	Ph 1	See 13.2-1
13.2-2	In the event of communications failure, the ASCT shall issue an alarm to user-specified recipients. (This requirement may be fulfilled by sending the alarm to a designated list of recipients by a designated means, or by using an external maintenance management system.	M	Ph 1	Accomplished in MAXVIEW
13.2-3	The ASCT shall issue an alarm at the point of failure detection.	M	Ph 1	Accomplished in MAXVIEW
13.2-4	In the event of a communications failure, the ASCT shall log details of the failure in a permanent log.	M	Ph 1	Accomplished in MAXVIEW
13.2-5	The permanent failure log shall be searchable, achievable and exportable.	M	Ph 1	Accomplished in MAXVIEW
<b>13.3 Adaptive Processor Failure</b>				
13.3-1	The ASCT shall execute user-specified actions when adaptive control fails:		Ph 1	
13.3-1.0-2	The ASCT shall release control to local operations to operate under its own time-of-day schedule.	M	Ph 1	Release to Local TOD based off critical failure timer
13.3-2	In the event of adaptive processor failure, the ASCT shall issue an alarm to user-specified recipients. (This requirement may be fulfilled by sending the alarm to a designated list of recipients by a designated means, or by using an external maintenance management system.	M	Ph 1	Accomplished in MAXVIEW
13.3-3	The permanent failure log shall be searchable, achievable and exportable.	D	Ph 1	Accomplished in MAXVIEW
13.3-4	During adaptive processor failure, the ASCT shall provide all local detector inputs to the local controller.	D	Ph 1	Adaptive never takes control of the detectors it uses detector info provided by the controller for operation.
<b>14. Software</b>				
14.0-1.SC	The System Integrator's adaptive software shall be fully operational within a combination of the following operating system and administration platforms: • Windows (Active Directory Client/Server Domain) • Linux • Mac-OS • Unix	M	Ph 1	MAXTIME and MAXTIME adaptive run on Linux while MAXVIEW utilizes Windows. User interfaces can be accessed from a web browser on any device platform.
<b>15. Training</b>				
15.0-1.SC	The System Integrator shall provide the following training.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-1.SC	The System Integrator shall provide training on the operations of the adaptive system.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-2.SC	The System Integrator shall provide training on troubleshooting the system.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-3.SC	The System Integrator shall provide training on preventive maintenance and repair of equipment.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-4.SC	The System Integrator shall provide training on system configuration.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-5.SC	The System Integrator shall provide training on administration of the system.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-6.SC	The System Integrator shall provide training on system calibration.	D	Ph 1	Q-Free will provide the required training
15.0-1.0-7.SC	The System Integrator's training delivery shall include: printed course materials and references, electronic copies of presentations and references.	D	Ph 1	Q-Free will include printed and electronic course materials (training manual), presentations, and references (tech notes)

15.0-1.0-8.SC	The System Integrator's training shall be delivered at a WSDOT and/or Snohomish County venue connected to the adaptive system for operations and maintenance training.	D	Ph 1	Q-Free will provide the required training at the WSDOT and/or Snohomish County venue connected to the adaptive system for operations and maintenance training.
15.0-1.0-9.SC	The System Integrator shall provide a sufficient amount of training to fully prepare maintenance and operations staff to operate, configure, maintain and calibrate the ASCT. The System Integrator shall provide a training program for agency review one month prior to scheduled training.	M	Ph 1	Q-Free will provide a sufficient amount of training to fully prepare maintenance and operations staff to operate, configure, maintain, and calibrate the adaptive system. Typically, training includes 1 day of configuration and calibration training and 1 day of maintenance and troubleshooting training.

## 16. Technical Support

16.0-1.SC	The initial implementation plan shall include five years of technical support. The ASCT System Integrator shall provide technical support according to a separate technical support contract. That contract should identify software modifications necessary to preserve requirements fulfillment, responsiveness in effecting those modifications, and all requirements on the System Integrator while performing the modifications.	M	Ph 1	Q-Free America will provide the required technical support.
16.0-2.SC	The ASCT System Integrator shall provide routine updates to the software and software environment necessary to preserve the fulfillment of requirements. Preservation of requirements fulfillment especially includes all IT management requirements as previously identified.	D	Ph 1	Q-Free America will routine software updates.
16.0-3.SC	The ASCT System Integrator shall warrant the system to be free of defects in materials and workmanship. Warranty is defined as correcting defects in materials and workmanship (subject to Technical Support language included in the project contract documents). Defect is defined as any circumstance in which the material does not perform according to its specification.	D	Ph 1	Q-Free America will provide the required warranty.
16.0-4.SC	The ASCT System Integrator shall provide support with the following response times: <ul style="list-style-type: none"> <li>• Support provided by telephone – 24 hours</li> <li>• Support provided via remote login to the system – 24 hours</li> <li>• Support requiring System Integrator staff onsite – 3 business days.</li> </ul>	M	Ph 1	Q-Free America will provide the required technical support response times.
16.0-5	The ASCT System Integrator shall have replacement equipment readily available in case of equipment failure per warranty.	D	Ph 1	Q-Free America is committed to providing any necessary replacement equipment in a reasonable amount of time.

## 17. Performance Measurement, Monitoring and Reporting

17.0-1	The ASCT system shall report high fidelity and high-resolution data (1/10th second) from within the ASCT local, central, and adaptive software to support system performance monitoring. All data shall be searchable through system filters.	M	Ph 1	MAXTIME collects all high-resolution data. MAXVIEW polls this data every 10 seconds for performance monitoring. The data can be searched through system filters, or the ATSPM reporting tool can be used for comprehensive reports of data.
17.0-2	The ASCT shall report measures of current traffic conditions on which it bases signal state alterations.	D	Ph 1	MAXTIME adaptive has current status screens for conditions, OCC, and VOL as well as Link speeds.
17.0-3	The ASCT shall report all intermediate calculated values that are affected by calibration parameters.	M	Ph 1	See 17.0-2
17.0-4	The ASCT shall maintain a real-time log of all signal state alterations directed by the ASCT.	M	Ph 1	MAXTIME has a real-time log of the most recent signal state alterations.
17.0-4.0-1	The ASCT log shall include all events directed by the external inputs.	D	Ph 1	This data is part of high-resolution data. See 17.0-1
17.0-4.0-2	The ASCT log shall include all external output state changes.	D	Ph 1	This data is part of high-resolution data. See 17.0-1
17.0-4.0-3	The ASCT log shall include all actual parameter values that are subject to user-specified values.	D	Ph 1	All configuration parameters are stored as part of the local database file.

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17.0-4.0-4	The ASCT shall maintain the records in this ASCT log for a user-specified period.	D	Ph 1	MAXVIEW will hold all the records indefinitely. The length of storage can be user specified. See 6.0-3 and 6.0-6
17.0-4.0-5	The ASCT shall archive the ASCT log in a searchable and exportable manner.	M	Ph 1	See 17.0-1
17.0-5	The ASCT shall maintain a log of all TSP interactions with the ASCT.	M	Ph 1	This data is part of high-resolution data. See 17.0-1
17.0-5.0-1	The ASCT log shall include BRT calculated headways.	D	Ph 1	This data is part of high-resolution data. See 17.0-1
17.0-5.0-2	The ASCT log shall include TSP requests received and delivered.	D	Ph 1	This data is part of high-resolution data. See 17.0-1
17.0-5.0-3	The ASCT log shall include signal state alterations to manage/maintain transit headway goals.	D	4	This data is part of high-resolution data.  The use of this data to manage/ maintain transit headway goals may require 3 <sup>rd</sup> party integration. Q-Free America is willing to work with Snohomish County, but cannot commit to development associated with integrating 3rd Party software within the timeline defined by this RFP.  This item can be further discussed during contract negotiation.
17.0-6	The ASCT shall include a GUI which provides easy and quick access to real time and historical graphical representations and spreadsheets of the performance measures.	D	Ph 1	Performance menus with graphical representations of coordination, phase termination, service times, and raw high-resolution data are available within the MAXTIME WebUI. Additional reports are available via the MAXVIEW WebUI. See 17.0-1
17.0-7	The ASCT shall be capable of reporting performance data in real time to an Application Programming Interface (API).	D	Ph 1	MAXTIME, MAXTIME adaptive, and MAXVIEW all use API's. These can be public API's as desired for query engines. Data is updated in real-time.

# **Exhibit B**

## **DBE Participation Plan**

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This project has a UDBE Goal of Zero



# **Preparation and Delivery of Electronic Engineering and Other Data**

CONSULTANT shall provide documents, exhibits, electronic files, or other presentations to the AGENCY in the following formats upon completion of the various phases of the work:

The following documents shall be provided to the AGENCY as digital copies or hardcopy originals;

- Executive Summary of Detectors Value Engineering (VE) Study
- Meeting minutes for the discussion of VE study results and action plan
- List of new additional detections furnished within each partnering agencies jurisdictions
- Both digital and hard copy of the Adaptive System (MaxTime, Max View and MaxAdapt) operations manuals, users manuals, five copies at least
- Troubleshooting guide and technical notes.
- System testing and acceptance report for Verification Test (including approved plan before system testing and verification).
- Report, plan and resolve system variances as identified during the system testing and verification.
- Training materials (multiple printed copies) and digital presentations before each training.
- Provide routine updates to the software and software environment necessary for the optimal operation of the system.

## Exhibit D Prime Consultant Cost Computations

### Cost Proposal

Item	Description	QTY	Unit	Unit Price	Extended Price
1	Project Management (Including all reports and meetings per proposed schedule)	1	LS	\$32,381.70	\$32,381.70
2	Furnish 32 ASCT Central Server Software Licenses (MAXVIEW)	1	LS	\$28,000.00	\$28,000.00
3	Furnish and Install ASCT Local Controller Hardware (27 1C Cards and 2 2070 LDX Controllers.)	29*	EA	\$994.00	\$28,826.00
4	Furnish and Install ASCT Local Controller Software Includes MAXTIME Adaptive Software	32	EA	\$2,758.25	\$88,264.00
5	Detection Upgrades	1**	ES	\$525,000.00	\$525,000.00
6	Communication Upgrades	1**	ES	\$10,000.00	\$10,000.00
7	Software Support	5	Per Year	\$22,800.00	\$68,400.00
8	System Testing, Configuration, Fine-Tuning and Verification	1	LS	\$126,598.00	\$126,598.00
9	Training and Documentation	3	Day	\$2,835.33	\$8,505.99
Sub-Total					\$951,975.69
+9.8%Tax					\$89,765.62
<b>Total</b>					<b>\$1,005,741.31</b>

\* Existing ASCT Central Server Hardware shall be used.

\*\*Detection (Item 5) and Communication (Item 6) Upgrades pricing is for estimation purposes only. Actual pricing will depend on Detection and Communications Evaluation and AGENCY equipment preferences. Detection and Communication Upgrades shall be installed by AGENCY forces per direction of the CONSULTANT.

### Optional Items – Tax Not Included

Item	Description	QTY	Unit	Unit Price	Extended Price
10	Traffic Signal Controller*	29	EA	\$2,154.00	\$62,466.00
11	Conflict Monitors	29	EA	\$725.00	\$21,025.00
12	CCTV Cameras	9	EA	\$6,000.00	\$54,000.00
13	CCTV Video Encoders	4	EA	\$1,000.00	\$4,000.00
14	Phase Selectors	22	EA	\$3,535.00	\$77,770.00
15	Additional Software Support	2	Per Year	\$22,800.00	\$45,600.00

\* Traffic Signal Controller would replace Item 3 – Furnish and Install ASCT Local Controller Hardware. An amendment to revise scope and budget shall be completed PRIOR To purchase of optional items.

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## Payment Schedule

The cost breakdown is summarized in the previous table of this Exhibit D and includes work as described in the scope of work in Exhibit A. Work shall be paid based on the milestones summarized in Table 1 below.

**Table 1. Milestones and Corresponding Payments**

Milestone	Item {See Cost Proposal, Exhibit D}								
	Project Management	ASCT Server Software Licenses	ASCT Local Controller Hardware and Software	ASCT Local Controller Hardware and Software	Detection Equipment	Other Equipment (Monitors, Phase Selectors, Camera)	Communications Equipment	System Integration, Testing, Configuration, Tuning and Validation	Training and Documentation
Final Detector Value Engineering Study (Exec. Summary}	10%							10%	
Equipment Delivered to County	5%				87%	95%	95%		
Detection Installed and Configured	10%				8%				
Central MAXVIEW System Licenses Provided and Intersections Configured in Existing MAXVIEW Deployment.	15%	85%							
2070 Controllers with MAXTIME Delivered	5%		90%	90%					
2070 Controllers and Timings Installed in Field	15%							40%	
GO-Live (MAXTIME adaptive)	10%	10%						10%	
Acceptance Testing Complete	20%							30%	
Training 1:									3 3%
Training 2:									3 3%
Training 3:									3 4%
Project Complete	10%	5%	10%	10%	5%	5%	5%	10%	

# **Exhibit E**

## **Sub-consultant Cost Computations**

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The CONSULTANT shall not sub-contract for the performance of any work under this AGREEMENT without prior written permission of the AGENCY. Refer to section VI “Sub-Contracting” of this AGREEMENT.

# **Exhibit F**

## **Title VI Assurances**

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During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, and successors in interest agrees as follows:

1. **Compliance with Regulations:** The CONSULTANT shall comply with the Regulations relative to non-discrimination in federally assisted programs of the AGENCY, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the “REGULATIONS”), which are herein incorporated by reference and made a part of this AGREEMENT.
2. **Non-discrimination:** The CONSULTANT, with regard to the work performed during this AGREEMENT, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of sub-consultants, including procurement of materials and leases of equipment. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the REGULATIONS, including employment practices when this AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.
3. **Solicitations for Sub-consultants, Including Procurement of Materials and Equipment:** In all solicitations either by competitive bidding or negotiations made by the CONSULTANT for work to be performed under a sub-contract, including procurement of materials or leases of equipment, each potential sub-consultant or supplier shall be notified by the CONSULTANT of the CONSULTANT’s obligations under this AGREEMENT and the REGULATIONS relative to non-discrimination on the grounds of race, color, sex, or national origin.
4. **Information and Reports:** The CONSULTANT shall provide all information and reports required by the REGULATIONS or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the AGENCY, the STATE, or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such REGULATIONS, orders and instructions. Where any information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the AGENCY, the STATE, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
5. **Sanctions for Non-compliance:** In the event of the CONSULTANT’s non-compliance with the non-discrimination provisions of this AGREEMENT, the AGENCY shall impose such AGREEMENT sanctions as it, the STATE, or the FHWA may determine to be appropriate, including, but not limited to:
  - Withholding of payments to the CONSULTANT under this AGREEMENT until the CONSULTANT complies, and/or;
  - Cancellation, termination, or suspension of this AGREEMENT, in whole or in part.
6. **Incorporation of Provisions:** The CONSULTANT shall include the provisions of paragraphs (1) through (5) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the REGULATIONS, or directives issued pursuant thereto. The CONSULTANT shall take such action with respect to any sub-consultant or procurement as the STATE, the AGENCY, or FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance.

Provided, however, that in the event a CONSULTANT becomes involved in, or is threatened with, litigation with a sub-consultant or supplier as a result of such direction, the CONSULTANT may request the AGENCY enter into such litigation to protect the interests of the STATE and/or the AGENCY and, in addition, the CONSULTANT may request the United States enter into such litigation to protect the interests of the United States.

# **Exhibit G**

## **Certification Documents**

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- Exhibit G-1(a) Certification of Consultant
- Exhibit G-1(b) Certification of Snohomish County Official
- Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions
- Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying
- Exhibit G-4 Certificate of Current Cost or Pricing Data

**Exhibit G-1(a) Certification of Consultant**

I hereby certify that I am the and duly authorized representative of the firm of Q-Free America, Inc., whose address is 4660 La Jolla Village Dr., Suite 500, San Diego, CA 92008, and that neither the above firm nor I have:

- a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the aboveCONSULTANT) to solicit or secure this AGREEMENT;
- b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out this AGREEMENT; or
- c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above CONSULTANT) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this AGREEMENT; except as hereby expressly stated (if any);

I acknowledge that this certificate is to be furnished to the Washington State Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Q-Free America, Inc.

\_\_\_\_\_  
Consultant (Firm Name)

\_\_\_\_\_  
Signature (Authorized Official of Consultant)

\_\_\_\_\_  
Date

## Exhibit G-1(b) Certification of Snohomish County Official

I hereby certify that I am the:

Snohomish County Executive

Executive Director

of Snohomish County Washington and that Q-Free America, Inc. or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this AGREEMENT to:

- a) Employ or retain, or agree to employ to retain, any firm or person; or
- b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as hereby expressly stated (if any):

I acknowledge that this certificate is to be furnished to the Washington State Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation, in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Agreement Number: CCF05-20



## Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions

- I. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - B. Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - D. Have not within a three (3) year period preceding this application / proposal had one or more public transactions (Federal, State and local) terminated for cause or default.
- II. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Q-Free America, Inc.

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Consultant (Firm Name)

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Signature (Authorized Official of Consultant)

---

Date

Agreement Number: CCF05-20

## Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative AGREEMENT, and the extension, continuation, renewal, amendment, or modification of Federal contract, grant, loan or cooperative AGREEMENT.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative AGREEMENT, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00, and not more than \$100,000.00, for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier sub-contracts, which exceed \$100,000, and that all such sub-recipients shall certify and disclose accordingly.

Q-Free America, Inc.

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Consultant (Firm Name)

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Signature (Authorized Official of Consultant)

---

Date

Agreement Number: CCF05-20

## Exhibit G-4 Certificate of Current Cost or Pricing Data

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 2.101 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.403-4) submitted, either actually or by specific identification in writing, to the Contracting Officer or to the Contracting Officer's representative in support of RFP-16-20SR\* are accurate, complete, and current as of 11/20/20\_\_\*\*

This certification includes the cost or pricing data supporting any advance AGREEMENT's and forward pricing rate AGREEMENT's between the offer or and the Government that are part of the proposal.

Firm: Q-Free America, Inc.

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Signature

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Title

Date of Execution\*\*\*: Signature date of the last party to sign.

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\*Identify the proposal, quotation, request for pricing adjustment, or other submission involved, giving the appropriate identifying number (e.g. project title.)

\*\*Insert the day, month, and year, when price negotiations were concluded and price AGREEMENT was reached.

\*\*\*Insert the day, month, and year, of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

# **Exhibit H**

## **Liability Insurance Increase**

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### **To Be Used Only If Insurance Requirements Are Increased**

The professional liability limit of the CONSULTANT to the AGENCY identified in Section XII, Legal Relations and Insurance of this Agreement is amended to \$ .

The CONSULTANT shall provide Professional Liability insurance with minimum per occurrence limits in the amount of \$ .

Such insurance coverage shall be evidenced by one of the following methods:

- Certificate of Insurance.
- Self-insurance through an irrevocable Letter of Credit from a qualified financial institution.

Self-insurance through documentation of a separate fund established exclusively for the payment of professional liability claims, including claim amounts already reserved against the fund, safeguards established for payment from the fund, a copy of the latest annual financial statements, and disclosure of the investment portfolio for those funds.

Should the minimum Professional Liability insurance limit required by the AGENCY as specified above exceed \$1 million per occurrence or the value of the contract, whichever is greater, then justification shall be submitted to the Federal Highway Administration (FHWA) for approval to increase the minimum insurance limit.

If FHWA approval is obtained, the AGENCY may, at its own cost, reimburse the CONSULTANT for the additional professional liability insurance required.

Notes: Cost of added insurance requirements: \$ .

- Include all costs, fee increase, premiums.
- This cost shall not be billed against an FHWA funded project.
- For final contracts, include this exhibit.

# **Exhibit I**

## **Alleged Consultant Design Error Procedures**

---

The purpose of this exhibit is to establish a procedure to determine if a consultant's alleged design error is of a nature that exceeds the accepted standard of care. In addition, it will establish a uniform method for the resolution and/or cost recovery procedures in those instances where the agency believes it has suffered some material damage due to the alleged error by the consultant.

### **Step 1 Potential Consultant Design Error(s) is Identified by Agency's Project Manager**

At the first indication of potential consultant design error(s), the first step in the process is for the Agency's project manager to notify the Director of Public Works or Agency Engineer regarding the potential design error(s). For federally funded projects, the Region Local Programs Engineer should be informed and involved in these procedures. (Note: The Director of Public Works or Agency Engineer may appoint an agency staff person other than the project manager, who has not been as directly involved in the project, to be responsible for the remaining steps in these procedures.)

### **Step 2 Project Manager Documents the Alleged Consultant Design Error(s)**

After discussion of the alleged design error(s) and the magnitude of the alleged error(s), and with the Director of Public Works or Agency Engineer's concurrence, the project manager obtains more detailed documentation than is normally required on the project. Examples include: all decisions and descriptions of work; photographs, records of labor, materials and equipment.

### **Step 3 Contact the Consultant Regarding the Alleged Design Error(s)**

If it is determined that there is a need to proceed further, the next step in the process is for the project manager to contact the consultant regarding the alleged design error(s) and the magnitude of the alleged error(s). The project manager and other appropriate agency staff should represent the agency and the consultant should be represented by their project manager and any personnel (including sub-consultants) deemed appropriate for the alleged design error(s) issue.

### **Step 4 Attempt to Resolve Alleged Design Error with Consultant**

After the meeting(s) with the consultant have been completed regarding the consultant's alleged design error(s), there are three possible scenarios:

- It is determined via mutual agreement that there is not a consultant design error(s). If this is the case, then the process will not proceed beyond this point.
- It is determined via mutual agreement that a consultant design error(s) occurred. If this is the case, then the Director of Public Works or Agency Engineer, or their representatives, negotiate a settlement with the consultant. The settlement would be paid to the agency or the amount would be reduced from the consultant's agreement with the agency for the services on the project in which the design error took place. The agency is to provide LP, through the Region Local Programs Engineer, a summary of the settlement for review and to make adjustments, if any, as to how the settlement affects federal reimbursements. No further action is required.
- There is not a mutual agreement regarding the alleged consultant design error(s). The consultant may request that the alleged design error(s) issue be forwarded to the Director of Public Works or Agency Engineer for review. If the Director of Public Works or Agency Engineer, after review with their legal counsel, is not able to reach mutual agreement with the consultant, proceed to Step 5.

## **Step 5 Forward Documents to Local Programs**

For federally funded projects all available information, including costs, should be forwarded through the Region Local Programs Engineer to LP for their review and consultation with the FHWA. LP will meet with representatives of the agency and the consultant to review the alleged design error(s), and attempt to find a resolution to the issue. If necessary, LP will request assistance from the Attorney General's Office for legal interpretation. LP will also identify how the alleged error(s) affects eligibility of project costs for federal reimbursement.

- If mutual agreement is reached, the agency and consultant adjust the scope of work and costs to reflect the agreed upon resolution. LP, in consultation with FHWA, will identify the amount of federal participation in the agreed upon resolution of the issue.
- If mutual agreement is not reached, the agency and consultant may seek settlement by arbitration or by litigation.

# *Exhibit J*

## **Consultant Claim Procedures**

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The purpose of this exhibit is to describe a procedure regarding claim(s) on a consultant agreement. The following procedures should only be utilized on consultant claims greater than \$1,000. If the consultant's claim(s) are a total of \$1,000 or less, it would not be cost effective to proceed through the outlined steps. It is suggested that the Director of Public Works or Agency Engineer negotiate a fair and reasonable price for the consultant's claim(s) that total \$1,000 or less.

This exhibit will outline the procedures to be followed by the consultant and the agency to consider a potential claim by the consultant.

### **Step 1 Consultant Files a Claim with the Agency Project Manager**

If the consultant determines that they were requested to perform additional services that were outside of the agreement's scope of work, they may be entitled to a claim. The first step that must be completed is the request for consideration of the claim to the Agency's project manager.

The consultant's claim must outline the following:

- Summation of hours by classification for each firm that is included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Timeframe of the additional work that was outside of the project scope;
- Summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work; and
- Explanation as to why the consultant believes the additional work was outside of the agreement scope of work.

### **Step 2 Review by Agency Personnel Regarding the Consultant's Claim for Additional Compensation**

After the consultant has completed step 1, the next step in the process is to forward the request to the Agency's project manager. The project manager will review the consultant's claim and will meet with the Director of Public Works or Agency Engineer to determine if the Agency agrees with the claim. If the FHWA is participating in the project's funding, forward a copy of the consultant's claim and the Agency's recommendation for federal participation in the claim to the WSDOT Local Programs through the Region Local Programs Engineer. If the claim is not eligible for federal participation, payment will need to be from agency funds.

If the Agency project manager, Director of Public Works or Agency Engineer, WSDOT Local Programs (if applicable), and FHWA (if applicable) agree with the consultant's claim, send a request memo, including backup documentation to the consultant to either supplement the agreement, or create a new agreement for the claim. After the request has been approved, the Agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit. No further action is needed regarding the claim procedures.

If the Agency does not agree with the consultant's claim, proceed to step 3 of the procedures.

### **Step 3 Preparation of Support Documentation Regarding Consultant's Claim(s)**

If the Agency does not agree with the consultant's claim, the project manager shall prepare a summary for the Director of Public Works or Agency Engineer that included the following:

- Copy of information supplied by the consultant regarding the claim;
- Agency's summation of hours by classification for each firm that should be included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Agency's summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work;
- Explanation regarding those areas in which the Agency does/does not agree with the consultant's claim(s);
- Explanation to describe what has been instituted to preclude future consultant claim(s); and
- Recommendations to resolve the claim.

### **Step 4 Director of Public Works or Agency Engineer Reviews Consultant Claim and Agency Documentation**

The Director of Public Works or Agency Engineer shall review and administratively approve or disapprove the claim, or portions thereof, which may include getting Agency Council or Commission approval (as appropriate to agency dispute resolution procedures). If the project involves federal participation, obtain concurrence from WSDOT Local Programs and FHWA regarding final settlement of the claim. If the claim is not eligible for federal participation, payment will need to be from agency funds.

### **Step 5 Informing Consultant of Decision Regarding the Claim**

The Director of Public Works or Agency Engineer shall notify (in writing) the consultant of their final decision regarding the consultant's claim(s). Include the final dollar amount of the accepted claim(s) and rationale utilized for the decision.

### **Step 6 Preparation of Supplement or New Agreement for the Consultant's Claim(s)**

The agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit.