CONTRACT DOCUMENTS AND SPECIFICATIONS

for

City of Portsmouth Project #22002 New Hampshire Project #29781 Federal Project # X-A004(304) Woodbury Avenue Traffic Signal Interconnect Project Bid #49-18 City of Portsmouth Rockingham County John P. Bohenko, City Manager



Prepared by:

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City of Portsmouth Portsmouth, New Hampshire Department of Public Works

Woodbury Avenue Traffic Signal Interconnect Project Bid #49-18

INVITATION TO BID

<u>Sealed</u> bid proposals, <u>plainly marked</u> Woodbury Avenue Traffic Signal Interconnect Project, Bid Proposal #49-18 on the outside of the mailing envelope as well as the sealed bid envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until March 8, 2018 at 1:00 p.m.; at which time all bids will be publicly opened and read aloud.

This project consists of the installation of traffic signal equipment, concrete sidewalks, ADA-accessible ramps, pedestrian refuge islands, granite curbing, retroreflective signage, and minor roadway paving and markings in the section of Woodbury Avenue from Gosling Road to Granite Street and Market Street from Woodbury Avenue to Portsmouth Boulevard. Additionally, there is an add/alternate portion of the bid for paint pavement markings, as oppose to thermoplastic and paint pavement markings in the base bid, throughout the project should the City's concurrent pavement resurfacing project along Woodbury Avenue not occur until a time subsequent to the project under this cover.

Work may begin at any time on or after May 1, 2018. Substantial completion of all roadway, sidewalk, and foundation work is required by July 31, 2018. Traffic signal installation work may occur following that date, but Final Completion of the project must occur by October 30, 2018 with no more than seventy (70) days on site working total. Liquidated damages shall be assessed at \$600.00 per day. Hours of work will be 7:00 AM to 5:00 PM weekdays, unless otherwise approved by the City of Portsmouth DPW.

The Contractor will be required to keep roadways and sidewalks passable for the public and employees to the maximum degree possible. Contractor proposed traffic or pedestrian detour routes or phasing shall be approved by the City of Portsmouth DPW prior to the commencement of work.

The Contractor will be required to coordinate with NHDOT Project #11238Q (Newington-Dover), also known as the Spaulding Turnpike project in Newington and Dover, New Hampshire. Many traffic signal components as part of the Woodbury Avenue project within this bid will require integration and direct coordination with traffic signals being reconstructed as part of the NHDOT Project #11238Q. The Contractor will be required to also coordinate with the repaving of Woodbury Avenue and Market St which is currently out to bid as well.

The General Contractor for this project must be <u>Pre-qualified with the New Hampshire Department of Transportation</u> (NHDOT) for Road Construction and/or Signal Work. All work shall conform to the current standard specifications and documentation requirements issued by the NHDOT unless otherwise stipulated in this document. This contract is also subject to all applicable Federal Highway Administration (FHWA) and NHDOT requirements required for Local Public Agency (LPA) Federal Aid projects, including but not limited to, Federal wage rate compliance, Affirmative Action requirements, lobbying disclosures, Buy America provisions, and other relevant documentation needs.

Bidders must determine the quantities of work required and the conditions under which the work will be performed.

Specifications may be obtained at the City's website: <u>http://www.cityofportsmouth.com/finance/purchasing.htm</u> Addenda to this project, if any, including written answers to questions, will not be provided directly to vendors, but will be posted by 1:00 p.m., on March 2, 2018 on the City of Portsmouth Website under the project heading.

Electronic copies of the plans and specifications may be obtained off of the City's webpage. Documents are not available for pickup.

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re-bid, and to accept any bid that it may deem to be in the best interest of the

City. Also, the City reserves the right to approve or deny subcontractors for this project. An award of this project is contingent upon additional process and funding.

A schedule of the minimum wages for all labor classifications as determined by the Secretary of Labor pursuant to Section 115 of the Federal Aid Highway Act of 1956 is included in the proposal. Unskilled labor may be hired from lists prepared by the NH Dept. of Employment Security designated in the proposal.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H.

INSTRUCTIONS TO BIDDERS

BIDDING REQUIREMENTS AND CONDITIONS

1. Special Notice to Bidders

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

Addenda to this bid document, if any, including written answers to questions, will be posted by March 2, 2018 on the City of Portsmouth website at <u>http://www.cityofportsmouth.com/finance/purchasing.htm</u> under the project heading. Addenda and updates will <u>NOT</u> be sent directly to firms. Contractors submitting a bid should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.

2. Interpretation of Quantities in Bid Schedules

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

3. Examination of Plans, Specifications and Site Work

The bidder is expected to examine carefully the site of the proposed work, the plans, standard specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that maybe found therein.

4. Familiarity with Laws

The bidder is assumed to have made himself or herself familiar with all federal and state laws, procedures, and documentation requirements; and all local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the work or affect the materials or equipment used in the work or affect the conduct of the work, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

5. Preparation of Proposal

a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of the respective prices and quantities written in figures in the column provided for that purpose and the

total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed.

If a unit price or a lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink.

b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if member-managed) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his or her name and post office address must be shown, by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles and business addresses of the president, secretary and treasurer.

6. Nonconforming Proposals

Proposals will be considered nonconforming and may be rejected in the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached;
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning;
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than the amount indicated in the Invitation to Bid. All sureties shall be made payable to the "City of Portsmouth". If a bid bond is used by the bidder it shall be:

- In a form satisfactory to the Owner;
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have four business days (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by 4:00 p.m. If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may rejected the bid.

8. Delivery of Proposals

When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

9. Withdrawal of Proposals

A bidder will be permitted to withdraw his or her proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

11. Disqualification of Bidders

Any or all of the following reasons may be deemed by Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of his proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- Evidence of collusion among bidders;
- Failure to submit all required information requested in the bid specifications;
- If the Contractor is not listed with the New Hampshire Department of Transportation as a pre-qualified contractor under the classification of Road Construction;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders qualification or otherwise;
- Uncompleted work which, in the judgment of the owner, might hinder or prevent the prompt completion of additional work if awarded;
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts;
- Default or unsatisfactory performance on previous contracts; or
- Such disqualification would be in the best interests of the Owner.

12. Material Guaranty and Samples

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

AWARD AND EXECUTION OF CONTRACT

1. Consideration of Proposals

After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work and any such additional considerations as may be identified in the bid documents. The comparisons of total price will be established from the base bid, and not the add/alternate bid. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.

2. Award of Contract

Within 30 calendar days after the opening of proposals, if a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, mailed to the address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

3. Reservation of Rights

The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby. The Owner further reserves the right to conduct such investigations of the contractor's history, financial resources, and other qualifications as it deems necessary to determine whether bidder is qualified to do the work. Bidder may be asked to execute releases. Failure to execute a release upon request may result in disqualification.

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. An award of this project is contingent upon additional process and funding.

4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guaranties of the three lowest bidders will be returned within ten days following the award of the contract if requested.

5. Contract Bonds

At the time of the execution of the contract, the successful bidder shall furnish:

- A performance bond in the amount of 100 percent of the contract amount.
- Labor and materials payment bond in the sum equal to 100 percent of the contract amount.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3) conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered as in effect until it has been fully executed by all parties.

7. Failure to Execute Contract

Failure to execute the contract and to provide acceptable bonds and proof of insurance within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the City may exercise its reserved rights including the rejection of all bids or re-advertisement.

PROPOSAL FORM

Woodbury Avenue Traffic Signal Interconnect Project

CITY OF PORTSMOUTH, N.H.

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

1. All interested in the Bid as Principals are named herein.

2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;

3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid.

4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;

5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Director of Public Works. Any such changes will not result in or be justification for any penalty or increase in contract prices; and agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefore the following item prices, to wit:

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
202.6	450	FT	Curb Removal for Salvage	\$	\$
203.1	775	СҮ	Common Excavation	\$	\$
214	1	U	Fine Grading	\$	\$

Bid Proposal #49-18

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
304.3	15	CY	Crushed Gravel (F)	\$	\$
403.12	200	Tons	Hot Bituminous Pavement, Hand Method	\$	\$
604.0007	10	EA	Polyethylene Liner	\$	\$
604.4	25	LF	Reconstructing / Adjusting Catch Basin & Drop Inlet	\$	\$
608.26	950	SY	6" Concrete Sidewalk	\$	\$
608.257	185	SY	Median Island (Broom Finish in 8" Cement Concrete)	\$	\$
608.54	55	SY	Detectable Warning Devices, Cast Iron	\$	\$
609.01	75	LF	Straight Granite Curb	\$	\$
609.02	225	LF	Curved Granite Curb	\$	\$
609.21	130	LF	Straight Granite Sloped Curb	\$	\$
609.23	20	LF	Curved Granite Sloped Curb	\$	\$

Bid Proposal #49-18

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
609.5	1,800	LF	Reset Granite Curb	\$	\$
614.511	20	EA	Concrete Pull Box 14"	\$	\$
614.519	48	EA	Reset Concrete Pull Box	\$	\$
614.73118	775	LF	3" PVC Conduit, Schedule 80	\$	\$
615.0301	510	SF	Traffic Sign Type C	\$	\$
615.032	60	EA	Traffic Sign Type C, Breakaway Mounts (F)	\$	\$
615.033	45	EA	Removing Traffic Sign, Type C	\$	\$
616.191	1	U	Alterations to Traffic Signals Location No. 1	- \$	\$
616.192	1	U	Alterations to Traffic Signals Location No. 2	- \$	\$
616.193	1	U	Alterations to Traffic Signals Location No. 3	_ \$	\$

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
616.194	1	U	Alterations to Traffic Signals Location No. 4	\$	\$
616.195	1	U	Alterations to Traffic Signals Location No. 5	- \$	\$
616.196	1	U	Alterations to Traffic Signals Location No. 6	\$	\$
616.197	1	U	Alterations to Traffic Signals Location No. 7	\$	\$
618.61	120	HR	Uniformed Officers with Vehicle	\$	\$
618.7	240	HR	Flaggers	\$	\$
619.1	1	U	Maintenance of Traffic	\$	\$
625.52	1	U	Light Pole	\$	\$
625.621	1	U	Reset Luminaire	\$	\$
625.622	1	U	Remove Light Pole	\$	\$
632.3106	100	LF	Retroreflective Thermoplastic Pavement Marking, 6" Line	\$	\$

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
632.3112	2,250	LF	Retroreflective Thermoplastic Pavement Marking, 12" Line	\$	\$
632.3118	225	LF	Retroreflective Thermoplastic Pavement Marking, 18" Line	\$	\$
632.3124	75	LF	Retroreflective Thermoplastic Pavement Marking, 24" Line	\$	\$
632.32	300	SF	Retroreflective Thermoplastic Pavement Marking, Symbol or Word	\$	\$
632.911	2,300	LF	Obliterate Pavement Marking Line, 12" Wide & Under	\$	\$
632.912	950	LF	Obliterate Pavement Marking Line, Over 12" Wide	\$	\$
632.92	680	SF	Obliterate Pavement Marking, Symbol or Word	\$	\$
646.512	575	SY	Turf Establishment with Mulch, Tackifiers and Loam (F)	\$	\$
692	1	U	Mobilization	\$	\$

TOTAL FOR PROJECT BASE BID AND BASIS OF AWARD

In Figures \$_____

In Words \$_____

PROPOSAL FORM FOR ADDITIONAL/ALTERNATIVE #1 BID CONSTRUCTION ITEMS

It is mandatory to fill out this section as well.

The Add Alternate #1 bid has been included for the application of thermoplastic pavement markings along the Woodbury Avenue corridor should the City choose not to apply the pavement markings themselves concurrent with their pavement resurfacing project along Woodbury Avenue. The application of thermoplastic pavement markings along the side-street approaches is included in the base bid.

ITEM #	EST. QTY	UNITS	ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
632.3106	1,700	LF	Retroreflective Thermoplastic Pavement Marking, 6" Line	\$	\$
632.3112	3,500	LF	Retroreflective Thermoplastic Pavement Marking, 12" Line	_ \$	\$
632.3118	350	LF	Retroreflective Thermoplastic Pavement Marking, 18" Line	\$	\$
632.32	450	SF	Retroreflective Thermoplastic Pavement Marking, Symbol or Word	_ \$	\$

TOTAL FOR PROJECT ADDITIONAL/ALTERNATIVE BID #1

In Figures \$_____

In Words \$_____

To Bidder:

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts and/or easements and agreements from one or more impacted property owners are not received.

It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.

TOTAL FOR PROJECT (BASE BID + ADD ALTERNATIVE BID #1)

In Figures \$_____

In Words \$_____

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the Contract Documents, the bidder will accept compensation as stipulated therein.

Date:

Company

By:_____Signature

Business Address

City, State, Zip Code

Telephone:_____

Title:

All Bids are to be submitted on this form and in a sealed envelope, plainly marked on the outside with the Bidder's name and address and the Project name as it appears at the top of the Proposal Form.

We certify that the Company is currently pre-qualified with the State of New Hampshire for Road Construction.

By:

Signature & Title

Date

BID SECURITY BOND

(This format provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

_____, as Principal, and

_____, as Surety, are hereby

held and firmly bound unto _____

IN THE SUM OF _____

as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted to the

A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached hereto or, in the alternative,
- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and or CONTRACT,

then this obligation shall be void, otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the parties hereto have duly executed

this bond on the _____ day of _____, 20__.

_____L.S. (Name of Principal)

(SEAL)

BY_____

(Name of Surety)

BY_____

STATEMENT OF BIDDER'S QUALIFICATIONS

Supply with Bid

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary

- 1. Name of Bidder
- 2. Permanent Main Office Address
- 3. Form of Entity
- 4. When Organized
- 5. Where Organized

6. How many years have you been engaged in the contracting business under your present name; also state names and dates of previous firm names, if any.

7. Contracts on hand; (schedule these, showing gross amount of each contract and the approximate anticipated dates of completion).

- 8. General character of work performed by your company.
- 9. Have you ever failed to complete any work awarded to you? ____(no)___(yes). If so, where and why?
- 10. Have you ever defaulted on a contract? _____(no)____(yes). If so, where and why?
- 11. Have you ever failed to complete a project in the time allotment according to the Contract Documents? _____(no)____(yes). If so, where and why?

12. List the most important contracts recently executed by your company, stating approximate cost for each, and the month and year completed.

13. List your major equipment available for this contract.

- 14. List your key personnel such as project superintendent and foremen available for this contract.
- 15. List subcontractors for the following categories whom you will use for the following (unless this work is to be done by your own organization, in which case please state).

a. Signal Work

- b. Concrete Flatwork
- c. Curbing _____
- d. Paving _____
- e. Pavement Markings ______

STATEMENT OF BIDDERS QUALIFICATIONS (continued)

The City reserves the right to disallow <u>any</u> subcontractor including work proposed to be completed by the General Contractor.

16. With what banks do you do business?

a. Do you grant the Owner permission to contact this/these institutions?
____(yes) ____(no).

b. Latest Financial Statements, certified audited if available, prepared by an independent certified public accountant, may be requested by Owner. If requested, such statements must be provided within five (5) business days or the bid proposal will be rejected. Certified Audited Statements are preferred. Internal statements may be attached only if independent statements were not prepared.

Dated at ______ this _____ day of _____, 20___.

Name of Bidder

BY_____

TITLE_____

State of_____

County of_____

_____being duly sworn, deposes and

says that the bidder is ______of_______(Name of Organization)

and answers to the foregoing questions and all statements contained therein are true and correct.

Sworn to before me this _____day of _____, 20___.

Notary of Public My Commission expires_____

CONTRACT AGREEMENT

Woodbury Avenue Traffic Signal Interconnect Project

THIS AGREEMENT made as of _____ day of _____ in the year **2018**, by and between the City of Portsmouth, New Hampshire (hereinafter call the Owner) and ______ (hereinafter called the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE I- Work - The Contractor shall perform all work as specified or indicated in the Contract Documents for the completion of the Project. The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

ARTICLE II - ENGINEER - The Director of Public Works or his authorized representative will act as engineer in connection with completion of the Project in accordance with the Contract Documents.

ARTICLE III - CONTRACT TIME - The work will commence in accordance with the Notice to Proceed. **Please note the requirements for substantial completion of all roadway, sidewalk, and foundation work by July 31, 2018.** All work shall be completed no later than October 30, 2018 and the contractor will have no more than seventy (70) on site working days to complete the project.

ARTICLE V - PAYMENT - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

ARTICLE VI - LIQUIDATED DAMAGES - In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **six hundred dollars** (**\$600**) for each calendar day beyond the specified completion date for each section of work. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

CONTRACT AGREEMENT (continued)

ARTICLE VII – CONTRACT DOCUMENTS – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor's Bid and Bonds
- 8.3 Notice of Award, Notice to Proceed
- 8.4 Instruction to Bidders

General Requirements, Control of Work, Temporary Facilities, Measurement and Payment, Standard Specifications

- 8.5 Insurance Requirements
- 8.6 Special Conditions
- 8.7 Standard and Technical Specifications
- 8.8 Drawings
- 8.9 Special Provisions
- 8.10 Any modifications, including change orders, duly delivered after execution of this Agreement.

ARTICLE VIII – TERMINATION FOR DEFAULT – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

ARTICLE IX – INDEMNIFICATION OF OWNER – Contractor will indemnify Owner against all suits, claims, judgments, awards, loss, cost or expense (including without limitation attorneys' fees) arising in any way out of the Contractor's negligent performance of its obligations under this Contract. Contractor will defend all such actions with counsel satisfactory to Owner at its own expense, including attorney's fees, and will satisfy any judgment rendered against Owner in such action.

ARTICLE X – PERMITS –The Contractor will secure at its own expense, all other permits and consents required by law as necessary to perform the work and will give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, rules and regulations.

ARTICLE XI – INSURANCE – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

ARTICLE XII - MISCELLANEOUS -

- A. Neither Owner nor Contractor shall, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and, specifically not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives, to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents.
- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.
- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this

AGREEMENT the day and year first above written.

BIDDER:

BY:_____

TITLE:_____

CITY OF PORTSMOUTH, N.H.

BY:_____

John P. Bohenko

TITLE: City Manager

NOTICE OF INTENT TO AWARD

Date:

TO:

IN AS MUCH as you were the low responsible bidder for work entitled:

Woodbury Avenue Traffic Signal Interconnect Project Bid #49-18

You are hereby notified that the City intends to award the aforesaid project to you.

Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within ten (10) calendar days from the date of this Notice.

The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.

City of Portsmouth Portsmouth, New Hampshire

Judie Belanger, Finance Director

NOTICE TO PROCEED

DATE:

Woodbury Avenue Traffic Signal Interconnect Project Bid #49-18

TO:

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE

WITH THE AGREEMENT DATED AND ALL

WORK SHALL BE COMPLETED BY ______.

CITY OF PORTSMOUTH, N.H.

BY: Peter H. Rice, PE

TITLE: Public Works Director

ACCEPTANCE OF NOTICE

RECEIPT OF THE ABOVE NOTICE TO PROCEED IS HEREBY ACKNOWLEDGED BY

This the _____ day of _____ 20___

By:_____

Title:_____

CHANGE ORDER

Change Order Numbe	r	Date of Issuance			
Owner: CITY OF PO	RTSMOUTH, N.H				
Contractor:					
You are directed to ma	ake the following ch	anges in the Contract Documents:			
Description:					
Purpose of Change Or	rder:				
Attachments:					
CHANGE IN CONTR	RACT PRICE	CHANGE IN CONTRACT TIME	E		
Original Contract Pric \$	e:	Original Completion Date:			
Contract Price prior to Change Order: \$	o this	Contract date prior to this Change Order:			
Net Increase or Decre this Change Order: \$	ase of	Net Increase or Decrease of this Change Order:			
Contract Price with al approved Change Ord \$		Contract Due date with all approved Change Orders:			
RECOMMENDED:		APPROVED:	APPROVED:		
by	by	by	by		
PW Director	City Finance	City Manager	Contractor		

PERFORMANCE BOND

(This format provided for convenience, actual Performance Bond is acceptable in lieu, if compatible)

Bond Number _____

KNOW ALL MEN BY THESE PRESENTS

that _______as Principal, hereinafter called Contractor, and _______(Surety Company) a corporation organized and existing under the laws of the State of _______and authorized to do business in the State of New Hampshire as surety, hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, in the amount of _______Dollars (\$______), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, Contractor has by written agreement dated _______ entered into a contract with Owner for _______ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall well and faithfully do and perform the things agreed by him to be done and performed, according to the terms of said Contract and such alterations as may be made in said Contract during progress work, and shall further indemnify and save harmless the said Owner in accordance with the Contract and shall remedy without cost to the Owner any defect which may develop within one year from the time of completion and acceptance of the work.

The Surety hereby waives notice of any alteration in work or extension of time made by the Owner or any of its agents or representatives.

Whenever Contractor shall be, and declared by Owner to be, in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

(1) Complete the Contract in accordance with its terms and conditions, or

(2) Obtain a bid or bids for submission to the Owner for completing the Contract in accordance with its terms and conditions, and upon determination by Owner and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Owner and make available as work progresses (even though there should be a default or a succession of defaults under the contract of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the Owner to Contractor under the Contract and any amendments thereto, less the amount paid by Owner to Contractor.

PERFORMANCE BOND (continued)

Any suit under this bond must be instituted before the expiration of (2) years from the date on which final payment under the contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of Owner.

Signed and sealed this _____ day of _____

A.D., 20____.

In the presence of:

(Witness)

(Surety Company)

(Witness) (Title) (Seal)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

BY: _____

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

LABOR AND MATERIAL PAYMENT BOND

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible) Bond Number _____ KNOW ALL MEN BY THESE PRESENTS: that ____ as Principal, hereinafter called Contractor, and _____ (Surety Company) a corporation organized and existing under the laws of the State of _ and authorized to do business in the State of New Hampshire hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the Dollars (\$), for the payment whereof Principal and Surety bind amount of ____ themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, Principal has by written agreement dated _______ entered into a in accordance with drawings and contract with Owner for specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject

(1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and

gasoline, telephone service or rental of equipment applicable to the Contract.

(2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be

LABOR AND MATERIAL PAYMENT BOND (continued)

justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

(3) No suit or action shall be commenced hereunder by any claimant:

(a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

(b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

(c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere. (4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this ______ day of _____, 20___. In the presence of:

(Witness)

BY: ______ (Principal) (Seal)

BY:

(Surety Company)

(Witness)

(Title) (Seal)

LABOR AND MATERIAL PAYMENT BOND (continued)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

CONTRACTOR'S AFFIDAVIT

STATE OF:	
COUNTY OF:	
Before me, the undersigned, a(Notary Public, Justice of the Peace)	
in and for said County and State personally appeared,(Individual, Partner, or duly authorized represent	ntative of Corporate)
who, being duly sworn, according to law deposes and say	s that the cost of labor, material, and
equipment and outstanding claims and indebtedness of wh	hatever nature arising out of the
performance of the Contract between	
CITY OF PORTSMOUTH, NEW HAMPSHIRE and(Contractor)	
of	_
Dated:	
has been paid in full for Construction of: Woodbury Avenue Tr	raffic Signal Interconnect Project
	(Individual, Partner, or duly authorized representative of Corporate Contractor)
Sworn to and subscribed before me thisday of 20	

CONTRACTOR'S RELEASE

KNOW ALL MEN BY THESE PRESENTS that					
(Contractor) of	_, County of		_and State of		
		does hereby acknowledge			
that		(Contractor)			
has on this day had, and received from the	ne CITY OF PORTSM	OUTH NEW HAMPSHIRE	, final and completed		

payment for the Construction of:

Woodbury Avenue Traffic Signal Interconnect Project

NOW THEREFORE, the said _____

(Contractor)

for myself, my heirs, executors, and administrators) (for itself, its successors and assigns) do/does by these presents remise, release, quit-claim and forever discharge the City of Portsmouth, New Hampshire, its successors and assigns, of and from all claims and demands arising from or in connection with the said Contract dated _______, and of and from all, and all manners of action and actions, cause and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law of equity, or otherwise, against the City of Portsmouth, New Hampshire, its successors and assigns, which (I, my heirs, executors, or administrators) (it, its successors and assigns) ever had, now have or which (I, my heirs, executors, or administrators) (it, its successors and assigns) hereafter can shall or may have, for, upon or by reason of any matter, cause, or thing whatsoever; from the beginning of record time to the date of these presents.

IN WITNESS WHEREOF,

Contractor:

print name of witness:

By:_____ Its Duly Authorized _____

Dated: _____

GENERAL REQUIREMENTS

SCOPE OF WORK

1. INTENT OF CONTRACT

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

2. INCIDENTAL WORK

Incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Clearing, grubbing and stripping (unless otherwise paid for)
- b. Clean up
- c. Plugging existing sewers and manholes
- d. Signs
- e. Mobilization/Demobilization (unless otherwise paid for)
- f. Restoration of property
- g. Cooperation with other contractors, abutters and utilities.
- h. Utility crossings, (unless otherwise paid for)
- i. Minor items such as replacement of fences, guardrails, rock wall, etc.
- j. Steel and/or wood sheeting as required.
- k. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional.
- 1. Coordination and scheduling with the City of Portsmouth for the potential phasing of pavement marking application based on the City's schedule for a separate roadway resurfacing project along Woodbury Avenue (by others).
- m.Preparation of temporary traffic control plans (TTCP) for vehicular and pedestrian movements.

3. ALTERATION OF PLANS OR OF CHARACTER OF WORK

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

4. EXTRA WORK ITEMS

Extra work shall be performed by the Contractor in accordance with the specifications and as directed, and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit bid price. If the Owner determines that extra work is to be performed, a change order will be issued.

GENERAL REQUIREMENTS (continued)

5. CHANGE ORDERS

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary buildings, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean-up all sites and storage grounds.

The items prescribed herein will not be paid for separately, but shall be paid for as part of the total contract price.

7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

- 1. Standard Specifications for Road & Bridge Construction will govern General Requirements.
- 2. Technical Specifications will govern Standard Specifications.
- 3. Plans will govern Technical Specifications, and General Requirements.
- 4. Special Provisions written for this contract will govern the plans.
CONTROL OF WORK

1. AUTHORITY OF ENGINEER

(a) All work shall be done under supervision of the Engineer and to his satisfaction. The Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.

(b) The Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled any additional payments arising out of any such suspensions.

(c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the Engineer the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

(a) The Contractor shall use every precaution to prevent injury or damage to wires, poles, or other property of public utilities; trees, shrubbery, crops, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.

(b) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

(c) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

(d) The Contractor shall paint with tree paint all scars made on fruit or ornamental trees by equipment, construction operations, or the removal of limbs larger than one inch in diameter. Damaged trees must be replaced if so determined by the City Arborist, in his or her sole discretion.

(e) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours notice, may proceed to do so, and the cost thereof may be deducted from any money due or which may become due the Contractor under the contract.

(f) It is the intent of the Parties that the Contractor preserve, to as great an extent as possible, the natural features of the site.

CONTROL OF WORK (continued)

3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

4. SAFETY PRECAUTIONS

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

5. PERMITS

It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

6. BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS

(a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Roadway closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.

(b) The Contractor will be held responsible for all damage to the work from traffic, pedestrians, animals or any other cause due to lack of adequate controlling devices.

(c) The Contractor shall provide such police officers or flaggers as the Engineer deems necessary for the direction and control of traffic within the site of project.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

TEMPORARY FACILITIES

1. STORAGE FACILITIES

(a) The Contractor shall not store materials or equipment in a public right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.

(b) The Contractor shall protect all stored materials from damage by weather or accident and shall insure adequate drainage at and about the storage location.

(c) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

2. SANITARY FACILITIES

(a) The Contractor shall provide for toilet facilities for the use of the workers employed on the work.

(b) Temporary toilet facilities may be installed provided that the installation and maintenance conform with all State and local laws, codes, regulations and ordinances governing such work. They shall be properly lit and ventilated, and shall be kept clean at all times.

(c) Prior to final acceptance of the work all temporary toilet facilities shall be removed from the site.

3. TEMPORARY WATER

The Contractor shall make all arrangements with the local water department for obtaining water connections to provide the water necessary for construction operations and shall pay all costs.

4. TEMPORARY ELECTRICITY

The Contractor shall make all arrangements with the Eversource for obtaining electrical connections to provide the electrical power necessary for construction operations and security lighting and shall pay all electrical connection and power costs.

The Contractor shall be responsible with obtaining an electrical permit from the City Electrical Inspector.

INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

AMOUNT OF INSURANCE

- A) Commercial General Liability: Bodily injury or Property Damage - \$2,000,000 Per occurrence and general aggregate
- B) Automobile and Truck Liability: Bodily Injury or Property Damage - \$2,000,000 Per occurrence and general aggregate

Coverage amounts may be met with excess policies

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) Full Workers Comprehensive Insurance coverage for all people employed by the Contractor to perform work on this project. This insurance shall at a minimum meet the requirements of the most current laws of the State of New Hampshire.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

ADDITIONAL INSURED

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insureds.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) City of Portsmouth shall be listed as a Certificate Holder. The City shall be identified as follows:

City of Portsmouth Attn: Legal Department 1 Junkins Avenue Portsmouth, NH 03801

MEASUREMENT AND PAYMENT

1. MEASUREMENT OF QUANTITIES

(a) All work completed under the contract will be measured according to the United States standard measure.

(b) The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.

(c) Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the dimensions shown on the plans or ordered in writing.

(d) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.

(e) In computing volumes of excavation, embankment, and borrow, the average end area method will be used. Where it is impracticable to measure by the cross-section method, acceptable methods involving three-dimensional measurement may be used. When measurement of borrow in vehicles is permitted, the quantity will be determined as 80 percent of the loose volume.

(f) In computing volumes of concrete, stone and masonry, the prismoidal method will be used. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois.

(g) Except as specified below, all materials that are measured or proportioned by weight shall be weighed on scales which the Contractor has had sealed by the State or by a repairman registered by the Commissioner of Agriculture. All weighing shall be performed in a manner prescribed under the Rules and Regulations of the Bureau of Weights and Measures of the New Hampshire Department of Agriculture.

(h) Weighing of materials on scales located outside New Hampshire will be permitted for materials produced or stored outside the state, when requested by the Contractor and approved. Out-of-state weighing in order to be approved, must be performed by a licensed public weigh master or a person of equal authority in the state concerned on scales accepted in the concerned state.

(i) Each truck used to haul material being paid for by weight shall bear a plainly legible identification mark, and if required, shall be weighed empty daily at such times as directed.

(j) When material is weighed, the individual weight slips, which shall be furnished by the Contractor, for trucks, trailers, or distributors, shall show the following information: the date; the project; the material or commodity; the dealer or vendor; the Contractor or Subcontractor; the location of the scales; the vehicle registration number or other approved legible identification mark; the tare and net weights, with gross weights when applicable; and the weigher's signature or his signed initials.

(k) The right is reserved to weight any truck, trailer, or distributor, at locations designated, before and after making deliveries to the project.

(1) Bituminous materials will be measured by the gallon or ton.

(m) When material is specified to be measured by the cubic yard but measurement by weight is approved, such material may be weighed and the weight converted to cubic yards for payment purposes. Necessary conversion factors will be determined by the Owner.

MEASUREMENT AND PAYMENT (continued)

(n) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.

(o) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.

(p) Material wasted without authority will not be included in the final estimate.

2. SCOPE OF PAYMENT

(a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.

(b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.

(c) No monies, payable under the contract or any part thereof, except the first estimate, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part, and deduct the amount of amounts so paid from any partial or final estimate, excepting the first estimate.

3. COMPENSATION FOR ALTERED QUANTITIES

(a) Except as provided for under the particular contract item, when the accepted quantities of work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, so far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.

(b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

4. PARTIAL PAYMENTS

Partial payments will be made on a monthly basis during the contract period. From the total amount ascertained as payable, an amount equivalent to ten percent (10 %) of the whole will be deducted and retained by the Owner until such time as the work receives final acceptance.

MEASUREMENT AND PAYMENT (continued)

5. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of such work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

6. ACCEPTANCE AND FINAL PAYMENT

(a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.

(b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. After approval of the final estimate by the Owner, the Contractor will be paid the entire sum found to be due after deducting all previous payments and all amounts to be retained or after all amounts deducted.

(c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

7. GENERAL GUARANTY AND WARRANTY OF TITLE

(a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.

(b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon.

MEASUREMENT AND PAYMENT (continued)

Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

8. NO WAIVER OF LEGAL RIGHTS

(a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

(b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

9. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply but without regard to Section 100 "General Conditions" of those Standard Specifications and without regard to any of those NHDOT provisions that allow for an adjustment for changing fuel and asphalt prices.

Special Provisions

Amendments to Standard Specifications:

608.2	Sidewalks
609.23	Curved Granite Slope Curb
616.191	Alterations to Traffic Signals
616.192	Alterations to Traffic Signals
616.193	Alterations to Traffic Signals
616.194	Alterations to Traffic Signals
616.195	Alterations to Traffic Signals
616.196	Alterations to Traffic Signals
616.197	Alterations to Traffic Signals
618	Uniformed Officers and Flaggers
619	Maintenance of Traffic

Supplemental Specifications:

608.52	ADA Detectable Warning Tiles
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January 2018

SPECIAL PROVISION AMENDMENT TO SECTION 608 - SIDEWALKS

Item 608.2 – Sidewalks

Amend Section 608 to include:

Description

Amend 1.1: This work shall consist of constructing sidewalks of Portland cement concrete, reinforced when specified. Portland cement concrete sidewalks shall receive a protective coating unless otherwise directed.

Materials

Amend 2.3: Reinforcement shall conform to 544.7. (Synthetic Fibers)

Method of Measurement

Amend 4.1: Sidewalks will be measured by the square yard to the nearest 0.1 square yard. The area occupied by the curb will not be included in the final pay quantity.

Basis of Payment

Amend 5.1: Sidewalks will be paid for at the Contract unit price per square yard complete in place.

Pay itemPay unit608.266" Concrete Sidewalks (Accessible RampsSquare Yardand immediate sidewalk)Square Yard

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 608 - SIDEWALKS

Item 608.52 – ADA Detectable Warning Tiles

Description

1.1 This work shall consist of furnishing and installing a detectable warning surface and accessories on sidewalk ramps at locations shown on the plans, as specified herein, or as ordered including any and all required surface preparation. Detectable warnings shall be installed at sidewalk ramps where a sidewalk crosses a vehicular way, excluding unsignalized driveway crossings. The edge nearest the curbline shall be located 6 to 8 in from the face of curbline. The panel shall be centered on the ramp and extend the entire width of the ramp to the nearest whole panel dimension.

<u>Materials</u>

- 2.1 <u>Material.</u> The detectable warning surface shall consist of units from Neenah Foundry, East Jordan Iron Works, or approved equal. The units shall be cast into Portland cement or other owner approved material, as recommended by the manufacturer. The paver units shall be of cast iron.
- **2.2** <u>Color.</u> The color of the tile used shall be natural rust, and will be installed in a concrete ramp as described in 608.26.
- **2.3** <u>Paver Dimensions.</u> Nominal paver dimensions shall be 2' deep x 2' wide. The panels shall be combined to span the width of the walk to the nearest whole panel dimension.
- 2.4 <u>Detectable Warning Truncated Dome Geometry:</u>
 - **2.4.1** Detectable warnings shall be in full compliance with ADAAG guidelines (Title 49 DFR Transportation, Part 37.9 Standard for Accessible Transportation Facilities, Appendix A, Section 4.29.2- Detectable Warning on Walking Surfaces).
 - **2.4.2** Size and spacing for truncated domes shall be as follows: base diameter of nominal 0.9 inch, top diameter of nominal 0.4 inch, height of nominal 0.2 inch, with a center to center spacing of nominal 2.35 inches.
 - **2.4.3** The truncated dome pattern shall align properly from paver to paver if more than 1 paver is required.

Construction Requirements

- **3.1** The Contractor shall submit manufacturer's installation instructions and descriptive literature for materials specified herein.
- **3.2** Pavers shall be set into fresh concrete before it sets. Concrete pad for setting bed to be 6" in both directions larger than the tactile panel so that no more than 3" of concrete is showing around the panels. See manufacturer instructions.
- **3.3** Transport, storage, and handling of products shall be in accordance with manufacturer's instructions. All sealants/adhesives shall be protected from freezing conditions.
- **3.4** The air and surface temperatures during construction shall be in accordance with manufacturer's recommendations.
- **3.5** Concrete foundation shall be installed in accordance with the specifications included within Section 608 to depths indicated in the section shown on the plans.
- **3.6** Install detectable warning pavers in accordance with manufacturer's instructions directly in the setting bed and the allowing the top surface of the paver units to be at or just below the required finish grade.
- **3.7** Care shall be taken to ensure the safety of pedestrians when sidewalks must remain in service during construction.

Method of Measurement

4.1 ADA Detectable warning tiles will be measured by each panel installed.

Basis of Payment

5.1 ADA Detectable warning tiles will paid for at the Contract unit price per each panel installed.

Pay Item

ADA Detectable Warning Tiles, Cast Iron

<u>Pay Unit</u> Each

January 2018

S P E C I A L P R O V I S I O N AMENDMENT TO SECTION 609 - CURBING <u>Item 609.23 – Curved Granite Slope Curb</u>

Amend Section 609 to include:

Description

Amend 1.1: This work shall also consist of installing curb corners at each of the pedestrian refuge island corners and nose of median islands.

Materials

Amend 2.3: Curb corners shall be made of granite with radius as measured on the plans.

Method of Measurement

Amend 4.1: Curb corners shall be measured by individual unit and recorded under Item 609.23 Curved Granite Sloped Curve by the corresponding linear foot.

Basis of Payment

Amend 5.1: Curb corners will be paid for under Item 609.23 Curved Granite Slope Curve by linear foot.

Pay item

609.23 Curved Granite Slope Curve

Pay unit Linear Feet

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.191 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Gosling Road (Location 1) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

Add to 2.1:

2.1.3 List of Major Materials:

- 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
- 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
- 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be furnished on a cement concrete foundation.
- 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
- 1 Closed loop system master controller and programming compatible with the proposed controllers to complete communications. System master shall be capable of Ethernet communications and shall include an Ethernet cable for connection to the Ethernet switch located in the controller cabinet. System master may, where applicable, be a software additional with applicable communications ports within the local controller.
- 1 System cable drop for connection between interconnect / video system to City of Portsmouth Department of Public Works.
- 1 System cable modem in controller cabinet for broadband service between interconnect / video system and City of Portsmouth Department of Public Works. [The installation/service connection cost to be paid by the Contractor; monthly service to be assumed by the Portsmouth DPW]
- 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
- $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.

- 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
- 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
- 1 Environmentally Hardened Ethernet Switch.
- 1 The Signal Mast Arm Pole anchor bolt cap to replace missing cap.
- 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (4 camera system), Iteris – Vantage Series (4 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.
- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.
- 1 9" Color flat screen portable monitor or approved equal, compatible with installed video detection system, with capabilities to view video detection. [This monitor will become the property of the Portsmouth DPW and may be used for all locations.]
- 8 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 4 One-way, four-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, or on signal posts. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 8 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 8 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 4 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)

- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equal.
- 4-8-foot traffic signal pedestal posts with foundations.
- 2 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 2 R4-7, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.
- 1 R4-7a, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.
- 2 OM1-1, 18 inch by 18 inch, diamond-shaped aluminum Type CC sign post mounted. Paid under separate item.
- 2 Broadband Wireless Interconnect System including antennae and radio units to connect Woodbury Ave at Gosling Road with Woodbury Ave at The Crossings and with Woodbury Ave at BJ's Driveway/Durgin Lane. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).
- 1 Laptop and system remote software compatible with Portsmouth Department of Public Works computer system / server. The Contractor shall contact the Portsmouth Department of Public Works to determine compatibility. The software shall be capable of receiving transmitted video data and interconnect system data for viewing at Portsmouth Department of Public Works office. This effort and pricing shall include one day of system training for Portsmouth Department of Public Works personnel at their facility.
- 1 Contractor shall provide system integration testing. All closed loop system integration shall be tested by the Contractor in the presence of the ENGINEER. This testing shall include, but not be limited to the following: (1) Verification of the system database set up including a review of the complete programming data installed for system operation by the equipment supplier to determine that the proper system parameters have been installed, (2) Verification to determine that the communications link between intersections and the master controller, and the communication link with the remote computers are functioning and information is being transmitted and received, (3) Review of the central computer functions including setup and graphics to determine that they function properly and provide graphics in accordance with the specifications, (4) Identification of equipment malfunctions, computer program errors, and communication problems, (5) Verification to ensure that data transfer between the central computers to field hardware (controllers) is complete and accurate, and (6) Verification of system detector reports, event logs, and critical alarms in accordance with contract requirements. The Contractor shall provide supplier technician time to finetune the coordination timings, controller / master parameters, and potential phasing modifications.

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

Add to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

<u>Add</u> to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



TRAFFIC CONTROLLER CABINET

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.192 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City

of Portsmouth Department of Public Works (603-427-1530) with names and phone numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.

7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

<u>Add</u> to 2.1:

- **2.1.3** List of Major Materials:
 - 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
 - 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
 - 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be mounted on the existing foundation (measured at 36" by 48").
 - 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
 - 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
 - $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
 - 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
 - 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
 - 1 Environmentally Hardened Ethernet Switch.
 - 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (4 camera system), Iteris – Vantage Series (4 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.

- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.
- 10 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 6 One-way, four-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 8 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 8 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 4 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equal.
- 4 8-foot traffic signal pedestal posts with foundations.
- 2-10-foot traffic signal pedestal posts with foundations.
- 1 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 1 R10-11b, 36 inch by 36 inch, "No Turn on Red" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 4 R4-7, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.

- 4 OM1-1, 18 inch by 18 inch, diamond-shaped aluminum Type CC sign post mounted. Paid under separate item.
- 2 Broadband Wireless Interconnect System and including antennae and radio units to connect Woodbury Ave at BJ's Driveway/Durgin Lane with Woodbury Ave at Gosling Road and with Woodbury Ave at Commerce Way/Durgin Square Plaza. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

<u>Add</u> to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

Add to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



Page 60

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.193 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

Add to 2.1:

- **2.1.3** List of Major Materials:
 - 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
 - 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
 - 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be mounted on the existing foundation (measured at approximately 36" by 48").
 - 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
 - 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
 - $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
 - 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
 - 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
 - 1 Environmentally Hardened Ethernet Switch.
 - 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (4 camera system), Iteris – Vantage Series (4 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.
 - 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.

- 8 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 3 One-way, four-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 8 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 8 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 4 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equal.
- 3-8-foot traffic signal pedestal posts with foundations.
- 2 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 2 R10-11b, 36 inch by 36 inch, "No Turn on Red" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 2 Broadband Wireless Interconnect System including antennae and radio units to connect Woodbury Ave at Commerce Way/Durgin Square Plaza Driveway with Woodbury Ave at BJ's Driveway/Durgin Lane and with Woodbury Ave at Arthur Brady Drive/Marshall's Driveway. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

Add to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

<u>Add</u> to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



TRAFFIC CONTROLLER CABINET

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.194 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

<u>Add</u> to 2.1:

2.1.3 List of Major Materials:

- 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
- 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
- 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be mounted on the existing foundation (measured at 36" by 48").
- 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
- 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
- $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
- 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
- 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
- 1 Environmentally Hardened Ethernet Switch.
- 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (4 camera system), Iteris – Vantage Series (4 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.
- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.

- 10 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 2 One-way, four-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, or on signal posts. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 8 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 8 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 4 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equal.
- 5-8-foot traffic signal pedestal posts with foundations.
- 2 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted. Paid under separate item.
- 3 R4-7, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.
- 3 OM1-1, 18 inch by 18 inch, diamond-shaped aluminum Type CC sign post mounted. Paid under separate item.
- 2 Broadband Wireless Interconnect System including antennae and radio units to connect Woodbury Avenue at Arthur Brady Drive/Marshall's Driveway with Woodbury Avenue at Commerce Way/Durgin Square Plaza and with Woodbury Avenue at Market Street/Market Basket Driveway. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

<u>Add</u> to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

Add to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.195 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Market Street/Market Basket Driveway (Location 5) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.
<u>Add</u> to 2.1:

- **2.1.3** List of Major Materials:
 - 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
 - 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
 - 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be furnished on a cement concrete foundation.
 - 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
 - 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
 - $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
 - 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
 - 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
 - 1 Environmentally Hardened Ethernet Switch.
 - 1 The Signal Mast Arm Pole anchor bolt cap to replace missing cap.
 - 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (4 camera system), Iteris – Vantage Series (4 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.

- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.
- 14 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 16 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 12 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Traffic signal pole/mast arm assembly and foundation. The Signal Mast Arm Pole shall have a mast arm length of 35 feet. The entire structure, including foundation, will be designed and constructed in accordance with the Special Details included in the Contract Documents. Signal Mast Arm Poles shall be manufactured by Valmont Industries, Inc., or Union Metal Corp., or approved equal. Foundations shall comply with NHDOT Standard Drawings dated May 2016.
- 1 Traffic signal pole/mast arm assembly and foundation. The Signal Mast Arm Pole shall have a mast arm length of 45 feet. The entire structure, including foundation, will be designed and constructed in accordance with the Special Details included in the Contract Documents. Signal Mast Arm Poles shall be manufactured by Valmont Industries, Inc., or Union Metal Corp., or approved equal. Foundations shall comply with NHDOT Standard Drawings dated May 2016.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 4 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equal.
- 9 8-foot traffic signal pedestal posts with foundations.
- 1 10-foot traffic signal pedestal posts with foundations.
- 2 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted. Paid under separate item.

- 4 R4-7, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.
- 4 OM1-1, 18 inch by 18 inch, diamond-shaped aluminum Type CC sign post mounted. Paid under separate item.
- 2 Broadband Wireless Interconnect System including antennae and radio units to connect Woodbury Avenue at Market Street/Market Basket Driveway with Woodbury Avenue at Durgin Square Driveway/Commerce Way and Market Street at Portsmouth Boulevard. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

Add to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

<u>Add</u> to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



PORTSMOUTH

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.196 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Woodbury Avenue and Granite Street (Location 6) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Market Street and Portsmouth Boulevard (Location 7 Item 616.197)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

Add to 2.1:

2.1.3 List of Major Materials:

- 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
- 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
- 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be furnished on a cement concrete foundation. An expanded 6" cement concrete pad shall be constructed in front of the cabinet door (approx. 3' x 5').
- 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
- 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
- $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
- 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
- 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
- 1 Environmentally Hardened Ethernet Switch.
- 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (3 camera system), Iteris – Vantage Series (3 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.

- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.
- 7 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 4 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 4 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Traffic signal pole/mast arm assembly and foundation. The Signal Mast Arm Pole shall have a mast arm length of 40 feet. The entire structure, including foundation, will be designed and constructed in accordance with the Special Details included in the Contract Documents. Signal Mast Arm Poles shall be manufactured by Valmont Industries, Inc., or Union Metal Corp., or approved equal. Foundations shall comply with NHDOT Standard Drawings dated May 2016.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 3 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 1 Confirmation strobe light, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equivalent.
- 1-8-foot traffic signal pedestal posts with foundations.
- 1 10-foot traffic signal pedestal posts with foundations.
- 1 R10-11b, 36 inch by 36 inch, "No Turn on Red" aluminum Type CC sign mast arm mounted.
- 1 Broadband Wireless Interconnect System including antennae and radio units to connect Woodbury Ave at Granite Street with Woodbury Avenue and Durgin Square Driveway/Commerce Way. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

<u>Add</u> to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

Add to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



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PORTSMOUTH

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 616 - TRAFFIC SIGNALS

Item 616.197 – Alterations to Traffic Signals

This special provision provides for the reconstruction of the existing traffic control signal at the intersection of Market Street and Portsmouth Boulevard (Location 7) in the City of Portsmouth, NH. The system will be coordinated with the traffic control signal at the following intersections:

- Woodbury Avenue and Gosling Road (Location 1 Item 616.191)
- Woodbury Avenue and Durgin Lane/BJ's Driveway (Location 2 Item 616.192)
- Woodbury Avenue and Durgin Square Driveway/Commerce Way (Location 3 Item 616.193)
- Woodbury Avenue and Arthur Brady Drive/Marshall's Driveway (Location 4 Item 616.194)
- Woodbury Avenue and Market Street/Market Basket Driveway (Location 5 Item 616.195)
- Woodbury Avenue and Granite Street (Location 6 Item 616.196)

Provisions are included in the contract for future coordination with the following traffic control signals as part of NHDOT Project #11238Q:

- Woodbury Avenue and The Crossings/Business Drive (Newington)
- Woodbury Avenue and W. Park Road/Piscataqua Drive (Newington)
- Woodbury Avenue and Old Dover Road (Newington)

The Contractor shall furnish and install a radio interconnect system that will be compatible with the system installed under NHDOT Project #11238Q and shall integrate the three intersections listed above within the Siemens traffic signal system for future remote monitoring capability by the City of Portsmouth and Town of Newington.

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

1. The Contractor shall be responsible for the traffic signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. The Contractor shall notify the City of Portsmouth Department of Public Works (603-427-1530) with names and phone

numbers of persons to be contacted in case of a malfunction. The Contact person(s) must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work the Contractor completes on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.

- 2. It is not intended that every fitting, minor detail or feature be shown and described, as the assumption is made that the Contractor and/or their Subcontractor is an expert in the particular area of responsibility and is capable of interpreting the plans, Specifications, and Special Provisions so that the bid and/or construction shall include all items required to provide complete, fully operational traffic control signal system and that they shall be provided and installed in a neat and workmanlike manner.
- 3. All quantities for traffic signal items as listed below shall be checked against the plans by the Contractor. Where a discrepancy between the quantities is noted, the plans shall override.
- 4. The traffic signal must be inspected and approved by the City of Portsmouth Department of Public Works (603-427-1530) prior to placing in flashing operation. The Contractor shall contact David Desfosses (603-766-1411) one week prior to turning the signals on flash. If the Contractor does not speak directly with David Desfosses they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.
- 5. The Contractor shall install a generator anchoring system to the new traffic controller cabinet's cement concrete foundation. The location of the anchoring system will be on the side of the cabinet that houses the controller's power supply and installed to the minimum 12" raised concrete foundation (see location A on Attachment A Detail Plan). If the controller cabinet doesn't have a raised foundation to accommodate the anchoring system then the Contractor shall install the anchoring system to the front access pad of the controller cabinet. The anchoring system shall be a ¹/₂-inch x 13 tpi galvanized wrought eyebolt with a thread length of 1 5/8-inch. The eyebolt shall be installed in a 5/8-inch diameter drilled hole into the concrete foundation or pad (the location of the drilled hole shall be placed in an area where it does not interfere with the existing controller cabinet anchor bolt system to the concrete foundation). The eyebolt shall be bonded into the concrete by an epoxy compound [Component "A" (105 resin) and Component "B" (205 hardener)], with the epoxy compound filling the drilled hole and covering the threads of the eyebolt. The epoxy compound shall be a product as included on the Department's Qualified Product List. [See "Attachment A" Detail Plan]
- 6. The electrical service modifications and new hook-up shall be paid for by the Contractor. The monthly power costs will continue to be paid for by the City of Portsmouth during the construction contract.
- 7. The notation of approved equal or equivalent is denoted on several items and requires specific approval by the Engineer and the City.

Add to 2.1:

2.1.3 List of Major Materials:

- 1 Maintain existing traffic signal cabinet and controller during the duration of construction and remove and stack cabinet at Portsmouth DPW following switch-over to the new cabinet control listed below. All ancillary equipment shall be salvaged and delivered with the cabinet.
- 1 Replace all traffic signal cabling throughout the intersection. Existing loop detectors will be abandoned following the installation of the video detection system. The Contractor shall properly dispose of all old cabling unless otherwise directed by the City of Portsmouth.
- 1 The traffic signal equipment shall be housed in a "P" Type cabinet that is on the NHDOT approved products list and assembled by the equipment manufacturer with a 12-inch extension base. The interior and exterior of the controller cabinet shall be natural aluminum. The cabinet shall be equipped with a pull out keyboard tray, an interior light, and a standard generator hook-up for future auxiliary power needs. The cabinet shall be equipped with a newly installed ground rod array and lightning arresting connections on all external cables leads. The cabinet shall be mounted on the existing foundation (measured at 36" by 48").
- 1 16-Phase programmable traffic actuated signal controller of current NEMA specifications (TS2-Type 1) with internal time-based coordination and internal fire preemption with associated MMU to be operated in conflict monitor mode. The controller shall be a <u>Siemens model m60</u> NEMA controller with compatible MMU. (Public Interest Finding for use of Siemens model m60 provided in Bid Documents). The controller and MMU/conflict monitor, plus any additional hardware shall be capable of initiating the flashing yellow arrow sequence. The controller shall include an integrated Ethernet port. The Contractor shall provide all necessary hardware for compatibility with currently available adaptive control software by the same manufacturer.
- 1 16-channel Ethernet equipped enhanced malfunction management unit (as noted above), set-up to operate in conflict monitor mode. The MMU shall be compatible with the Siemens model m60 NEMA controller and shall include an integrated Ethernet port, or approved equal.
- $1 \frac{1}{2}$ inch x 13 tpi galvanized wrought eyebolt with a thread length of $1-\frac{5}{8}$ -inch.
- 1 Two-part epoxy bonding agent (105 resin and 205 hardener).
- 1 Reset generator transfer switch from existing control cabinet to proposed control cabinet.
- 1 Environmentally Hardened Ethernet Switch.
- 1 4-Channel Video Detection Grid Smart omni-directional, Traficon VIP Series VIP 3D.a or 3D.2 (3 camera system), Iteris – Vantage Series (3 camera system), or approved equal Video Cameras with manufacturer cables and rack cards, including hardware mounted on the mast arms (include spare card and camera) with integral counting capability.

- 1 Rack Mounted Video Detection Processor and Cable, GridSmart GS2, Naztec Model 722 TXC or approved equal. Detector rack power supply shall be Naztec Model TS1-RACK-PS only or approved equal.
- 9 One-way, three-section, 12-inch black polycarbonate signal heads with LED modules, type (Duralight Corp., G.E. Lighting (Gelcore) or Dialight/Trastar), mounted on mast arms with Astro-Bracs, with 5-inch louvered backplates. The outside perimeter of the backplate shall be lined with a fluorescent-yellow 2-inch strip of Type IX or XI retroreflective sheeting to highlight the three-section signal head.
- 2 One-way, 16-inch black polycarbonate pedestrian signal head with LED countdown module, type (Leotek, G.E. Lighting or Dialight/Trastar) side-mounted on mast arms with brackets, or on signal posts. The pedestrian signal indications shall provide countdown indications.
- 2 Pedestrian push button assemblies, mounted on traffic signal poles or posts. The push button assemblies shall provide Accessible Pedestrian signal (APS) capabilities; including vibratory warning and audio/audible warning. Push buttons shall be mounted perpendicular to the path of travel and detectable arrow parallel to the path of travel. Push button assemblies shall include a R10-3e sign, mounted with the push button, with arrow facing the corresponding crossing path.
- 1 Optical Fire Preemptor Phase Selector, GTT Opticom Model 764, with a Model 760 Card Rack, or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 3 Optical Fire Preemptor receivers, GTT Opticom Model 711 or City approved Opticom brand equivalent for City compatibility based on Portsmouth Fire Department requirements. (Public Interest Finding for use of Opticom brand provided in Bid Documents)
- 2 Confirmation strobe lights, 120 VAC, with red Lexan optic lens. Whelan Model, IAC 12 RP, TOMAR Model 804-110 or approved equivalent.
- 2-8-foot traffic signal pedestal posts with foundations.
- 1 R10-11a(M), 30 inch by 42 inch, "No Turn on Red Arrow" aluminum Type CC sign mast arm mounted.
- 2 R4-7, 24 inch by 30 inch, "Keep Right" aluminum Type CC sign post mounted. Paid under separate item.
- 2 OM1-1, 18 inch by 18 inch, diamond-shaped aluminum Type CC sign post mounted. Paid under separate item.
- 1 Broadband Wireless Interconnect System including antennae and radio units to connect Market Street at Portsmouth Boulevard with Woodbury Avenue and Market Street/Market Basket Driveway. 5.8 GHz point-to-point radio / antenna capable of broadband capacity with ability to transmit video images (EnCom Energy series, or compatible equivalent).

2.1.4 Ethernet Switch. This work shall consist of furnishing, installing, and testing an Ethernet Switch that meets the requirements of a 100 Mbps Ethernet Switch and is compatible with the system installed under NHDOT Project #11238Q.

2.1.4.1 The Ethernet Switch shall include a minimum of four single mode fiber optic patch cords, each one meter in length, and terminated on both ends with Type SC single mode fiber optic connectors

2.1.4.2 The Ethernet Switch shall include sufficient Category 6 Ethernet patch cords, each one meter in length, and terminated on both ends with Type RJ45 connectors to provide full connectivity within the cabinet as shown in the Contract Documents.

2.1.4.3 The Ethernet Switch shall include all accessories required for a full and complete installation, including but not limited to all connecting cables, serial to Ethernet modems, power supplies, and mounting hardware.

Add to 3.15

3.15.2 Contractor shall be responsible for maintaining operations of the traffic signal during construction. The labor and equipment necessary to complete this application will be included in the cost.

Add to 5.1

5.1.2 Alterations to Traffic Signals will be paid for at the Contract lump sum price complete in place. The price shall be full compensation for all labor, equipment, hardware and incidentals necessary to make the traffic signal operational.

ATTACHMENT "A"



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PORTSMOUTH

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 618 – UNIFORMED OFFICERS AND FLAGGERS

Item 618.61 – Uniformed Officers with Vehicles

Item 618.7 – Flaggers

Amend Section 618 to include:

Description

Add 1.2: Daily traffic control personnel will be required to facilitate traffic through the work zone quickly and safely. The use of, type of, and number of personnel will be reviewed and approved with the Engineer. Flaggers will be used for all work outside of the vehicular path of travel (i.e ramp work, sidewalk work, etc. Uniformed officers will be used only when lane closures are needed or when traffic signals are inoperable as part of work related to the project.

Method of Measurement

Amend 4.1: Uniformed Officers and Flaggers shall be measured by the actual hour worked in the field.

Basis of Payment

Amend 5.1: Uniformed Officers will be paid for at the Contract unit price, by the actual hour worked. The City will reimburse the exact cost for this item, no cost markup is allowed. The item cost on the bid form is reflective of the cost of these items to the City at the time of the bid and will be adjusted as necessary as costs increase.

PORTSMOUTH

January 2018

SPECIAL PROVISION

AMENDMENT TO SECTION 619 – MAINTENANCE OF TRAFFIC

Item 619 – Maintenance of Traffic

Amend Section 619 to include:

Construction Requirements

Add 3.4: All work shall be prosecuted so pedestrian and traffic flow can be maintained. No travel lane or sidewalk closures will be allowed without prior approval from the Engineer. If lane closures are required, a traffic flagging and/or detour plan will be generated and will need to be approved by the Department prior to its implementation.

Add 3.5: The Contractor will develop a construction staging plan for the project. The plan shall be submitted to be approved by the Engineer.

Add 3.6: Access shall be maintained to the abutting driveways and entrances at all times during construction. Open lanes of the road shall be graded safely for traffic at all times. A 24 hour contact will be required in case of emergency or safety concerns or in case the road surface needs attention.

Add 3.8: Portable Message Boards shall be 54" x 92" (+/-) and readily available within 48 hours.

Basis of Payment

Amend 5.1.4: The material cost of permanent construction signs is subsidiary to the Pay Item.

Add 5.1.10: The following items are subsidiary to the 619.1 Pay Item: Traffic control, construction signs (permanent and temporary), temporary message boards, temporary traffic loops, traffic control plans, and traffic cones and barrels.

Pay item

619.1 Maintenance of Traffic

<u>**Pay unit**</u> Unit

APPENDIX A – LOCAL PUBLIC AGENCY (LPA) CONTRACT DOCUMENTS

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06/24/08

Supercedes: 9/11/06, 12/5/90

WAGE RATES

FEDERAL AID PROJECTS

This proposal contains minimum wage determinations as specified by the U.S. Secretary of Labor. Copies of the attached wage determination(s) shall be posted on the bulletin board at the work site and furnished to employees upon request. Furthermore, the wage determination(s) shall be incorporated into all subcontract agreements.

If the Contractor, any subcontractor or lower-tier contractor intends to employ a classification of labor not listed in the attached determination(s), it shall submit a Request for Additional Work Classification(s) to the New Hampshire Department of Transportation, Labor Compliance Office at (603) 271-2467. The Contractor is responsible for ensuring that a Request is submitted for any additional classification of work to be employed by itself, any subcontractor or lower-tier contractor 3-4 weeks before the classification is utilized.

This contract is subject to the Work Hours Act of 1962, P.L. 87-581 and implementing regulations.

NOTICE TO ALL BIDDERS

In accordance with the section "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)", the New Hampshire Department of Transportation has the authority and responsibility to notify the Office of Federal Contract Compliance Programs of the United States Department of Labor if they become aware of any possible violations of Executive Order 11246 and 41 Code of Federal Regulation Chapter 60.

The Office of Federal Contract Compliance Programs is the sole authority for determining compliance with Executive Order 11246 and 41 Code of Federal Regulation Chapter 60 and the Contractor should contact them regarding related compliance issues.

Source 41 CFR 60-4 Affirmative Action Requirements

Source: 41 CFR 60-4.2 Solicitations

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for	Goals for female participation in
each trade	each trade

STANDARD METROPOLITAN STATISTICAL AREAS (SMSA)

SALEM-PLAISTOW:	4.0	6.9
MANCHESTER-NASHUA	0.7	6.9
NON-SMSA COUNTIES		
COOS, GRAFTON, SULLIVAN:	0.8	6.9
BELKNAP, MERRIMACK, CARROLL, STRAFFORD:	3.6	6.9
CHESHIRE:	5.9	6.9
ROCKINGHAM:	4.0	6.9
HILLSBOROUGH:	0.7	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation addressed as follows:

Director Federal Contract Compliance Program US Department of Labor JFK Building, Room 1612-C Boston, MA 02203

The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed <u>as noted within the Contract Special</u> <u>Provisions</u> for Affirmative Action to ensure Equal Employment Opportunity..

Source 41 CFR 60-4.3 Equal Opportunity Clauses

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

[1]. As used in these specifications:

a. `Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. `Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

c. `Employer identification number' means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. ``Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

[2]. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

[3]. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

[4]. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed

as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

[5] Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

[6]. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

[7]. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have

Source 41 CFR 60-4 Affirmative Action Requirements

employment opportunities available, and maintain a record of the Organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's

recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there

I. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals

and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take

Source 41 CFR 60-4 Affirmative Action Requirements

affirm ative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substamially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirm alive action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(b) The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally Assisted Construction published at 41 FR 32482 and commonly known as the Model Federal EEO Bid Conditions, and the New Form shall not be used after the regulations in 41 CFR Part 60-4 become effective.

[43 FR 49254, Oct. 20, 1978; 43 FR 51401, Nov. 3, 1978, as amended at 45

FR 65978, Oct. 3, 1980]

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

I. General

- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-thejob training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

 a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

 b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

 c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

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

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <u>Form FHWA-1391</u>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-ofway of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DavisBacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors Contractors and subcontractors shall maintain the full social security number and current address of each covered worker. and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract. (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30. d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours workweek in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

T h is provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federalaid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

 Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-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 antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) 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 (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

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Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

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

a. 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 an 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 any Federal contract, grant, loan, or cooperative agreement.

b. 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, Ioan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. 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 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$10,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.
Approved by OMB No. 0348-0046

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1. Type of Federal Action:	2. Status of Federal Action:		3. Report Type:	
a. contract	a. bid/offer/applicatio	n	a. initial filing	
b. grant	b. initial award		b. material change	
c. cooperative agreement d. loan	c. post-award		For Material Change Only:	
e. Ioan guarantee			year quarter	
f. Ioan insurance			date of last report	
4. Name and Address of Reporting Entity:		If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:		
Prime Subawardee		and Address of Finne.		
Tier	, if known:			
Congressional District, <i>If known:</i>		Congressional District, If known:		
6. Federal Department/Agency:		7. Federa	al Program Name/Description:	
		CFDA Number, if applicable:		
8. Federal Action Number, If known:	· · · · · · · · · · · · · · · · · · ·	9. Award	9. Award Amount, If known:	
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		\$		
10. a. Name and Address of Lobbyin	g Registrant		luals Performing Services (Including address if	
(If individual, last name, first nam	e, MI):	different from No. 10a)		
		(last na	ame, first name, MI):	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a				
		Signature:		
		Print Name:		
		Title		
civil penalty of not less that \$10,000 and not more than \$100,000 for		Telephone	No.: Date:	
each such failure.			A 1999	
Federal Use Only:			Authorized for Local Reproduction	
reueral use villy.			Standard Form LLL (Rev. 7-97)	

DISCLOSURE OF LOBBYING ACTIVITIES Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352 (See Reverse for public burden disclosure.)

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred, Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be a prime or subaward receipt. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks :Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (Item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
- Enter the most appropriate Federal identifying number available for the Federal action identified in Item 1 (e.g., Request for Proposal (RFP) number; Invitation for bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g. "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in Item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in Item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).

11. Certifying official shall sign and date the form, print his/her name, title and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

\$SD: 06/28/04

ALL FA PROJECTS

SPECIAL ATTENTION

DISADVANTAGED BUSINESS ENTERPRISE (DBE) DIRECTORY

The current New Hampshire Unified Disadvantaged Business Enterprise (DBE) Directory is available on the NHDOT website at http://www.nh.gov/dot/business/contractors.htm. If you have questions or do not have access to the Internet, the directory may be obtained from DBE Coordinator, located at 7 Hazen Drive, Concord, NH 03302, Tel: (603) 271-6612.

Page 1 of 4

SPECIAL ATTENTION

Disadvantaged Business Enterprise (DBE)

Disadvantaged Business Enterprise (DBE) Policy. It shall be the policy of the New Hampshire Department of Transportation (NHDOT) to ensure nondiscriminatory opportunity for Disadvantaged Business Enterprises (DBE's) to participate in the performance of all contracts and subcontracts financed with Federal funds as specified by the regulations of the United States Department of Transportation (USDOT), Federal Highway Administration and as set forth below.

1. <u>Policy</u>. It is the policy of the United States Department of Transportation to ensure nondiscriminatory opportunity for disadvantaged business enterprises, as defined in 49 Code of Federal Regulation (CFR) Part 26, to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds. Consequently, the DBE requirements of 49 CFR Part 26 applies to this contract.

2. Disadvantaged Business Enterprise (DBE) Obligation. The State and its Contractor agree to ensure nondiscriminatory opportunity for disadvantaged business enterprises, as defined in 49 CFR Part 26, to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds. Prime Contractors and subcontractors who further sublet must include this assurance in every subcontract: The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by any contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this Contract or such other remedy, as the NHDOT deems appropriate.

3. <u>Sanctions of Non-Compliance</u>. The Contractor is hereby advised that failure of the Contractor, or any Subcontractor performing work under this Contract, to carry out the requirements set forth in paragraphs 1 and 2 above shall constitute a breach of contract and, after notification of the United States Department of Transportation, may result in termination of this Contract or such remedy as the State deems appropriate.

Overall Statewide DBE Goals. The NHDOT currently employs a race/gender neutral DBE policy to attain its overall statewide DBE goals. This means that unless otherwise stated in the Contract, the NHDOT relies on the voluntary cooperation of all contractors to utilize DBE's on every project, sufficient to meet or exceed the current statewide DBE goal. Although the majority of statewide DBE goals are currently voluntary, failure of the NHDOT to meet or exceed the overall statewide DBE goal as required by the Federal Highway Administration (FHWA), could necessitate placement of mandatory DBE participation requirements on all future statewide projects.

Disadvantaged Business Enterprise (DBE) Program Goals. The New Hampshire Department of Transportation is required to set an overall DBE goal for participation in all transportation related Federal-aid projects. The goal is determined following guidelines set forth in 49 CFR 26.45, and based on the availability of ready, willing and able DBE's who submitted bids for transportation related projects, compared as a percentage of all available contractors who submitted bids for transportation related projects during the same time period. The DBE goal may be adjusted to take into account other factors impacting DBE utilization, in an effort to narrowly tailor the overall DBE goal. The detailed goal setting methodology and current overall DBE goal may be viewed on the NHDOT website at <u>www.nh.gov/dot</u>.

Disadvantaged Business Enterprise (DBE) Definition. A DBE is defined as a business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purpose of this definition:

- A. "Socially and economically disadvantaged person" means an individual who is a citizen or lawful permanent resident of the United States and who is a Woman, Black, Hispanic, Portuguese, Native American, Asian American, or a member of another group, or an individual found to be disadvantaged by an individual determination of social disadvantage as described in 49 CFR 26 appendix E, determinations of social and economic disadvantage.
- B. "Owned and controlled" means a business which is:
 - (1) A sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
 - (2) A partnership, joint venture or limited liability Company in which at least 51% of the beneficial ownership interests is legitimately held by a disadvantaged person(s).
 - (3) A corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests are legitimately held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with the percentage of ownership. Disadvantaged participation in a joint venture must also be based on the sharing of real economic interest and must include proportionate control over management, capital, and earnings, as above. If the disadvantaged group ownership interests are real, substantial and continuing and not created solely to meet the requirements of this program, a firm is considered a bona fide DBE.

Certified DBE Directory. The current New Hampshire Unified Disadvantaged Business Enterprise (DBE) Directory is available online at <u>www.nh.gov/dot</u>. This directory contains all currently certified DBE's available for work in New Hampshire, and is updated monthly. Only firm's listed in this directory are eligible for DBE credit on NH Federal-aid projects. If you have questions about DBE certification, or do not have access to the Internet, please call the DBE Coordinator at (603) 271-6612 for assistance.

Counting DBE Participation For Project Goals. In order for payments made to DBE contractors to be counted toward DBE goals, the DBE contractors must perform a commercially useful function (CUF). The DBE must be responsible for execution of the work of the contract and must carry out its responsibilities by actually performing, managing, and supervising the work involved, consistent with standard industry practices. This means that:

- A. The DBE must also be responsible for ordering its own materials and supplies, determining quantity and quality, negotiating price, installing (where applicable) and paying for the material itself;
- B. The DBE must perform work commensurate with the amount of its contract;
- C. The DBE's contribution cannot be that of an extra participant or a conduit through which funds are passed in order to obtain the appearance of DBE participation;
- D. The DBE must exercise responsibility for at least fifty percent of the total cost of its contract with its own work force;
- E. None of the DBE's work can be subcontracted back to the Prime Contractor, nor can the DBE employ the prime's, or other subcontractor's supervisors currently working on the project;
- F. The DBE's labor force must be separate and apart form that of the Prime Contractor or other subcontractors on the project. Transferring crews between primes, subcontractors, and DBE contractors is not acceptable;

- G. The DBE owner must hold a Public Works license and any other professional or craft licenses required for the type of work he/she performs on the project;
- H. The DBE may rent or lease, at competitive rates, equipment needed on the project from customary leasing sources or from other subcontractors on the project.

Allowable credit for payments made to DBEs for work performed. A contractor may take credit for payments made to a certified DBE that satisfies (CUF) requirements at the following rate.

- A. A DBE Prime Contractor; count 100% of the value of work performed by own forces, equipment and materials count towards DBE goals.
- B. An approved DBE subcontractor; count 100% of the value of work performed by the DBE's own forces, equipment and materials, excluding the following:
 - The cost of materials/supplies purchased from a non-DBE Prime Contractor.
 - The value of work provided by non-DBE lower tier subcontractors, including non-DBE trucking to deliver asphalt to a DBE contractor.
- C. A DBE owner-operator of construction equipment; count 100% of expenditures committed.
- D. A DBE manufacturer; count 100% of expenditures committed. The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Prime Contractor.
- E. A regular DBE dealer/supplier; count 60% of expenditures committed. A regular dealer/supplier is defined as a firm that owns, operates, or maintains a store, warehouse or other establishment, in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. A person may be a dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt without owning, operating or maintaining a place of business, if the person both owns and operates distribution equipment for the products, by the means of a long term agreement, and not by a contract by contract basis.
- F. A DBE Broker; count for DBE credit only the fees or commissions charged for assistance in the procurement, and, fees and transportation charges for the delivery of materials or supplies required at the job site, but not the cost of materials procured. A broker is defined as any person(s) or firm who arranges or expedites transactions for materials or supplies, and does not take physical possession of the materials or supplies at their place of business for resale.
- G. A DBE renter of construction equipment to a contractor; count 20% of expenditures committed, with or without operator.
- H. A bona fide DBE service provider; count 100% of reasonable fees or commissions. Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of the contract. Eligible services also include agencies providing bonding and insurance specifically required for the performance of the contract.
- I. A trucking, hauling or delivery operation, count 100% of payments when trucks are owned, operated, licensed and insured by the DBE and used on the contract and, if applicable, includes the cost of the materials and supplies. 100% of payments when the DBE leases trucks from another DBE firm including an owner-operator. 100% of reasonable fees, or commissions, the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
- J. Any combination of the above.

Reporting Requirements for Payments Made To DBE's: On all Federal-aid projects, the Prime Contractor is required to report payments made to DBE's during the life of the contract, on a quarterly basis, for the periods covering January 1st–March 31st, April 1st-June 30th, July 1st-September 30th and October 1st-December 31st, The NHDOT will provide the Prime Contractor with a quarterly DBE

Page 4 of 4

payments report, detailing all DBE's subcontracted by the Prime Contractor, per project. The Prime Contractor shall report any payments made to DBE's during the requested reporting period. This documentation shall be submitted to the Office of Federal Compliance within the time period stated on the NHDOT quarterly request. Failure of the Prime Contractor to submit this information may result in the Department withholding progress payments.

Removal of Approved DBE From Transportation Related Project: Contractors may not terminate for convenience, any approved DBE subcontractor and perform the work with their own forces, without prior written consent from the NHDOT.

<u>MUNICIPAL PROJECTS ONLY</u>: Timely submission of invoices to Municipalities: Prime Contractors must submit all invoices received for satisfactorily completed work, from any subcontractor/lower-tier subcontractor/material supplier, to Municipalities for payment within 30 days of receipt. Rev. 6/2/10 Supersedes Spec. Attn. dated 3/9/90, 12/5/90, 4/4/92, 2/22/93, 4/24/95 & 6/5/98

ALL FA PROJECTS (STEEL & IRON PRODUCTS)

SPECIAL ATTENTION

BUY AMERICA

In accordance with the **BUY AMERICA** requirements of the Federal regulations, all manufacturing processes for steel and iron materials furnished for permanent incorporation into the work on this project shall occur in the United States. The only exception to this requirement is the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

Products of steel include, but are not limited to, such products as structural steel, piles, reinforcing steel, structural plate, steel culverts, guardrail and steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not subject to this clause, only the application process.

A Certificate of Compliance, conforming to the requirements of Section 106.04, shall be furnished for steel and iron materials. Records to be maintained by the contractor for this certification shall include a signed mill test report and a signed certification by each supplier, distributor, fabricator, and manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Special Attention. The lack of these certifications will be justification for rejection of the steel or iron product.

The requirements of said law and regulations do not prevent a minimal use of foreign steel and iron materials if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or \$2,500.00, whichever is greater.

Upon completion of the project, the Contractor shall certify in writing as to compliance with this Special Attention and also provide the total project delivered cost of all foreign steel and/or iron permanently incorporated into the project. The form for this certification is entitled "Buy America Certificate of Compliance" and can be found at www.NHDOT.com.

December 24, 1998 Supersedes Spec. Attn. dated 3/29/88 & 12/5/90

FHWA Projects

SPECIAL ATTENTION

CONTRACT AFFIDAVIT - CERTIFICATION REGARDING DEBARMENT SUSPENSION

The separate form entitled, <u>CONTRACT AFFIDAVIT (As Required by Section 112(c) of</u> <u>Title 23 USC</u>) has been deleted from this proposal.

Bidders are advised that the last page of the bidding proposal has been revised to include the same reference, **IN BOLD PRINT**, relative to the non-collusion statement included on the discontinued form.

The Contractor is advised that 49 CFR 29.510, Appendix A, requires that the Contractor, including all principals, certify that they are not currently under debarment or suspension or have not been under debarment or suspension within the past three years. (For certification instructions see next page).

The certification has been added, **IN BOLD PRINT**, onto the next to the last page of the bidding proposal.

The Contractor is further advised that Appendix B of 49 CFR 29.510 regarding certification of lower tier transactions has been added to Form FHWA-1273.

Instruction for Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of these regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification" Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

1/2001 Supersedes 3/90 ALL FA PROJECTS

SPECIAL ATTENTION

LOBBYING

UNITED STATES DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

SUBJECT: LIMITATION ON USE OF GRANT OR CONTRACT FUNDS FOR LOBBYING

The lobbying restrictions were established by Section 319 of Public Law 101-121 (Department of the Interior and Related Agencies Appropriations Act for Fiscal Year 1990).

The law prohibits Federal funds from being expended by the recipient or any lower tier subrecipients of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement. The extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement is also covered.

Federal-aid contractors, and consultants, as well as lower tier subcontractors and subconsultants are also subject to he lobbying prohibition. To assure compliance, a certification provision is included in all Federal-aid construction solicitations and contracts, and consultant agreements exceeding \$100,000 in Federal funds.

The Contractor shall be aware that by signing and submitting this proposal, he or she is attesting to the requirements of the certification provisions.

During the period of performance of a grant or contract, recipients and subrecipients must file disclosure form (Standard Form LLL) at the end of each calendar year quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any previously filed disclosure form.

Lower tier certifications should be maintained by the next tier above (i.e., prime contractors will keep the subcontractors' certification on file, etc.). Copies of Standard Form LLL will be included in the subcontract package for distribution to successful bidders.

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Page 1 of 8

SPECIAL ATTENTION

SUMMARY OF REQUIREMENTS FOR FEDERAL-AID PROJECTS

1. Subletting on Federal-aid Contracts:

- a. On Federal-Aid projects, the following documents are required to be incorporated in, and made a part of, every subcontract agreement; including lower-tier subcontract agreements:
 - NHDOT Subcontracting Procedures
 - Required Contract Provisions (FHWA-1273)
 - Disadvantaged Business Enterprise (DBE) Program Requirements (Standard Specification 103.06)
 - Prompt Payment to Subcontractors (Standard Specification 109.09)
 - 41 CFR 60-4 Affirmative Action Requirements
 - Applicable only to contracts or subcontracts in excess of \$10,000
 - U.S. Department of Labor (USDOL) wage rates entitled "GENERAL WAGE DECISION" (as contained in the contract)
 - Does not apply to companies performing Davis-Bacon exempt work (such as testing, monitoring, and inspection services).
- b. Subcontractor Approvals for Companies Who Perform Testing, Monitoring, Inspection Services:
 - 1) Companies and/or independent contractors performing testing, monitoring, or inspection, such as ground penetrating radar, erosion control monitoring, video inspection, SWPPP, environmental testing/monitoring or vibration monitoring, require subcontractor approval.
 - 2) The following subcontractor approval documentation is required:
 - OFC Form 15 Transmittal Request
 - 15a for State managed projects, or
 - 15b for Local Public Agency (LPA) municipal projects
 - OFC Form 14 Contractor Acknowledgment Certification
 - OFC Form 26 Work Certificate
 - Certificate of Insurance showing Workers' Compensation coverage Office of Federal Compliance (OFC) staff will verify coverage with the NH Department of Labor (NHDOL).
- c. Contractors will not be approved or authorized to work until all OFC's Annual Assurance requirements have been fulfilled.
- d. Per NH RSA 228:4-b, Workers' Compensation Insurance must cover all individuals performing work on site and shall remain in effect for the duration of the contractor's work on the project. No excluded individual, owner, or officer may perform work on site without exception. All persons working on site must have Workers' Compensation coverage on file with the NHDOL.

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- e. Prime Contractors shall submit consent to sublet packages to the NHDOT at least 5 working days prior to said subcontractor (or lower-tier subcontractor) performing work on site. On LPA projects, the Prime Contractor shall also provide a courtesy copy to the town or the town's consultant, if applicable.
- f. <u>LPA Projects Only</u>: OFC is the sole approval authority for all LPA construction projects. Consents to sublet shall be submitted directly to the OFC.

2. FHWA Form 1273, Required Contract Provisions:

- a. The Prime Contractor shall insert in each subcontract all the stipulations contained in the Required Contract Provisions. Primes shall further require their inclusion in any lower-tier subcontract or purchase order that may in-turn be made. The Required Contract Provisions shall not be incorporated by reference in any case.
- b. In accordance with Section I, Paragraph 1, the Prime Contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. This shall include any unpaid wages found to be owed that is not paid by a subcontractor or lower-tier subcontractor.
- c. In accordance with Section I, Paragraph 3, "A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contact, suspension/debarment or any other action determined to be appropriate by the contracting agency and FHWA."

3. Certified Payrolls and Time Sheets:

a. Submission Format: Payrolls, as required by FHWA Form 1273, shall be submitted electronically (email) as a pdf document to the NHDOT Contract Administrator, consistently named in the following format: Contractor's name (abbreviated is acceptable) followed by the "week ending" date (yyyy/mm/dd). The Contractor's and each Subcontractor's payroll shall be submitted as separate, individual files.

Example: Plow Brothers Inc 2017-12-09

- b. Multiple Counties/States or Categories (Highway/Building/Heavy): Whenever contracts have multiple wage determinations, contractors shall indicate, on each payroll submission, which wage determination is applicable to the work.
- c. Project Specific: Except for weekly gross pay, deductions, and weekly net pay, all information shown on certified payrolls shall be project specific. Please reference FHWA Form 1273 for additional payroll requirements and limitations.
- d. Time Sheets: Every contractor shall create and maintain time sheets for every worker performing work on the project. This includes salaried employees who perform work in a classification, either intermittently or full time. Time sheets shall record all work performed during the work week, both Federal and non-Federal, shop time, travel time considered work time, including any time considered "hours worked" as described under the Fair Labor Standards Act, Part 785. When requested, Contractors shall provide copies of time sheets to the OFC in support of certified payroll report information being provided. Time sheets, payroll records, and other basic records relating thereto shall be maintained by the Contractor during the course of the work

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and preserved for a period of three years from final invoice for all laborers and mechanics working at the site of work.

4. Sign-In Sheets:

- a. <u>State Managed Projects</u>: The use of daily sign-in sheets is required for subcontractors performing asbestos abatement. The OFC may also direct the use of daily sign-in sheets on other State managed projects for any contractor who does not accurately report all workers performing work on site on their payrolls. The sign-in sheets shall be administered as described below.
- b. <u>LPA Projects</u>: The use of daily sign-in sheets is <u>mandatory</u> on all LPA projects. Every worker must sign in, on a daily basis, <u>prior</u> to performing work on site. The OFC Form 20- Daily Sign-In Record shall be used for this purpose. The Prime Contractor is responsible to ensure all sign-in sheet requirements are met and that sign-in sheets are turned in to the Contract Administrator on a daily basis. Contract Administrators shall review and initial sign-in sheets daily; cross matching what employees have indicated for their work classification and what employers are indicating on certified payroll reports, and also verifying employers of workers signing in have been approved to work by the NHDOT. Sign-in sheets shall be colocated with certified payrolls and filed in a 3-ring binder; newest sign-in sheets on top. Sign-in sheets are an inspection item.

5. Requesting Work Classifications, Classifying Workers, and/or Payment of Wages.

- a. The Prime Contractor is required to submit an additional request to the NHDOT for any classification of labor/equipment that they or their subcontractors shall be utilizing under the contract that is not contained in the Proposal's Federal General Decision.
- b. Conformance submissions shall be in accordance with U.S. Department of Labor Memorandum No. 213, dated March 22, 2013. A copy of the Memorandum can be found at <u>http://www.wdol.gov/aam/aam213.pdf</u>.
- c. Unless otherwise instructed by the OFC, a SF 1444 shall be used for this purpose.
- d. Requests must be submitted to the NHDOT prior to any work being performed in the classification(s).
- e. Contractors who do not receive a USDOL conformance decision from the OFC within 45 days of submission should follow-up with the OFC.
- f. Once a decision is received from the USDOL, the OFC will notify the Prime Contractor. In cases when the USDOL stipulates a higher rate of pay than the one proposed by the Contractor, and the Contractor elects not to submit an appeal, restitution, if due, shall be paid to employees within 10 calendar days of being notified by the OFC. Restitution requirements of the NHDOT shall apply.
- g. Appeals shall be filed with the USDOL within 30 calendar days and a courtesy copy forwarded to the OFC at the same time. Restitution, if applicable, does not need to be paid during the time the appeal is under review by the USDOL.
- h. Contractors shall immediately inform the OFC whenever appeal decisions (including reconsideration requests) are received from the USDOL.

- i. In cases when a contractor indicates to the OFC he/she plans to appeal the USDOL decision but fails to provide the OFC proof of submission within 30 calendar days, the contractor shall comply with the original USDOL decision. The OFC will subsequently notify the Contractor that proof of an appeal was not received within 30 days and restitution, if applicable, must be paid to workers within 10 calendar days. Contractors who fail to provide restitution will be deemed "in non-compliance."
- j. OFC payment release authorization letters (Okay to Pay letters) cannot be accomplished until all wage conformances have been deemed closed (USDOL responses have been received), any pending contractor wage appeals have been finalized, with restitution paid if applicable, and all Prompt Pay requirements have been met.
- k. Job Classifications Descriptions (Laboring Category): While most of skilled and unskilled crafts appearing in Wage Determinations are self-explanatory, the below classifications (not all inclusive) have been described by the NHDOT and are consistent with USDOL requirements. Questions involving correct classification of workers should be addressed prior to performing work on the project. Workers performing in these classifications, according to the description, will be classified by contractors accordingly:
 - 1) <u>Asbestos Abatement</u>: All work associated with asbestos abatement shall be classified as "Laborer," unless said work involves piping that will be reinsulated. In these cases, "Asbestos Abatement Worker" shall be used.
 - 2) <u>Blaster</u>: Supervises and assists in locating, loading, and firing blast holes with explosives to break up hard materials. This work includes any of the following duties on-site: determining the spacing and depth of drilled holes; determining the amount of explosives, timing and placement of detonators; handling blasting materials in the work area; loading holes with detonators, primers and explosives; tamping and stemming holes; directing the placement of blasting mats or other flyrock controls; and detonating the charges.
 - 3) <u>Brick Mason</u> (also called Brick Layers): Builds and repairs walls, floors, paths/sidewalks, partitions, fireplaces, chimneys, and other structures with brick, pavers, precast masonry panels, concrete block, and other masonry materials, with or without mortar.
 - 4) <u>Carpenter</u> (Form Work Only): Formwork carpenters build the molds that retain wet concrete in the construction of bridges, foundations and other concrete structures. This also includes pre-manufactured forms made of steel, wood or heavy plastic. Work under this class also includes bracing required to hold the forms in place.
 - 5) <u>Carpenter</u> (Excluding Form Work): Involves all carpentry work not directly related to the pouring of concrete. This includes, without limitation, scaffolding, safety rail, platforms, walkways, stairs, demo containment, buildings, and bracing that is not in direct contact with concrete.

Note 1: Any work to dismantle where workers can simply "tear it apart" and where no safety concerns are present can be performed by Common or General Laborers.

Note 2: Questions involving these classes should be addressed prior to performing work on the project.

- 6) <u>Drill Operator</u>: Unless a hand-held tool, which can then be classified and performed as a Common/General Laborer, all drill work shall be performed in the "Drill Operator" classification. Conformances, if needed, shall be consistent with this requirement.
- 7) <u>Guardrail Installer</u>: Except for the "pounder," each person performing guardrail installation work shall be classified as "Guardrail Installer."
- 8) <u>Ironworker (Reinforcing)</u>: Positions and secures steel bars to placement of reinforced concrete; determines number, size, shape, and location of reinforcing rods from plans, specifications, sketches and/or oral instructions; places and ties reinforcing steel using wire and pliers, sets rods in place, spaces and secures reinforcing rods. May bend steel rods with hand tools or operate a rod-bending machine; may reinforce concrete with wire mesh; may perform other related duties.
- 9) <u>Ironworker (Structural)</u>: Performs any combination of the following duties to set beams, hang diaphragms, install bolts, torque bolts, test bolts, raise, place and unite girders, columns and other structural steel members to form completed structures or structure frameworks, working as a member of a crew; sets up hoisting equipment for raising and placing structural steel members; fastens steel members to cable of hoist using chain, cable or rope; signals worker operating hoisting equipment to lift and place steel members. Guides member using guy line (rope) or rides on member to guide it into position. Reads plans; rigs, assembles and erects structural members requiring riveting or welding. May perform other related duties.
- 10) Lead Abatement Worker: All work associated with lead abatement shall be classified as "Lead Abatement Worker".
- 11) <u>Stone Mason</u>: Builds stone walls, as well as set stone exteriors and floors, lays/sets all cut stone, marble, slate, or stone, with or without mortar. They work with natural cut stone, such as marble, granite, limestone and artificial stone made of concrete, marble chips, or other masonry materials.
- 12) <u>Sweeper/Broom Operators</u>: Whenever Sweeper or Broom does not appear in the Wage Determination, contractors may use the Truck Driver classification for this service if the equipment used is of the over the road type (only). However, anytime the contract has an established classification/rate for "Sweeper or "Broom," this classification must be used and the minimum rate, as it appears in the contract, shall apply.
- 13) <u>Traffic Coordinator</u>: Performs sign placement and maintenance, including proper set up and relocation of construction sign packages and message boards; designs lane closures in accordance with local, state, and Federal requirements. Please do not confuse this classification with Flagger.
- 6. <u>Prompt Pay:</u> Prompt pay requirements are outlined in the NHDOT Standard Specifications Section 109.09. Submissions are due no later than the 10th calendar day of each month.

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- a. <u>State managed projects:</u> Contractors may use the OFC Form 18 or utilize their own document that contains the same required information unless otherwise instructed by the OFC.
 - If no payments were made during the reporting period, contractors shall submit a certification indicating "no payments made to subcontractors."
- b. LPA projects: Contractors shall use the OFC Form 12.
- 7. <u>Mandatory Training</u>: Prime Contractors who fail to obtain an annual average (based on the calendar year) of at least 60% "Satisfactory" ratings on all OFC Compliance Field Audit Reports may be required to attend a mandatory 4-hour Contractor Compliance Training Class each spring (as scheduled by the OFC). A principal owner or executive officer of the company, and his/her payroll accountant shall attend.
 - a. Compliance ratings will be averaged over all projects if a Prime Contractor has multiple projects.
 - b. The OFC has at least two Contractor Compliance Training Seminars each year. Every contractor participating on Federal-aid construction projects is encouraged to attend.
- 8. <u>Restitution</u>: If required, restitution shall be performed in accordance with the OFC guidelines. The OFC Form 8 Restitution Worksheet and Affidavit shall be used.

9. Temporary Suspensions:

- a. Any Contractor, Subcontractor, or Lower-tier Subcontractor found to be in violation of FHWA Form 1273, Required Contract Provisions, made part of its contract, or has failed to comply with OFC Field Audit requirements, will be required to take corrective action before participating in future projects funded by the Department. Corrective action will include, but not limited to, the submission of certified payrolls or other records and reports necessary to verify compliance with the Provisions.
- b. Any Contractor, Subcontractor or Lower-tier Subcontractor found to have repeatedly violated the FHWA Form 1273, Required Contract Provisions, may be required to complete 4-hours of Federal Contract Compliance Training conducted by the OFC. When mandated, a principal owner and/or company executive and his/her payroll accountant shall attend. Federal Contract Compliance Training must be completed before participation on future projects is authorized. This requirement does not relieve the Contractor of its obligations under the prime contract, nor does it prevent the Department from seeking other remedies or enforcement action, as provided by the governing Rules, Laws, and Federal Regulations.
- c. Companies will be notified of suspensions in writing. Actions the company must take to have participation privileges restored will be clearly indicated. Companies will also be advised that if a satisfactory response is not received within 30 days of receipt of the suspension notice, the company will be considered "non-responsive." In cases where companies are non-responsive, and unpaid wages on the part of the subcontractor or lower-tier subcontractor are involved, the matter will then be deferred to the Prime Contractor for payment of wages as provided in Form FHWA 1273, Required Contract Provisions, Section I, Paragraph 3.

- 10. <u>Right to Withhold Payment</u>: The Department may withhold payments claimed by the Contractor on account of:
 - a. Failure of the Contractor to make payments to Subcontractors for materials or labor.
 - b. Regulatory non-compliance or enforcement.
 - c. Failure to comply with OFC Field Audit Report requirements.
 - d. Failure to comply with monthly reporting requirements, as applicable.
 - e. For projects with an On-The-Job Training (OJT) requirement, failure to submit OJT Form 1 - On-The-Job Training Acknowledgement and Statement of Intent within 30 days of the project start date.
 - f. Failure to submit closeout documentation.
 - g. All other causes that the Department reasonably determines negatively affect the State's interest.
- 11. <u>Final Payment Release:</u> Once final project records are transferred to the OFC, a final review shall be performed to determine compliance with the Federal provisions. Release of any final payment shall not be made to the Contractor until the OFC issues a payment release letter (Okay to Pay) certifying:
 - a. All required payrolls, labor, and Equal Employment Opportunity (EEO) documentation have been received and deemed complete and correct.
 - b. DBE requirements stipulated in the Contract and/or the Required Contract Provisions have been fulfilled.
- 12. <u>Deposits in Escrow</u>: Every attempt is made to complete compliance actions and resolve any disputes before the project is completed and final payments are made. Sometimes, however, corrective actions or disputes continue after completion and provisions must be made to ensure that funds are available to pay any wage restitution that is ultimately found due. In these cases, the project can proceed to final closing provided the Prime Contractor, from payments already provided him/her, provides written evidence a deposit of an amount equal to the potential liability for wage restitution and liquidated damages, if applicable, has been deposited in an escrow account. When a final decision is rendered, the Prime Contractor makes disbursements from the account in accordance with the decision. Deposit/escrow accounts are established for one or more of the following reasons:
 - a. Where the parties have agreed to amounts of wage restitution that are due but the employer has not yet furnished evidence that all the underpaid workers have received their back wages. The deposit is equal to the amount of restitution due to workers lacking payment evidence. As proper documentation is received, an amount corresponding to the documentation is returned to the depositor. Amounts for any workers who cannot be located are held in the escrow account for three (3) years. Amounts remaining in the account not disbursed by the end of this three-year period shall be returned to the Prime Contractor.
 - b. Where underpayments are suspected or alleged and an investigation has not yet been completed. The deposit is equal to the amount of wage restitution and liquidated

damages, if applicable, that is estimated to be due. If the final determination of wages due is less than the amount estimated and placed in the escrow account, the escrow will be reduced to the final amount and the difference will be returned to the depositor. If the parties agree to the investigative findings, the amounts due to workers will be disbursed from the escrow account in accordance with the schedule of wages due. Amounts for unfound workers will be retained for a period of three (3) years and subsequently disbursed to the depositor as described above in Paragraph 12a.

c. Where the parties are waiting for the outcome of an administrative hearing that has been or will be filed contesting a final determination of wages due. The deposit shall be equal to the amount of wage restitution and liquidated dates, if applicable, that have been determined to be due. Once the final decision is rendered, disbursements from the escrow account are made in accordance with the decision.

Please direct questions relating to any information in this document to the OFC. See the OFC website for forms, documents, training schedules, contact information, and other helpful material: www.nh.gov/dot/org/administration/ofc/index.htm.

TE/CMAQ Program Construction Proposal

It is proposed:

To execute the Contract and begin work within <u>10 days</u> from the date specified in the "Notice to Proceed" and to prosecute said work so as to complete the ______ and its appurtenances on or before ______.

To furnish a Contract Bond in the amount of 100 per cent of the Contract award, as security for the construction and completion of the _______ and its appurtenances in accordance with the Plans, Specifications and Contract. The Contractor's attention is called to Section <u>103.05</u> of the NHDOT Standard Specifications for road and bridge construction which provides the following guidance: unless specifically waived in the Proposal, upon execution of the Contract, the successful Bidder shall furnish the Agency a surety bond or bonds equal to the sum of the Contract amount. The form of the bond(s) shall be acceptable to the Agency and the bonding Company issuing the bond(s) shall be licensed to transact business in the State of New Hampshire, and....

To certified that the Bidder, in accordance with the requirements of <u>103.06 and 108.01</u>, intends to sublet, assign, sell, transfer or otherwise dispose of one or more portions of the work and (1) has contacted the appropriate listed disadvantaged businesses and afforded such disadvantaged businesses equal consideration with non-disadvantaged business for all work the Bidder currently proposes to sublet, assign, sell, transfer or otherwise dispose of, (2) may contact additional appropriate disadvantage businesses and will afford such businesses equal consideration with non-disadvantaged businesses for all work the Bidder in the future proposes to sublet, assign, sell, transfer or otherwise dispose of, and (3) will complete enclosed "DISADVANTAGED BUSINESS ENTERPRISE COMMITMENT FORM" and Letters of Intent for each disadvantaged business. The name of the person in the Bidder's organization who has been designated as the liaison officer to administer the disadvantaged business enterprise program is:

(To be completed by the Bidder)

To guarantee all of the work performed under this Contract to be done in accordance with the Specifications and in good and workmanlike manner, and to renew or repair any work which may be rejected, due to defective materials or workmanship, prior to final completion and acceptance of the project.

Enclosed herewith find certified check or bid bond in the amount of _____

<u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters – Primary Covered</u> <u>Transactions</u>.

(1). The prospective primary participant certifies to the best of its knowledge and belief, that it and all 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-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 antitrust 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-year period preceding this application/proposal had one or more public transactions (Federal, State or Local) terminated for cause or default. (2). 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.

Contract Affidavit

I/We declare under penalty of perjury under the laws of the United States and the State of New Hampshire that, in accordance with the provisions of Title 23 USC, Section 112(c), have not either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this Proposal.

Dated: (If a firm or individual) Signature of Bidder_____ By_____ Address of Bidder_____ Names and Addresses of Members of the Firm: (If a Corporation) Signature of Bidder_____ Title_____ By_____ Business Address Incorporated under the laws of the State of _____ Names of Officers: President____ Name Address Secretary____ Name Address Treasurer____ Address Name

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SPECIAL PROVISION

SECTION 107 -- LEGAL RELATIONS AND RESPONSIBILITIES TO PUBLIC SUBSECTION 107.01 – LAWS TO BE OBSERVED

The intent of this Special Provision is to clarify Bulletin Board requirements.

Add to 107.01's third paragraph titled Bulletin Board Requirements the following:

New Hampshire Department of Transportation Bulletin Board Diagram (Revision 1-15-16)



SPECIAL ATTENTION

CONVICT PRODUCED MATERIAL

In accordance with the requirements of the Federal regulations (23 U.S.C. 114(b)(2), 23 CFR 635.417), essentially all convict produced material is prohibited from Federal–aid highway construction projects. More specifically, materials produced after July 1, 1991, by convict labor, may only be incorporated in a Federal-aid construction projects if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or 2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987*.

* Because the Department, Federal Highway Administration, nor New Hampshire Correctional Industries can produce documents to meet condition 2 above, this condition cannot be met for New Hampshire convict produced material.

FEDERAL HIGHWAY ADMINISTRATION CIVIL RIGHTS ASSURANCE

The New Hampshire Department of Transportation HEREBY CERTIFIES THAT, as a condition of receiving Federal financial assistance under the Civil Rights Act of 1964, as amended, it will ensure that:

- 1. No person on the basis of race, color, national origin, sex, age or disability will be subjected to discrimination in the level and quality of transportation services and transportation-related benefits.
- 2. The New Hampshire Department of Transportation will compile, maintain, and submit in a timely manner Title VI information required in compliance with the Department of Transportation's Title VI regulation, 49 CFR Part 21.9.
- 3. The New Hampshire Department of Transportation will make it known to the public that those people or persons alleging discrimination on the basis of race, color, or national origin as it relates to the provision of transportation services and transportation-related benefits may file a complaint with the Federal Highway Administration and/or the U.S. Department of Transportation.

The person or persons whose signature appears below are authorized to sign this assurance on behalf of the grant applicant or recipient.

John F. Sheetzy

09/28/2017

Victoria F. Sheehan Commissioner New Hampshire Department of Transportation Date

The United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination

Assurances

DOT Order No. 1050.2A

The New Hampshire Department of Transportation (NHDOT) (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through the Federal Highway Administration (FHWA), is subject to and will comply with the following:

Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled Non-discrimination In Federally-Assisted Programs Of The Department Of Transportation-Effectuation Of Title VI Of The Civil Rights Act Of 1964);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

"No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, "for which the Recipient receives Federal financial assistance from DOT, including the FHWA).

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted highway program:

 The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23(b) and 21.23(e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard

2

to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.

 The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Federal-aid Highway Program activities and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

> "The NHDOT, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

- The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
- 4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
- That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
- 6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
- 7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- 8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

- the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
- b. the period during which the Recipient retains ownership or possession of the property.
- 9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
- 10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, the NHDOT also agrees to comply (and require any sub-recipients, subgrantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FHWA and USDOT access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by FHWA and USDOT. You must keep records, reports, and submit the material for review upon request to FHWA, and USDOT or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

The NHDOT gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the FHWA-aid highway program. This ASSURANCE is binding on the NHDOT, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the FHWA-aid highway program. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

Lictors F. Sheetz

Victoria F. Sheehan, Commissioner

09/28/2017

DATED

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
- Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or

the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the New Hampshire Department of Transportation (NHDOT) will accept title to the lands and maintain the project constructed thereon in accordance with 23 U.S. Code § 107, the Regulations for the Administration of the Federal-aid Highway program, and the policies and procedures prescribed by the FHWA of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation generating to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NHDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the NHDOT and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NHDOT, its successors and assigns.

The NHDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the NHDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the abovementioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the New Ham[shire Department of Transportation (NHDOT) pursuant to the provisions of Assurance 7(a):

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
 - 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, NHDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
- C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the NHDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NHDOT and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

С

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by the New Hampshire Department of Transportation (NHDOT) pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Nondiscrimination covenants, the NHDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, the NHDOT will there upon revert to and vest in and become the absolute property of the NHDOT and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

APPENDIX B – PREVAILING WAGE RATES

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General Decision Number: NH180033 01/05/2018 NH33

Superseded General Decision Number: NH20170033

State: New Hampshire

Construction Type: Highway

County: Rockingham County in New Hampshire.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/05/2018	

* SUNH2011-029 08/15/2011

	Rates	Fringes
CARPENTER (Excluding Form Work)	\$ 23.13	2.51
CARPENTER (Form Work Only)	\$ 20.57	1.06
ELECTRICIAN	\$ 23.22	2.78
INSTALLER - GUARDRAIL	\$ 22.29	11.84
IRONWORKER, REINFORCING	\$ 18.00	0.00
IRONWORKER, STRUCTURAL	\$ 34.45	17.20
LABORER: Blaster Rock	\$ 28.38	9.46
LABORER: Common or General	\$ 16.99	2.60
LABORER: Flagger	\$ 10.42	1.37
LABORER: Highway/Parking Lot Striping\$ 16.77	0.00	
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LABORER: Landscape\$ 14.65	0.00	
LABORER: Pipelayer\$ 18.29	4.33	
OPERATOR: Auger\$ 26.07	0.00	
OPERATOR: Backhoe\$ 27.72	4.17	
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 19.25	0.00	
OPERATOR: Bucket\$ 30.00	0.00	
OPERATOR: Bulldozer\$ 24.59	6.11	
OPERATOR: Crane\$ 23.95	3.29	
OPERATOR: Drill Rig Caissons\$ 36.86	19.78	
OPERATOR: Excavator\$ 24.72	5.58	
OPERATOR: Grader/Blade\$ 25.16	6.97	
OPERATOR: Loader\$ 24.10	5.72	
OPERATOR: Mechanic\$ 16.92	3.44	
OPERATOR: Oiler\$ 29.54	16.15	
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)\$ 23.43	0.00	
OPERATOR: Roller\$ 22.27	6.57	
OPERATOR: Post Driver/Pounder\$ 27.24	7.90	
TRUCK DRIVER, Includes all		
axles including Dump Trucks (Excludes Low Bed Trucks)\$ 17.59	2.99	
TRUCK DRIVER: Low Bed Truck\$ 21.43	6.30	

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

APPENDIX C – PUBLIC INTEREST FINDING

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Request	for Approval of	Dublic Inter	et Finding (DTE')
Request		Public intere	est Finding (PIF)
Use of patented and proprietary Use of State-furnished materials		CFR 635.411)	ner e	
Mandatory use of borrow/dispos				
Waiver to Buy America Require	nents (only FHWA HQ o	an approve throug	h the Division Offi	ce) (23 CFR 635.410)
Diff Duration	1	Project Spe	cific Information	ay an an tao mana amin'ny fanisa amin'ny fanisa amin'ny fanisa amin'ny fanisa amin'ny fanisa amin'ny fanisa ami
Project Specific Approval-or-	Contract Name:Woodbur	y Avenue Signal Int	erconnect Project -	Portsmouth, NH
Statewide Blanket Approval	FA Project #:X-A004(30		e Project #: 29781	
Duration (FHWA Approval)	Stewardship:	Full Oversight	Exempt/Sta	ate Delegated
Description of Item(s)/Work (clearly		involved):		
The Woodbury Avenue Signal Interc	nnect Project will reconst	nuct degraded or ant	invated traffic signs	equinment at seven con
intersections in Portsmouth, NH. Th	s Public Interest Finding (PIF) is intended for	the use of a sole pro	prietary item, the 'GTT
Opticom' emergency vehicle preempt	ion components Model 76	4 Multimode Phase	Selectors with card	rack, Model 711 Receive
and accompanying programming, will Estimated Costs Associated with Put	lic Interest Finding (pleas	e provide a breakout	t of items):	
54 I III				
GTT Opticom Model 764 Multimod	Phase Selectors w/ Card	Rack ~ \$2,750 each	-GTT Opticom Mo	del 711 Preemption Rece
-	\$450 each (approximatel	y \$4,000 to 4,500 pe	er intersection)	•
Justification for a Public Interest Fin The following describes the justification	on for the public interest of	easons and/or justifi of the G11 Opticom	cation for the PIF): components:	
• The City of Portsmouth Fire Dana	ment evoluciusly uses OT	Contiana and	nto for all for	
 The City of Portsmouth Fire Depart owned signal locations throughout the 				auses. Also all existing
 Most NHDOT owned signals within 	n the limits of the City hav	e been equipped wit		uipment by request by the
wherever they have been upgraded to				
 Providing GTT Opticom component 				
apparatus internet the eveters will be	ve seamless use as onnos	to possible confli	te caucad by other -	manufacturer's manufactures!-
apparatus utilizing the system will has systems, and	ve seamless use as oppose	ed to possible conflic	cts caused by other r	manufacturer's preemptio
systems, and • The City of Portsmouth has made s	gnificant investments in it	mplementing the exi	sting GTT Opticom	traffic signal emergency
systems, and • The City of Portsmouth has made s vehicle preemption infrastructure on	gnificant investments in in he City's fire apparatuses	mplementing the exi and traffic signal lo	sting GTT Opticom cations throughout t	traffic signal emergency the City. The continued u
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FHWA NH-PIF 2/11, Amended by NHDOT 07/17

Instructions for the Use of FHWA Form NH-PIF 2/11

The purpose for the use of this form is to streamline the process for documenting requests and approvals for Federal Aid participation in activities that require a "Public Interest Finding" required by 23 CFR.

The top series of check boxes are more for the most common instances where PIF is required but an "Other" box is available for non-typical issues.

PIF duration boxes can be checked either "Project Specific" or "Blanket" with a corresponding check box denoting years this request will remain in affect. On Full Oversight Projects, Public Agency Force Account or Blanket Requests, FHWA will designate the duration, on delegated projects, NHDOT's appointed "Reviewing Official" will select "Project Specific."

The "Requesting" official from NHDOT should complete the "Project Specific Information" fields as well as the boxes for "Description of Items', "Estimated Costs', and "Justification for Public Interest Finding" and "Supporting/Reference Documentation." Please use and attach extra sheets as necessary with supporting documentation and use this form as a cover sheet. Sole source requests requiring the State to Certify their justification per 23CFR635.411(a) (2)&(3) should do so under the "Justification" field.

The "Requesting" official should sign the form and provide name and title and the date of the request. FHWA must approve blanket requests, Public Agency FA, and those for full oversight projects. The request can then be scanned and emailed to FHWA or the NHDOT "Approving Official" for approval as appropriate per the request. All final signed copies (whether full oversight or not) will be maintained by NHDOT and FHWA for record keeping purposes. It is FHWA's expectation that the Construction Bureau Contract Administrators processing change orders with sole source materials must either have attached a copy of their approved PIF with the change order or a tracking number assigned related back to a blanket approval.

For Questions concerning less common requests for PIF and oversight responsibility, please see the Stewardship Agreement between FHWA & NHDOT approved 05/14/2015. (Pages 65-66)

FHWA Filing will be under Subject Files: Public Interest Findings -850.400 FHWA Filing will be under Project Files: State Project No. & Town

§635.411 Material or product selection.

(a) Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

(1) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or

(2) The State transportation department certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or

(3) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.

(b) When there is available for purchase more than one nonpatented, nonproprietary material, semifinished or finished article or product that will fulfill the requirements for an item of work of a project and these available materials or products are judged to be of satisfactory quality and equally acceptable on the basis of engineering analysis and the anticipated prices for the related item(s) of work are estimated to be approximately the same, the PS&E for the project shall either contain or include by reference the specifications for each such material or product that is considered acceptable for incorporation in the work. If the State transportation department wishes to substitute some other acceptable material or product for the material or product designated by the successful bidder or bid as the lowest alternate, and such substitution results in an increase in costs, there will not be Federal-aid participation in any increase in costs.

(c) A State transportation department may require a specific material or product when there are other acceptable materials and products, when such specific choice is approved by the Division Administrator as being in the public interest. When the Division Administrator's approval is not obtained, the item will be nonparticipating unless bidding procedures are used that establish the unit price of each acceptable alternative. In this case Federal-aid participation will be based on the lowest price so established.

(d) Reference in specifications and on plans to single trade name materials will not be approved on Federal-aid contracts.

(e) In the case of a design-build project, the following requirements apply: Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the Request for Proposals document unless the conditions of paragraph (a) of this section are applicable.

(f) State transportation departments (State DOTs) shall have the autonomy to determine culvert and storm sewer material types to be included in the construction of a project on a Federal-aid highway.

[41 FR 36204, Aug. 27, 1976, as amended at 67 FR 75926, Dec. 10, 2002; 71 FR 66454, Nov. 15, 2006; 78 FR 5717, Jan. 28, 2013]



PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH 680 Peverly Hill Road Portsmouth N.H. 03801 (603) 427-1530 FAX (603) 427-1539

December 7, 2017

New Hampshire Department of Transportation Bureau of Planning and Community Assistance William Watson, Administrator Attn: Thomas Jameson, P.E., Project Manager John O. Morton Building P.O. Box 483 / 7 Hazen Drive Concord, NH 03302-0483

Ref: NH Project Number: 29781 | Federal project Number: X-A004(304)

RE: Request for Approval of Public Interest Finding (PIF) Woodbury Avenue Traffic Signal Interconnect LPA Project

Dear Mr. Watson:

The City of Portsmouth is currently preparing to rebid the Woodbury Avenue Traffic Signal Interconnect - Local Public Agency (LPA) Project. The scope of the project includes upgrades to ADA accessibility and reconstruction of antiquated traffic signal equipment at seven signalized intersections along the Woodbury Avenue / Market Street corridor. We request that you seek FHWA's approval of the enclosed Public Interest Finding (PIF) for the use of the Global Traffic Technologies (GTT) Opticom Model 764 Multimode Phase Selectors with card rack and Model 711 Receivers. These items are components of the emergency vehicle traffic signal preemption system. This sole proprietary item is being requested based on the following justification:

- The City of Portsmouth Fire Department exclusively uses GTT Opticom components for all fire apparatuses. Also all existing City owned signal locations throughout the City have been fitted with this brand of equipment.
- Most NHDOT owned signals within the limits of the City have been equipped with GTT Opticom equipment by request by the City wherever they have been upgraded to include pre-emption equipment.
- Providing GTT Opticom components to match the Fire Department's existing equipment is the best plan to guarantee that all fire apparatus utilizing the

HIGHWAY . WATER . SEWER . ENGINEERING . PARKING & TRANSPORTATION

Mr. William Watson RE: Request for Approval of Public Interest Finding (PIF) November 27, 2017 Page 2 of 2

system will have seamless use as opposed to possible conflicts caused by other manufacturer's preemption or systems, and

 The City of Portsmouth has made significant investments in implementing the existing GTT Opticom traffic signal emergency vehicle preemption infrastructure on the City's fire apparatuses and traffic signal locations throughout the City. The continued use of GTT Opticom components will allow for efficient maintenance because of the familiarity of the system for the City technicians; cost efficiencies for the City's DPW because of the reduction of required inventory for routine replacement parts; and less need for multiple vendor technical services for future service calls.

We believe that it is of public interest to approve this equipment because any minor difference in contractor pricing for this proprietary item will be far outweighed by the post-construction cost savings of having uniform emergency vehicle preemption technology at both the traffic signal infrastructure and within the City's fire apparatuses. Please find enclosed a copy of the PIF Form. If you have any questions regarding this request, please do not hesitate to contact me or David Desfosses, Project Manager at (603) 766-1411. Thank you for your consideration.

Sincerely,

No

Peter H. Rice, P.E., Director City of Portsmouth Department of Public Works

Enclosure: Request for Approval of PIF Form

CC: Tom Jameson, PE, NHDOT Kevin Dandrade, PE, TEC File

OPTICOM[™] PRIORITY CONTROL SYSTEM OPTICOM[™] MODEL 764 MULTIMODE PHASE SELECTOR

OPTICOM" SYSTEM COMPONENT FOR ENVIRONMENTS WITH INFRARED AND GPS TECHNOLOGY

Description

The Opticom[™] Model 764 Multimode Phase Selector is a plug-in, four-channel, dual-priority, multimode encoded signal device designed for use with both Opticom[™] Infrared system emitters and detectors and Opticom[™] GPS radio/GPS Intersection units and vehicle equipment. It can be installed directly into the input files of Type 170 traffic controllers equipped with priority phase selection software and in virtually any other traffic controller equipped with priority phase selection software. Phase selectors are powered from AC mains or 24 VDC and contain their own Internal power supply to support Opticom[™] Infrared system detectors and Opticom[™] GPS radio/GPS units.

The Opticom[™] Model 764 may be used in IR only applications, GPS only applications, or IR and GPS applications simultaneously.

The Opticom[™] Model 760 Card Rack is required when input file space is not available. When used in GPS only mode, the Model 1040 card rack may also be used.

Opticom[™] Model 764 recognizes and discriminates among three distinct Opticom[™] IR emitter frequency rates via Opticom[™] detectors: high priority, low priority and probe priority. Within each of these three frequency rates, the phase selectors further discriminate among 10 classes of vehicle identification codes, with 1,000 individual vehicle codes per class — 10,000 total per frequency rate. The Opticom[™] Model 764 also recognizes three different priority levels transmitted by Opticom[™] GPS vehicle equipment: high priority, low priority and probe priority. Within each of these three priority levels, the phase selectors further discriminate among 254 agency IDs, 15 classes of vehicle identification codes, with 10,000 individual vehicle codes per class — for more than 38 million total per priority level.

Opticom™ Model 764 Phase Selector internally records each system activation. Each entry contains:

- Intersection name
- Date and time of the activity
- Vehicle class code of the activating vehicle
- · Activating vehicle's ID number
- Agency ID (GPS only)
- Channel called
- · Priority of the activity

- Final green signal indications displayed at the end of the call
- Time spent in the final greens
- · Duration of the activation
- If preempt has been requested and reason if not
- Turn signal status at the end of the call (GPS only)
- · Entry, exit and average speed (GPS only)
- · Relative priority level



Building critical traffic connections^m





Global Traffic Technologies, LLC

Transportation Systems business, Is the manufacturer of Opticom[™] priority control systems and Canoga[™] traffic sensing systems.

(GTT), formed in 2007 from

3M's pioneering Intelligent

OPTICOM[™] MODEL 764 MULTIMODE PHASE SELECTOR

OPTICOM " SYSTEM COMPONENT FOR ENVIRONMENTS WITH INFRARED AND GPS TECHNOLOGY

Features

- . IR only operation, GPS only operation, or simultaneous IR and GPS operatio
- · Four channels of detection
- · Two audilary detectors per channel (IR)
- · Records green signel displayed at end of preemption
- Competible with encoded signal and non-encoded signal Opticom^{**} IR Er nittera
- · High and low priority as well as probe frequency discrimination
- · "First-come, first-served" priority within each priority level
- · Priority-by-class setting via the interface software
- · Priority-by-direction setting via the interface software
- Direct installation Into CAVNY Type 170 Input files
- · Automatic range setting using an encoded emitter (IR)
- · Call bridging for both IR and GPS calls including mixed mode · Low-priority output may be configured for first-come, first-served
- or all-channel active
- User-adjustable range setting up to 2,500 feet of operation
 Change parameters based on time of day
- Priority enables
- Max call times
- Hold times
- Call bridging
- Range/Activation point thresholds
- Limit time between low priority calls
- Low priority directional priorities
- Relative priorities
- · Compatible with most traffic controllers
- · 10/100Mb Ethernet communication on the front panel
- · USB 2.0 communication on the front panel
- · RS232 communications front port, and rear backplane and
- Auxiliary Interface Panel
- · User-selected communications baud rate of 1,200 to 230,400 bits per second
- · Customizable ID code validation
- · Rexible programming options for priority control parameters
- Detailed current Opticom[®] System parameter information
- History log of most recent Opticom[™] Infrared and GPS system activities (10,000 entries)
- · 30,000 frequency/class/vehicle code ID combinations (IR)
- · More than 38 million agency/class/vehicle code combinations
- (GPS) · Front panel switches and diagnostic indicators for testing
- · Accurate infrared signal recognition circuitry
- · Precise output pulse
- · Definitive call verification
- · Regulated detector power supply (IR)
- · Optically isolated outputs
- · Two character display and keypad to enable diagnostics and test calls to each channel
- · Display LED Indicators - High- and low-priority test calls
- Reset to default parameters
- Range setting
- · User-settable range satting by ETA and/or distance (GPS only)

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Building critical

traffic connections-

Features (cont)

- · Varied outputs depending on turn signal status of requesting vehicle (GPS only)
- Diagnostic test
- · Advanced built-in diagnostics and testing
- · Tested to NEMA environmental and electrical test specifications

- · 760 Card Rack

Operating Parameters

- · Four dual-priority and probe frequency channels
- · "First-come, first-served" for vehicles with the same priority level (high or low)
- · Priority override: always higher over lower
- Opticam" GPS Radio/GPS Unit Input
- . Opticom™ Infrared System Detector input(s): one per channel on the card edge connector and two auxiliary per channel through the Model 768 auxiliary interface panel
- · Optional Interface software for flexible programming options and call history
- LED indicators
- Status
- Radio (GPS mode)
- Link (GPS mode)
- High signal/call per channel
- Low signal/call per channel
- Two-digit status display
- · Two character display and keypad to enable diagnostics and test calls to each channel
- . Voltage: 89 to 135 VAC, 60 Hz at up to 500mA or 24 VDC at up to 1 Amp
- Temperature: -37°C to +74°C (-34.6°F to +165.2°F)
- · Humidity: 5% to 95% relative
- CE certified
- NEMA TS-2 compliance
- · FCC compliance

Physical Dimensions

Length: 7.0 in. (17.8 cm) x 8.2 in. (20.8 cm) including handle Width: 2.3 in. (5.8 cm) Height: 4.5 in, (11,4 cm) Weight: 0.60 lbs. (272 g)

For complete warranty information visit www.git.com.



Accessories

- · On-site Interface software package
- Model 768 Auxiliary Interface Panel
- Opticom[™] Model 755 Four-Channel Adapter Card (optional)



Opticom[™] Infrared System Opticom[™] Models 711, 721 and 722 Detectors

Opticom^{**} Infrared System Matched Component Products

October 2007

Description

The Opticom[®] 700 Series Detectors transform the optical energy detected from an approaching, vehicle-mounted Opticom[®] Emitter to an electrical signal. The electrical signal is transmitted along a cable to the Opticom[®] Phase Selector or Opticom[®] Discriminator for processing.

Opticom 700 series detectors are mounted at or near the intersection that permits a direct, unobstructed line-of-sight to vehicle approaches. Opticom detectors may be mounted on span wire, mast arm or other appropriate structures.

Opticom[®] Models 711, 721 and 722 Detectors offer significant advances and flexibility for specific intersection applications. The Opticom detectors are designed for common applications in three configurations: one direction—the single channel Opticom model 711; the single channel, dual detection Opticom model 721; and two direction, two output detection—the dual channel Opticom model 722. All Opticom 700 series detectors greatly reduce installation and life cycle costs through their modular design, adjustable tubes, and compatibility with existing Opticom[®] Infrared System intersection and vehicle equipment.



Opticom™ Models 722, 721 (back) and 711 Detectors

Features

- Advanced electrical transient immunity
- Modular design
- Adjustable turret configuration: accommodates skewed approaches
- Lightweight, durable, high-impact polycarbonate enclosure
- Simplified installation: span wire or mast arm
- Gray door identification of Opticom model 722





138 Detector Cable

Opticom™ Span Wire Clamp

Accessories

- Opticom[®] Span Wire Clamp
- Opticom[™] Model 138 Detector Cable

Operating Parameters

- Reception Range: 200 ft. (60 m) adjustable up to 2,500 ft. (760 m)
- · Electrical: 24 to 28 VDC, 50 MA minimum
- Temperature Range: -30° F (-34° C) to 165° F (74° C)
- · Humidity: 5% to 95% relative

Physical Dimensions Opticom[®] Model 711 Detector Length: 12.0 in. (30.5 cm) Width: 4.75 in. (12.1 cm) Height: 5.63 in. (14.3 cm) Weight: 0.88 lbs. (400 g)

Opticom[™] Models 721 and 722 Detectors Length: 12.0 in. (30.5 cm) Width: 4.75 in. (12.1 cm) Height: 7.13 in. (18.1 cm) Weight: 1.12 lbs. (508 g)

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GTT will, at its sole option, repair, replace or refund any amounts paid for any Opticom[™] Infrared System component found to be defective in materials or manufacture within five (5) years from the date of shipment from GTT. See "Warranty and Extended Coverage" for details and limitations of the coverage plan. GTT will provide a functioning replacement component at a standard charge per unit for an additional five (5) years.

GTT warrants future system operability coverage as described herein. The warranties set forth in this document shall not apply to (A) incandescent lamps (confirmation lights) or (B) any Opticom infrared system components which have been (1) repaired o modified by persons not authorized by GTT; (2) subjected to incorrect installation, misuse, neglect or accident; (3) damaged by extreme atmospheric or weather-related conditions; or (4) subjected to events or use outside the normal or anticipated course. d or

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Opticom[™] Infrared System Opticom[™] Model 760 Card Rack

An Opticom" Infrared System Matched Component Product

October 2007

Description

The Opticom[®] Model 760 Card Rack facilitates easy Opticom[®] Infrared System Phase Selector and Discriminator installation. It can be used in traffic control cabinets without card slots for Opticom[®] Infrared System components.

The Opticom model 760 consists of a metal enclosure with a dedicated card slot for one Opticom phase selector or discriminator. Either two- or four-channel units may be used.

The front panel of the Opticom model 760 includes a terminal strip for connecting the optical detectors, as well as a 9-pin circular connector and harness to connect the Opticom infrared system phase selector's or discriminator's outputs and 120 VAC to power the phase selector or discriminator.

Features

- Conveniently located connections and harnessing (in the front)
- Rugged construction
- Stable "on-shelf" mounting
- Easy-to-read terminal designations
- Easy installation



Opticom[™] Model 760 Card Rack

TB1 Terminal Block Connections

The terminal block on the front of the Opticom" Model 760 Card Rack, TB1, is intended for primary optical detector connections for channels A, B, C and D. It is located on the left side of the Opticom model 760.

Pin Function

- 1 Channel A (1) primary detector signal input
- 2 Channel B (2) primary detector signal input
- Channel C (3) primary detector signal input 3
- 4 Channel D (4) primary detector signal input
- 5 Detector power
- Detector power 6
- Detector ground 7
- Detector ground 8

J1 Connector

The J1 connector is intended to provide all the signals needed to connect Opticom" Phase Selectors directly to a NEMA controller. It is located next to TB1.

Fin Function

- 115 VAC (AC+) 1
- 2 AC return (AC-)
- 3 Chassis ground
- 4 Not used
- 5 Channel A priority control output
- Channel B priority control output 6
- 7 Channel C priority control output
- Channel D priority control output 8
- 9 Logic ground

Physical Dimensions

Opticom[™] Model 760 Card Rack

Length: 8.5 in. (21.6 cm)

Width: 5.25 in. (13.3 cm)

Height: 5.25 in. (13.3 cm)

Weight: 1.37 lbs. (620 g)

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