



Securing Your World



LETTER OF SUBMITTAL AND ATTACHMENTS

Proposal for

I-64 ATSMS, ALBEMARLE AND AUGUSTA
COUNTIES, VIRGINIA
PROJECT NO. 0064-007-913
CONTRACT ID# C00104815DB70

Submitted to

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION (VDOT)

Attention: Brenda L. Williams

Central Office Mail Center

Loading Dock Entrance

1401 E. Broad Street

Richmond, VA 23219



On

NOVEMBER 7, 2013

By

G4S TECHNOLOGY LLC (FORMERLY ADESTA, LLC)

1200 Landmark Center | Omaha, NE 68102 | 402.233.7700

ATTACHMENT 4.0.1.1

I-64 ACTIVE TRAFFIC AND SAFETY MANAGEMENT SYSTEM
LETTER OF SUBMITTAL CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Letter of Submittal Checklist, with the page references added, with the Letter of Submittal.

Letter of Submittal Component	Form (if any)	RFP Part 1 Cross Reference	Page Reference
Letter of Submittal Checklist and Contents	Attachment 4.0.1.1	Section 4.0.1.1	Tab 1
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.4 (Form C-78-RFP)	Sections 3.4; 4.0.1.1	Tab 2
Letter of Submittal	NA	Section 4.1	Tab 3
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	Tab 3
Offeror's full legal name and address	NA	Section 4.1.1	Tab 3
Authorized representative's original signature	NA	Section 4.1.1	Tab 3
Declaration of intent	NA	Section 4.1.2	Tab 3
120 day declaration	NA	Section 4.1.3	Tab 3
Point of Contact information	NA	Section 4.1.4	Tab 3
Principal Officer information	NA	Section 4.1.5	Tab 3
Offeror's Corporate Structure	NA	Section 4.1.6	Tab 3
Full Legal Name of Lead Contractor and Lead Designer	NA	Section 4.1.7	Tab 3
Offeror's VDOT prequalification information	NA	Section 4.1.8	Tab 3
DBE statement confirming Offeror is committed to achieving the required 2% DBE goal	NA	Section 4.1.9	Tab 3
Interim Milestone and Final Completion Dates	NA	Section 4.1.10	Tab 3

ATTACHMENT 4.0.1.1

I-64 ACTIVE TRAFFIC AND SAFETY MANAGEMENT SYSTEM
LETTER OF SUBMITTAL CHECKLIST AND CONTENTS

Letter of Submittal Component	Form (if any)	RFP Part 1 Cross Reference	Page Reference
Attachments to the Letter of Submittal	NA	Section 4.2	
Affiliated and/ or Subsidiary Companies	Attachment 4.2.1	Section 4.2.1	Tab 4
Certification Regarding Debarment Forms	Attachment 4.2.2(a) Attachment 4.2.2(b)	Section 4.2.2	Tab 5
Offeror's VDOT prequalification certificate	NA	Section 4.2.3	Tab 6
Evidence of obtaining bonding	NA	Section 4.2.4	Tab 7
Full size copies of DPOR licenses and SCC registrations	NA	Section 4.2.5	Tab 8
SCC registration information - businesses	Attachment 4.2.5	Section 4.2.5.1	Tab 9
DPOR registration information - businesses	Attachment 4.2.5	Section 4.2.5.2	Tab 9
Lead Contractor Work History Form	Attachment 4.2.6(a)	Section 4.2.6	Tab 10
Lead Designer Work History Form	Attachment 4.2.6(b)	Section 4.2.6	Tab 11

ATTACHMENT 3.4**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**RFP NO. C00104815DB70PROJECT NO.: 0064-007-913, C501**ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA**

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.4, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of September 3, 2013 – RFP
(Date)
2. Cover letter of October 4, 2013 – RFP Addendum No. 1
(Date)
3. Cover letter of October 16, 2013 – RFP Addendum No. 2
(Date)

 _____ SIGNATURE	<u>November 6, 2013</u> _____ DATE
Lee K. Fintel _____ PRINTED NAME	Senior Vice President _____ TITLE



G4S Technology LLC
1200 Landmark Center
Suite 1300
Omaha, NE 68102

Telephone: 855-G4S-USA1
Fax: 402-233-7650
Email: info.g4stechnology@usa.g4s.com
www.g4stechnology.com

November 6, 2013

Brenda L. Williams
Commonwealth of Virginia
Department of Transportation (VDOT)
Central Office Mail Center
Loading Dock Entrance
1401 East Broad Street
Richmond, VA 23219

RE: Letter of Submittal Virginia Department of Transportation (VDOT) I-64 Active Traffic and Safety Management System (ATSMS)

Dear Ms. Williams,

G4S Technology LLC (G4S Technology) (formerly Adesta, LLC) submits the following response for the I-64 Active Traffic and Safety Management System (ATSMS) Request for Proposal (RFP).

Offer's Full Legal Name and Address (Reference RFP, Addendum 1, Section 4.1.1, Page 7 of 34)

G4S Technology LLC
1200 Landmark Center, Suite 1300
Omaha, NE 68102

Authorized Representative's Original Signature (Reference RFP, Addendum 1, Section 4.1.1, Page 7 of 34)

Lee K. Fintel, Senior Vice President, is the authorized representative for G4S Technology.

Offeror's Intent (Reference RFP, Addendum 1, Section 4.1.2, Page 7 of 34)

Upon award, G4S technology intends to enter into a contract with VDOT for the project in accordance with the terms outlined in the RFP.

Statement of Proposal Validity (Reference RFP, Addendum 1, Section 4.1.3, Page 7 of 34)

Our offer as represented in the price proposal submitted by G4S Technology remains in full force and effect for one hundred twenty (120) days after the proposal is submitted to VDOT. This letter of submittal and price proposal due date is November 7, 2013.



Point of Contact for the Offeror (Reference RFP, Addendum 1, Section 4.1.4, Page 8 of 34)

G4S Technology has identified Doug VanderKolk as the point of contact for this proposal:

Doug VanderKolk, Regional Sales Manager
7432 Alban Station Rd. Suite B226
Springfield, VA 22150
Ph:540-903-4810
Fax: 703-440-1464
doug.vanderkolk@usa.g4s.com

Principal Officer for the Offeror (Reference RFP, Addendum 1, Section 4.1.5, Page 8 of 34)

G4S Technology is the offeror for this project and our principal officer for the project is:

Lee K. Fintel, Senior Vice President
1200 Landmark Center, Suite 1300
Omaha, NE 68102
(402) 233-7700

Offeror Structure (Reference RFP, Addendum 1, Section 4.16, Page 8 of 34)

G4S Technology is a Delaware Limited Liability Company (LLC) with headquarters in Omaha, NE. G4S Technology is a part of G4S plc, the world's leading international security group. G4S Technology designs manufactures, installs, and maintains integrated security systems, communication networks, and Intelligent Traffic Systems (ITS) for a wide range of commercial, state and federal agencies, and facilities. G4S Technology will hold financial responsibility and upon award, will provide a single 100% performance bond and a single 100% payment bond. The Surety on these bonds will be Liberty Mutual Insurance (NAIC #23043) which is a certified company listed on the Department of the Treasury's Listing of Certified Companies.

Full Legal Name for the Lead Contractor and Lead Designer (Reference RFP, Addendum 1, Section 4.1.7, Page 8 of 34)

Lead Contractor: G4S Technology
Lead Designer: Gannett Fleming, Inc.



VDOT Prequalification Information (Reference RFP, Addendum 1, Section 4.1.8, Page 8 of 34)

G4S Technology holds an active prequalification certificate in good standing from VDOT and is qualified to bid on this project. G4S Technology's prequalification number is G1012. A copy of the VDOT prequalification certificate is provided in the attachments to the letter of submittal.

DBE Participation (Reference RFP, Addendum 1, Section 4.1.9, Page 8 of 34)

G4S Technology understands the DBE participation goal for the I-64 ATSMS project is three (3) percent and we are committed to achieving this goal on this project.

Interim Milestones and Final Completion Dates (Reference RFP, Addendum 1, Section 4.1.10, Page 8 of 34)

Interim Milestone Date: April 6, 2015

Final Completion Date: July 6, 2015

The G4S Technology and Gannett Fleming Design-Build Team understands the importance of the I-64 Active Traffic and Safety Management System and the need to enhance safety through the Afton Mountain Corridor. We are proud to provide our response for this important project. Our proven track record of delivering major ITS projects on time and within budget will provide the Commonwealth of Virginia with the needed experience to successfully complete the project.

We look forward to providing VDOT any additional information or clarifications.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Lee K. Fintel'.

Lee K. Fintel,
Senior Vice President

ATTACHMENT 4.2.1

State Project No. 0064-007-913 C-501

Affiliated and Subsidiary Companies of the Offeror

ATTACHMENT 4.2.2(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-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; and have not been convicted of any violations 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.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.


Signature

November 6, 2013

Date

Senior Vice President

Title

G4S Technology LLC

Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

- 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 participation in this transaction 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.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.



Signature

Date

Title

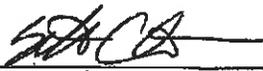
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

- 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 participation in this transaction 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.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

<u></u>	<u>11-7-13</u>	<u>President</u>
Signature	Date	Title

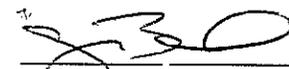
Colter Electric
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 Signature	11-6-13 Date	EXECUTIVE VP OF OUTSIDE OPERATIONS Title
--	-----------------	---

EDMUNDOS TELECOMMUNICATIONS Inc.
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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- 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.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	11/6/2013	President
Signature	Date	Title

Froehling & Robertson, Inc.
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

<u><i>Arian Hillen</i></u>	<u>11.5.13</u>	<u>President</u>
Signature	Date	Title

L.A.S Trucking & Construction
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 _____ Signature	11/6/13 _____ Date	Branch Operations Manager _____ Title
---	--------------------------	---

MBP Inc. (DBA McDonough Bolyard Peck)

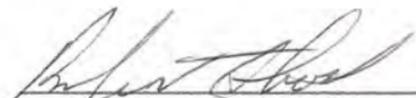
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 11/7/13 PRESIDENT
Signature Date Title

3B's Inc dba RAS COMMUNICATIONS
Name of Firm

ATTACHMENT 4.2.2(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-913, C-501

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

<u>Sal Royfonde</u>	<u>11-6-13</u>	<u>Vice President</u>
Signature	Date	Title

Webster & Webster Inc.
Name of Firm

TRNSPORT - E22
LSPPREQ

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PREQUALIFIED VENDORS SORTED BY VENDOR NAME
THIS LIST INCLUDES ALL PREQUALIFIED LEVELS
AS OF 10/18/2013
- G -

10/18/2013
2:02 PM
PAGE 172

=====
H969
G. B. HARRIS PAVING
PREQ. EXP : 05/30/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)
1138 HODGES RD. 004 - ASPHALT CONCRETE PAVING
RICHMOND, VA 23225 186 - SUBCONTRACTOR ONLY
PHONE : 804-874-5944
FAX : 804-249-9098

BUSINESS CONTACT: HARRIS, JR., GARLAND, B.
EMAIL:

-----DBE INFORMATION-----

DBE TYPE : DBE
DBE CONTACT: HARRIS, JR., GARLAND, B.

=====
G1012
G4S TECHNOLOGY
PREQ. EXP : 05/31/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)
1299 FARNAM STREET 018 - ELECTRICAL INSTALLATION
OMAHA, NE 68102 045 - UNDERGROUND UTILITIES
PHONE : 402-233-7700
FAX : 402-233-7650

BUSINESS CONTACT:
EMAIL:

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A
=====



Liberty Mutual Surety
Liberty Mutual Insurance Company

November 1, 2013

Commonwealth of Virginia
Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: **Contractor Prequalification**
Contractor: G4S Technology LLC
I-64 Active Traffic and Safety Management System
Design-Build Project
State Project No.: 0064-007-913, C501
Federal Project No.: OC-0642 (164)
Contract ID Number: C00104815DB70

To Whom It May Concern:

Liberty Mutual Insurance Company ("Liberty") has had the pleasure of handling G4S Technology LLC's bonding requirements since 2001. Liberty is a national provider of contract surety bonds, is licensed to provide surety bonds in all 50 states, is rated "A XV" by AM Best Company and is listed in the Federal Register as a surety acceptable on Federal projects. Liberty has provided bonds on individual projects in excess of \$20 Million with an aggregate in excess of \$300 Million on behalf of G4S Technology LLC.

Our investigation of this firm clearly indicates a company thoroughly versed in construction, with a great depth of experienced people who have become well known for their ability to complete jobs on schedule and within budget, complemented with excellent workmanship. We have found their relationship with owners, subcontractors and suppliers to be far above average, which we feel is of great importance to a well-run project.

We understand that G4S Technology LLC desires to be prequalified to submit proposal(s) the Commonwealth of Virginia. We will favorably consider a request from G4S Technology LLC to provide required bid, performance and payment bond(s), however, such prequalification and subsequent approval would be subject to review and approval of the contract terms and conditions (including bond forms), confirmation of full project financing and other underwriting criteria which we deem relevant at the time of such request

It is understood, of course, that any arrangement for the issuance of the bid, performance and payment bonds are a matter between G4S and ourselves. We assume no liability to third parties or to you for any reason we do not execute said bonds.

Sincerely,
Liberty Mutual Insurance Company

Claudette Alexander Hunt
Attorney-in-Fact

Member of Liberty Mutual Group

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 5953027

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint Caroline K. Lamarre; Claudette Alexander Hunt; Joseph M. Pietrangelo

all of the city of Miami, state of FL each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 16th day of January, 2013



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 16th day of January, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows.

ARTICLE IV – OFFICERS – Section 12 Power of Attorney Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5 Surety Bonds and Undertakings Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, whenever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 16th day of November, 2013



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

March 1, 2011

BETH EPSTEIN
UCC RETRIEVALS INC
7288 HANOVER GREEN DR
MECHANICSVILLE, VA 23111

RECEIPT

RE: G4S TECHNOLOGY LLC

ID: T021368 - 8

DCN: 11-02-28-1267

Dear Customer:

This is your receipt for \$25.00 to cover the fee(s) for filing an amended application for a certificate of registration and/or an amendment to the articles or certificate of organization for the above-referenced limited liability company, which was filed with this office on March 1, 2011.

Note: Prior to the effective date of this filing, the name of the above-referenced limited liability company was Adesta, LLC.

This is also your receipt for \$100.00 to cover the fee(s) for expedited service(s).

Thank you for contacting our office. If you have any questions, please call (804) 371-9733 or toll-free in Virginia, (866) 722-2551.

Sincerely,

Joel H. Peck
Clerk of the Commission

RECEIPTLC
LCNCF
CIS0354

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
07-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
2705077224

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS ESC

G4S TECHNOLOGY LLC
1200 LANDMARK CENTER
SUITE 1300
OMAHA, NE 68102-1892



Gordon N. Dixon
Gordon N. Dixon, Director

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS ESC
NUMBER: 2705077224 EXPIRES: 07-31-2015

G4S TECHNOLOGY LLC
1200 LANDMARK CENTER
SUITE 1300
OMAHA, NE 68102-1892



(FOLD)

(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

RECEIVED JUL 01 2

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, December 20, 1989

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

GANNETT FLEMING, INC.

a corporation organized under the laws of DELAWARE and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business. Effective date: December 20, 1989



State Corporation Commission

Attest:

George W. Bryant, Jr.
Clerk of the Commission

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON

12-31-2013

NUMBER

0407002949

**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION**

PROFESSIONS: ENG, ARC

**GANNETT FLEMING, INC.
ATTN CRIS MIZERAK
P O BOX 67100
ATTN: JEFFREY D. BRYSON
HARRISBURG, PA 17106-7100**



Gordon N. Dixon, Director

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD) **COMMONWEALTH OF VIRGINIA** (DETACH HERE)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233**

**BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407002949 EXPIRES: 12-31-2013
PROFESSIONS: ENG, ARC
GANNETT FLEMING, INC. ATTN: CRIS MIZERAK
P O BOX 67100
ATTN: JEFFREY D. BRYSON
HARRISBURG, PA 17106-7100**



**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON
02-28-2014**

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

**NUMBER
0411000055**

**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION**

PROFESSIONS: ARC, ENG

**GANNETT FLEMING, INC.
ATTENTION CRIS MIZERAK
7021 HARBOUR VIEW BLVD
SUITE 112
SUFFOLK, VA 23435**



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

**BOARD FOR AP/ELSC/DLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000055 EXPIRES: 02-28-2014
PROFESSIONS: ARC, ENG
GANNETT FLEMING, INC.
ATTENTION CRIS MIZERAK
7021 HARBOUR VIEW BLVD
SUITE 112
SUFFOLK, VA 23435**



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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233**

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON
02-28-2014**

**NUMBER
0411000750**

9980 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-9500

**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION**

PROFESSIONS: ENG

**GANNETT FLEMING, INC.
7133 RUTHERFORD ROAD
SUITE 300
WINDSOR MILL, MD 21244**



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD) **COMMONWEALTH OF VIRGINIA**

**BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000750 EXPIRES: 02-28-2014
PROFESSIONS: ENG
GANNETT FLEMING, INC.
7133 RUTHERFORD ROAD
SUITE 300
WINDSOR MILL, MD 21244**



(DETACH HERE)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9980 Mayland Dr., Suite 400, Richmond, VA 23233**

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000261

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

GANNETT FLEMING INC
4401 FAIR LAKES CT STE 100
FAIRFAX, VA 22033



Gordon N. Dixon
Gordon N. Dixon, Director

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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000261 EXPIRES: 02-28-2014
PROFESSIONS: ENG
GANNETT FLEMING INC
4401 FAIR LAKES CT STE 100
FAIRFAX, VA 22033



(FOLD)

(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000882

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

GANNETT FLEMING, INC.
4350 WEST CYPRESS ST
SUITE 340
TAMPA, FL 33607



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000882 EXPIRES: 02-28-2014
PROFESSIONS: ENG
GANNETT FLEMING, INC.
4350 WEST CYPRESS ST
SUITE 340
TAMPA, FL 33607



(FOLD)

(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

ATTACHMENT 4.2.5

State Project No. 0064-007-913, C-501

SCC and DPOR Information - Businesses

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 4.2.5 and that all businesses listed are active and in good standing.

SCC & DPOR INFORMATION FOR BUSINESSES (RFP Sections 4.2.5.1 and 4.2.5.2)							
Business Name	SCC Information (4.2.5.1)			DPOR Information (4.2.5.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
G4S Technology LLC	T0213688	Limited Liability Company		1200 Landmark Center, Suite 1300 Omaha, NE 68102	ESC	2705077224	7/31/2015
Gannett Fleming, Inc.				4401 Fair Lakes Ct Ste 100 Fairfax, VA 22033	ENG	0411000261	2/28/2014
Gannett Fleming, Inc.				7021 Harbour View Boulevard, Suite 112 Suffolk, VA 23435	ARC, ENG	0411000055	2/28/2014
Gannett Fleming, Inc.				7133 Rutherford Road Suite 300 Windsor Mill, MD 21244	ENG	0411000750	2/28/2014
Gannett Fleming, Inc.				(Camp Hill Office) P.O. Box 67100 Harrisburg, PA 17106	ENG	0407002949	12/31/2013
Gannett Fleming, Inc.				4350 West Cypress Street, Suite 340 Tampa, FL 33607	ENG	0411000882	2/28/2014

ATTACHMENT 4.2.5

State Project No. 0064-007-913, C-501

SCC and DPOR Information - Businesses

ATTACHMENT 4.2.6(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: MassDOT Design Build Project Location: Massachusetts	Name: Gannett Fleming	Name of Client./ Owner: MassDOT Phone: 413-582-0599 Project Manager: Alfred Stegemann Phone: 413-582-0599 Email: al.stegemann@state.ma.us	09/03/08	Construction 06/10/11 Maintenance 06/30/14 (est)	\$30,761	\$35,920	\$33,676

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.

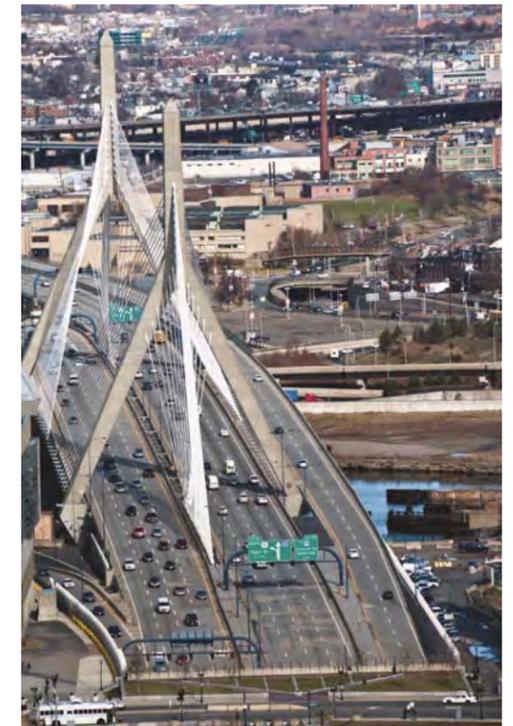
Overview

G4S Technology began a \$30.7M design-build Intelligent Transportation System (ITS) project for MassDOT in September, 2008. The project completed in June of 2011 consisted of implementing an ITS network that spans along I-91 through Massachusetts, from the Connecticut State Line to the Vermont State Line. G4s Technology was responsible for the design and installation of a fiber optic backbone along I-91 that would be utilized for the network. The fiber optic backbone was used to deploy a Ethernet network for the local area network, We value engineered a DWDM Wide area network that provided aggregation and connection between MassDOT's newly constructed District Traffic Operations Center (DTC) in Northampton and their Highway Operation Center (HOC) located in Boston, MA. The fiber network consisted of a six (6) conduit system that would provide additional scalability for MassDOT as a shared resource platform which has supported the broadband initiative in Western Massachusetts.

G4S Technology implemented the new DTC operation at MassDOT's facility located in their District 2 Operations Center. The CTV system consisted of integration into the Genetec Video management system used across MassDOT's ITS network. We also deployed and integrated Daktronic's software platform for the Variable Message Signs.

G4S Technology designed and deployed thirty-four (34) Closed Circuit Television (CCTV) locations and 17 Variable Message Sign (VMS) locations that connecting to the new traffic operation center (DTC) at District 2 office in Northampton and the (HOC) in Boston, MA. Additional connections for use of CCTV locations have been integrated at two (2) state police facilities. Additionally, some of these ITS elements are deployed along the I-291 corridor using a wireless and fiber solution to connect back to the Traffic Operations Centers. G4S Technology, as the prime contractor, along with team members Gannett Fleming and Henkels & McCoy, completed the project on time on June of 2011 and are now in year two (2) of a three (3) year maintenance period. Additional work to expand three (3) more VMS and three (3) more CCTV sites awarded in late 2011. The expansion work order is valued at \$2.3M and is in progress.

In addition, the ITS elements added in late 2011, G4S Technology has deployed additional ITS elements to support MassDOT operations. One of these solutions was for plow operations along I-91. The system provided information broadcast on the VMS locations to the traveling public where plow operations are occurring.



ATTACHMENT 4.2.6(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Pennsylvania Turnpike Commission, Installation of Intelligent Transportation Location: Pennsylvania	Name: Gannett Fleming	Name of Client./ Owner: Pennsylvania Turnpike Commission Phone: Project Manager: Lou Cortelazzi (ITS Coordinator) Phone: (717) 939-9551 X 3450 Email: lcortela@paturndpike.com	May 2011	Nov 2011 Due to Customer driven changes	\$8,612	\$8,989	\$8,989
<p>h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on <u>this</u> Project, so the relevancy of that work can be considered accordingly.</p> <p>G4S Technology began a design-build ITS project for Pennsylvania Turnpike Commission (PTC) in October 2009. The project consisted of deploying an ITS network at four (4) tunnel locations and other critical areas along the mainline and Northeast Extension. This network is comprised of VMS, CCTV, and arrow boards to provide PTC and the traveling public with real-time information concerning roadway and traffic conditions. These elements are linked to each tunnel's control center and PTC's TOC, located in Highspire, PA, through a wireless broadband network. G4S Technology analyzed the design and worked with the wireless vendor to plan the communications network. In addition, a fiber optic link was deployed at each tunnel for network connectivity and future expansion within the tunnel itself. Each area has specific quantities of VMS, CCTV, and arrow board locations to provide PTC the ability to monitor incidents and communicate to the traveling public. The network is comprised of 19 VMS signs, four (4) LED arrow boards, and 16 CCTV camera locations. The wireless solution deployed is a 4.9 GHX WiMax solution for communication back to PTC's TMC located in Highspire, PA</p> <p>As Prime Contractor, G4S Technology served as the System Integrator. The Project Design Lead was Gannett Fleming. Construction Contractor was Henkels and McCoy.</p>							

ATTACHMENT 4.2.6(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: New Jersey Turnpike Authority Roadway Surveillance Cameras Location: New Jersey	Name: G4S Technology	Name of Client./ Owner: New Jersey Turnpike Authority Phone: (732) 442-8600 Project Manager: Jose Dios Phone: 732-442-8600 x2277 Email: dios@turnpike.state.nj.us	Aug. 2008	Aug. 2008	\$2,100	\$2,100	\$2,100
<p>h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on <u>this</u> Project, so the relevancy of that work can be considered accordingly.</p> <p>Project Description This project for the New Jersey Turnpike Authority (NJTA) encompassed turnkey installation and integration of a video surveillance security system including location selection, design work, construction and systems integration. The roadway surveillance camera system is comprised of 150 Pan/Tilt/Zoom (PTZ) cameras mounted on light poles and sign structures at key locations along the New Jersey Turnpike and Garden State Parkway (GSP). The system is used by the New Jersey State Police as well as the NJTA Operations and Maintenance Departments to monitor traffic conditions.</p> <p>Each analog PTZ camera was connected to a wireless digital video encoder that transmits the video to receivers placed on toll and maintenance buildings. The receivers were connected to network to the NJTA's wide area network (WAN) through switches located at the toll plazas and maintenance buildings. Five (5) nDVR video servers were placed at the administration building for each roadway. Cameras stream video continuously to the servers that archive the video. In the event of failure of servers at one roadway they will switch over to the servers at the other roadway. Ten (10) workstations connected to the network were installed in operations and state police locations. Additionally, any user with the client video software can access and view any of the cameras by connecting to the wide area network at any location on either roadway. Each PTZ camera can be controlled through software from any of the workstations or client software if the user has the necessary access level.</p> <p>Project Management and Installation Efforts:</p> <ul style="list-style-type: none"> • Installation design and installation planning. • Subcontractor selection, mobilization and oversight. • System integration and configuration. • Scheduling and coordination with site management. • Providing project cost controls and budget management. • System performance validation and acceptance testing. • Delivery of site training at the operator and system administrator levels. • On-going systems maintenance support. <p>G4S Technology assisted NJTA personnel in selecting locations for the cameras on existing light poles and sign structures to provide best possible views of the roadway and line of site for wireless networking while minimizing installation time and cost by utilizing existing available electrical circuits where possible. G4S Technology performed all splicing and testing of fibers with its own personnel to ensure network integrity. We installed the cameras for the project along with additional wireless access points at areas where fiber connectivity was cost-prohibitive or not available. We deployed a wireless mesh network at specific facilities to provide access to cameras in the area as well as for NJ State Police.</p>							

ATTACHMENT 4.2.6(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
I-91 ITS Design-Build							
Name: Location: Western Massachusetts	Name: G4S Technology, LLC	Name of Client.: Massachusetts DOT Phone: (413) 420-0200 Project Manager: Jon Widdison Phone: (413) 582-0532 Email: jon.widdison@state.ma.us	12/2010	12/2010	\$30,761	\$30,761	\$3,095

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

Gannett Fleming served as the Prime Designer for this design-build project along I-91 and I-291 in western Massachusetts. The project stretched from the Connecticut state line to the Vermont state line and included 35 closed-circuit television (CCTV) cameras, 17 variable message signs, 54 miles of fiber-optic cable, and a five-mile wireless communication system. The project also included the installation of a district traffic operations center in the Massachusetts Department of Transportation, Highway Division, District 2 headquarters. The project involved integrating the devices into the statewide traffic operations center in Boston and providing video images from the CCTV cameras to the Northampton State Police (Troop B) barracks and the Springfield and Shelburne State Police facilities.

To better refine the locations of the CCTV cameras, our firm used a camera van to capture video at the proposed locations. Our firm followed the systems engineering process, including the completion of a concept of operations, detailed functional requirements, and the preparation of acceptance test plans. Our firm also prepared communication plans, ITS device-site plans, subsystem block diagrams, structural and foundation plans, and electrical plans for the I-91 system. In addition, our firm worked with the contractor to develop value engineering solutions to reduce the overall project cost to the client.

Office Location: Philadelphia, PA



ATTACHMENT 4.2.6(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Pennsylvania Turnpike ITS Design/Build							
Name: Location: Statewide Pennsylvania	Name: G4S Technology, LLC	Name of Client.: Pennsylvania Turnpike Commission Phone: (717) 939-9551 Project Manager: Lou Cortelazzi Phone: (717) 939-9551 Email: lcortela@paturndpike.com	4/2011	7/2011	\$8,500	\$8,500	\$902

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

As Prime Designer, Gannett Fleming was responsible for the preliminary and final design of ITS field devices at the approaches to four Pennsylvania Turnpike tunnels and other mainline and Northeast Extension locations. This \$8 million project involved the furnishing and installation of a completely functional ITS, including 19 DMSs, 15 CCTV camera systems, three arrow boards, 14 repeater poles, wireless and fiber-optic communications to the devices, relocation of static signs, and fiber-optic cable through the tunnels. This project involved connecting the devices to the Pennsylvania Turnpike Commission Traffic Operations Center (through the Turnpike's communication network) and providing local control of the arrow boards and cameras at the tunnels.

Our firm was responsible for the coordination of all design aspects, including utilities, structures, guide rail, environmental, electrical, and communications. Our firm installed completely functional DMS systems, CCTV systems, arrow boards, fiber-optic cable, and the required power and communications to four tunnel areas and other mainline and Northeast Extension locations.

To ensure that the system would meet the client's expectations, our firm participated in the factory acceptance testing of the DMS and developed device standalone and system testing procedures for all the ITS devices. Our firm also prepared communication plans, ITS device-site plans, system block diagrams, structural and foundation plans, and electrical plans for the system. In addition, our firm worked with the contractor to develop value engineering solutions to reduce the overall project cost to the client.

Office Location: Philadelphia, PA



ATTACHMENT 4.2.6(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
I-75 / I-595 Video Monitoring System Phase 2 Design-Build							
Name: Location: Broward County, Florida	Name: TransTech Electric	Name of Client.: Florida DOT, District Four Phone: (954) 847-2796 Project Manager: Dong Chen District Phone: (954) 847-2796 Email: dong.chen@dot.state.fl.us	10/2007	1/2009	\$15,000	\$15,000	\$1,100

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

This design-build ITS project designed and installed communications along 55 miles of I-75 and I-595 in Broward County The project featured the deployment of ITS equipment; the installation of a fiber trunk line, a wireless network, new communication hubs, and the upgrade of the video wall at the transportation management center (TMC). As Prime Designer, or firm provided all design services, system integration, system testing, and software coordination services, which allowed the contractor to focus on the field construction activities.

In order to supply power to all of the devices, a power distribution system was designed and installed. The power distribution included 18 new power service points from FPL, 7 existing power services points from FPL, 7 new power service points from Lee County Electric, 1 from the I-75 Service Plaza at mile marker 35, 1 from the I-75 Toll Plaza at mile marker 25, and 17 solar.

ITS Equipment Installed:

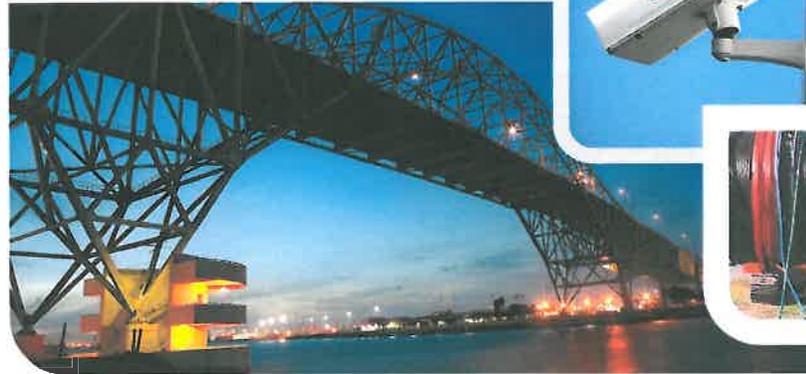
- 52 CCTV cameras
- 10 expressway DMSs
- 133 automated detectors
- 55 miles of fiber trunk (on I-75)
- Wireless network on I-595 (between I-95 and U.S. 1)
- Two new communication hubs
- New fiber along Hillsboro Boulevard (between I-95 and the Florida Turnpike)
- Video wall upgrade at SMART SunGuide® TMC

Office Location: Tampa, FL





Securing Your World



PRICE PROPOSAL FOR

**I-64 ATSMS, ALBEMARLE AND AUGUSTA
COUNTIES, VIRGINIA
PROJECT NO. 0064-007-913
CONTRACT ID# C00104815DB70**

Submitted to

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION (VDOT)**

Attention: Brenda L. Williams

Central Office Mail Center

Loading Dock Entrance

1401 E. Broad Street

Richmond, VA 23219

On

NOVEMBER 7, 2013

By

G4S TECHNOLOGY LLC (FORMERLY ADESTA, LLC)

1200 Landmark Center | Omaha, NE 68102 | 402.233.7700

ATTACHMENT 4.0.1.2

**DESIGN-BUILD PRICE PROPOSAL
CHECKLIST**

**Project Name: I-64 ACTIVE TRAFFIC AND SAFETY
MANAGEMENT SYSTEM
Contract ID Number: C00104815DB70**

➤ **Contents of Price Proposal:**

- Cost Breakdown Summary in whole numbers and Proposal Price in both numbers and words (Attachment 4.3.1)**
 - Price Adjustment Information and Forms for Fuel, Asphalt and Steel, including identification of pay items and associated quantities eligible for adjustment (Part 3, Section 6.3, Attachments 6.3)**
 - Proposal Guaranty (C-24) required by Section 102.07 of Part 5, Division I Amendments to the Standard Specifications**
 - Sworn Statement Forms (C-104, C-105, Attachments 4.3.4(a) and 4.3.4(b))**
 - DBE Requirements Forms (C-111, C-49 and C-112) as applicable (Attachments 4.3.5(a), 4.3.5(b) and 4.3.5(c))**
 - CD-ROM containing the entire Price Proposal in a single cohesive Adobe PDF file**
-

ATTACHMENT 4.3.1

PRICE PROPOSAL FORM

4.3.1 Offeror shall specify the pricing information for the items below, the dollars amount shall be in whole numbers:

Price Proposal Cost Breakdown Summary;

Design Services, LS	\$ <u>592,067.00</u>
Mobilization (Construction), LS	\$ <u>128,023.00</u>
Quality Assurance (Construction), LS	\$ <u>374,348.00</u>
Quality Control (Construction), LS	\$ <u>73,225.00</u>
Conduit Systems, LS	\$ <u>797,376.00</u>
Structures and Poles, LS	\$ <u>440,795.00</u>
Power and Communications, LS	\$ <u>1,077,039.00</u>
Dynamic Message Signs (DMS), LS	\$ <u>351,467.00</u>
Closed Circuit Television (CCTV), LS	\$ <u>142,971.00</u>
Weather Sensors/Detection, LS	\$ <u>271,723.00</u>
Roadside/Safety Improvements, LS	\$ <u>105,655.00</u>
All Others Costs, LS	\$ <u>244,573.00</u>

Proposal Price; (Specify the Total Lump Sum price in both numbers and words, this price shall **equal** to the total sum of the items listed above)

Lump Sum (LS): Four million five hundred ninety nine thousand two hundred

sixty two dollars and no cents (\$ 4,599,262.00)

EXHIBIT 6.3(a)
ADJUSTMENT FOR ASPHALT

SPECIAL PROVISION FOR
ASPHALT MATERIAL PRICE ADJUSTMENT
DESIGN-BUILD PROJECTS

August 9, 2013

All asphalt material listed in the attached "Master Listing of Asphalt Material Items Eligible for Price Adjustment" will be adjusted in accordance with the provisions as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract. Any item added through a Work Order which contains Asphalt Material will not be subject to Price Adjustment unless specifically designated in the Work Order to be subject to Price Adjustment.

Each month, the Department will publish an average state-wide PG 64-22 f.o.b. price per ton developed from the average terminal prices provided to the Department from suppliers of asphalt cement to contractors doing work in Virginia. The Department will collect terminal prices from approximately 12 terminals each month. These prices will be received once each month from suppliers on or about the last weekday of the month. The high and low prices will be eliminated and the remaining values averaged to establish the average statewide price for the following month. That monthly state-wide average price will be posted on the Construction Division website on or about the first weekday of the following month.

This monthly statewide average price will be the Base Index for all contracts on which Price Proposals are received during the calendar month of its posting and will be the Current Index for all asphalt placed during the calendar month of its posting. In the event an index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an index which is determined to best reflect the trend.

The amount of adjustment applied will be based on the difference between the Price Proposal\Contract Base Index and the Current Index for the applicable calendar month during which the work is performed. Calculations must be done for each type of Asphalt Material put in place each month, whether the Current Index is higher or lower than the Base Index. The calculation for the adjustment shall be shown as follows:

$$A = Q \times \%AC \times IC$$

Where: A = Asphalt Adjustment Dollar Amount

Q = Quantity of Asphalt Material put in place during the month

%AC = % of Asphalt Cement in the Asphalt Material as specified in the Job Mix Formula

IC = Numeric Dollar Difference, either positive or negative, between the Base Index and Current Index

Example Calculation for Negative Price Adjustment (Credit back to VDOT):

7,500 Tons of SM-12.5A put in place during the month (Q), Job Mix is 6.1% Asphalt Cement for SM-12.5A (%AC), Base Index for the Contract is \$515/Ton, Current Index is \$500/Ton, Difference of - \$15.00/Ton (IC)

$$7,500 \text{ Tons SM-12.5A} \times 6.1\% \times -\$15.00/\text{Ton} = -\$6,862.50 \text{ Adjustment Amount}$$

Example Calculation for Positive Price Adjustment (Paid to the Design-Builder):

10,000 Tons of BM-25.0A put in place during the month (Q), Job Mix is 5.2% Asphalt Cement for BM-25.0A (%AC), Base Index for the Contract is \$515/Ton, Current Index is \$560/Ton, Difference of + \$45.00/Ton (IC)

$$10,000 \text{ Tons BM-25.0A} \times 5.2\% \times \$45.00/\text{Ton} = +\$23,400.00 \text{ Adjustment Amount}$$

Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22 or PG 70-28, will be based on the indexes for PG 64-22. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The quantity of asphalt emulsion for surface treatments to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly application of payment for work packages completed; however, such adjustment will not be included in the total cost of the work for progress determination or for extension of contract time. Items the Design-Builder claims in its application of payment for asphalt adjustments must include supporting calculations certified by the Quality Assurance Manager (QAM). These calculations must be completed relative to the calendar month under which the work was performed and shall be submitted for either positive or negative adjustment.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment or failure to submit required cost and price data as noted hereinbefore may result in rejection of items for asphalt adjustment.

VIRGINIA DEPARTMENT OF TRANSPORTATION
MASTER LISTING OF
ASPHALT MATERIAL ITEMS ELIGIBLE FOR PRICE ADJUSTMENT
(10-27-09)

ITEM	DESCRIPTION	UNITS	SPECIFICATION
10062	Asphalt-Stab. Open-Graded Material	Ton	313
10416	Liquid Asphalt	Gal	311 312
10420	Blotted Seal Coat Ty. B	Sy	ATTD
10422	Blotted Seal Coat Ty. C	Sy	ATTD
10423	Blotted Seal Coat Ty. C-1	Sy	ATTD
10424	Blotted Seal Coat Ty. D	Sy	ATTD
10598	Ns Asphalt Concrete	Ton	315
10606	Asphalt Concrete Ty. SM-9.5	Ton	315
10607	Asphalt Concrete Ty. SM-12.5A	Ton	315
10608	Asphalt Concrete Ty. SM-12.5D	Ton	315
10609	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
10610	Asphalt Concrete Ty. IM-19.0A	Ton	315
10611	Asphalt Concrete Ty. IM-19.0D	Ton	315
10612	Asphalt Conc. Base Cr. Ty. BM-25.0	Ton	315
10613	Asphalt Concrete Ty. BM-37.5	Ton	315
10635	Asphalt Concrete Ty. SM-9.5A	Ton	315
10636	Asphalt Concrete Ty. SM-9.5D	Ton	315
10637	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
10639	Asphalt Concrete Ty. SM-19.0	Ton	315
10642	Asphalt Concrete Ty. BM-25.0A	Ton	315
10643	Asphalt Concrete Ty. BM-25.0D	Ton	315
10650	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	317
10651	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	317
10652	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	317
10653	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	317
10654	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	317
10655	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	317
10701	Liquid Asphalt Coating	Sy	ATTD
12505	Asphalt Concrete Curb Backup Material	Ton	315
13240	Asphalt Concrete Sidewalk	Ton	504
16110	Emul. Asph. Slurry Seal Type A	Sy	ATTD
16120	Emul. Asph. Slurry Seal Type B	Sy	ATTD
16130	Emul. Asph. Slurry Seal Type C	Sy	ATTD
16144	Latex Mod. Emul. Treat. Type B	Ton	ATTD
16145	Latex Mod. Emul. Treat. Type C	Ton	ATTD
16146	Latex Mod. Emul. Treat. Rutfilling	Ton	ATTD
16161	Modified Single Seal	Sy	ATTD
16162	Modified Double Seal	Sy	ATTD
16249	Nontracking Tack Coat	Gal.	ATTD
16250	Liquid Asphalt Matl. CMS-2 (Mod)	Gal	ATTD
16251	Liquid Asphalt Matl. CMS-2	Gal	ATTD
16252	Liquid Asphalt Matl. CRS-2	Gal	ATTD
16253	Liquid Asphalt Matl. CRS-2H	Gal.	ATTD.
16254	Liquid Asphalt Matl. RC-250	Gal	ATTD
16256	Liquid Asphalt Matl. RC-800	Gal	ATTD
16257	Ns Liquid Asphalt Matl.	Gal	ATTD
16260	Liquid Asphalt Matl. CRS-2L	Gal	ATTD

16325	NS Asphalt Concrete	Ton	N/A
16330	Asphalt Concrete Ty. SM-9.0A	Ton	315
16335	Asphalt Concrete Ty. SM-9.5A	Ton	315
16337	Asph. Conc. Ty. SM-9.5ASL (Spot Level)	Ton	315
16340	Asphalt Concrete Ty. SM-9.5D	Ton	315
16342	Asph. Conc. Ty. SM-9.5DSL (Spot Level)	Ton	315
16345	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
16350	Asphalt Concrete Ty. SM-12.5A	Ton	315
16352	Asph. Con. Ty. SM-12.5ASL (Spot Level)	Ton	315
16355	Asphalt Concrete Ty. SM-12.5D	Ton	315
16357	Asph. Con. Ty. SM-12.5DSL (Spot Level)	Ton	315
16360	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
16365	Asphalt Concrete Ty. IM-19.0A	Ton	315
16370	Asphalt Concrete Ty. IM-19.0D	Ton	315
16373	Asphalt Concrete Ty. IM-19.0A (T)	Ton	315
16374	Asphalt Concrete Ty. IM-19.0D (T)	Ton	315
16377	Asphalt Concrete Ty. BM-37.5	Ton	315
16379	Asphalt Concrete Ty. IM-19.0T	Ton	315
16390	Asphalt Concrete Ty. BM-25.0A	Ton	315
16392	Asphalt Concrete Ty. BM-25.0D	Ton	315
16395	Asphalt Concrete Ty. BM-25.0A (T)	Ton	315
16397	Asphalt Concrete Ty. BM-25.0D (T)	Ton	315
16400	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	ATTD
16401	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	ATTD
16402	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	ATTD
16403	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	ATTD
16404	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	ATTD
16405	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	ATTD
16490	Hot Mix Asphalt Treatment	Ton	ATTD
16500	Surf.Preparation & Restoration Type I	Ton	ATTD
16502	Surf.Preparation & Restoration Type Ii	Ton	ATTD
16504	Surf.Preparation & Restoration Type Iii	Ton	ATTD
67201	NS Asphalt Concrete Overlay	Ton	315
67210	NS Asphalt Concrete	Ton	315
68240	NS Asphalt Concrete	Ton	315

Exhibit 6.3(b)

Form C-16a
August 9, 2013

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
ASPHALT PRICE ADJUSTMENT (PG76-22 or PG 70-28)
DESIGN-BUILD PROJECTS**

INSTRUCTIONS - This form is to be completed and returned ONLY when asphalt concrete items containing PG 76-22 or PG 70-28 is being utilized on the project.

PROJECT NUMBER: 0064-007-913, C501

DISTRICT:

Bid Prices in this contract for items containing PG 76-22 or PG 70-28 asphalt cement were developed using an f.o.b. price of \$ 0.00 per IMPERIAL ton for PG 76-22 or PG 70-28. This quote is project specific.

Price quotes signed by each supplier from which the Design-Builder proposes to obtain PG 76-22 or PG 70-28 shall be maintained by the Design-Builder. These quotes shall be retained on site during the life of the Contract for review by the Engineer upon request.

DATE: November 6, 2013

SIGNATURE:  Lee K. Fintel, Senior Vice President

G4S Technology LLC
(Firm or Corporation)

(Vendor No.)

EXHIBIT 6.3 (c)
ADJUSTMENT FOR FUEL

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
OPTIONAL ADJUSTMENT FOR FUEL
DESIGN-BUILD PROJECTS

June 30, 2011

In the event the Design-Builder elects to seek adjustment for fuel items designated in the Price Proposal/Contract as Price Adjustment Items such items will be subject to price adjustment as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract.

The Design-Builder will submit their monthly application for payment associated with eligible work packages with an adjustment up or down as appropriate for cost changes in fuel used on specific items of work identified in this provision. A master listing of standard items eligible for fuel adjustment is provided by the Department on its website at the following link <http://www.virginiadot.org/business/resources/masteroptionalfuelitems.pdf>. The listing on the web site also includes the corresponding fuel factor for each item. The fuel usage factor for each item is considered inclusive of all fuel usage.

The amount of adjustment will be computed from the change in the indexes and the on-site fuel use as shown in the Department's master listing of eligible items.

In order to be eligible for fuel adjustment under this provision, the Design-Builder shall clearly identify in its Price Proposal those pay items and the associated quantities it chooses to have fuel adjustment applied to in its work packages. Items the Design-Builder claims in its application of payment for fuel adjustments must be properly designated in order to be considered for adjustment. Items not properly designated or left out of the Design-Builder's Price Proposal will automatically not be considered for adjustment.

The monthly index price to be used in the administration of this provision will be calculated by the Department from the Diesel fuel prices published by the U. S. Department of Energy, Energy Information Administration on highway diesel prices, for the Lower Atlantic region. The monthly index price will be the price for diesel fuel calculated by averaging each of the weekly posted prices for that particular month.

For the purposes of this provision, the base index price will be calculated using the data from the month preceding the receipt of bids. The base index price will be posted by the Department at the beginning of the month for all bids received during that month.

The current index price will be posted by the Department and will be calculated using the data from the month preceding the particular estimate being vouchered for payment.

The current monthly quantity for eligible items of work selected by the Design-Builder for fuel adjustment in its work packages will be multiplied by the appropriate fuel factor to determine the gallons of fuel to be cost adjusted. The amount of adjustment per gallon will be the net difference between the current index price and the base index price. Computation for adjustment will be made as follows:

$$S = (E - B) QF$$

Where; S = Monetary amount of the adjustment (plus or minus)
B = Base index price
E = Current index price
Q = Quantity of individual units of work

F = Appropriate fuel factor

Adjustments will not be made for work performed beyond the original contract time limit unless the original time limit has been changed by an executed Work Order.

If new pay items are added to this contract by Work Order and they are listed in the Department's master listing of eligible items, the Work Order must indicate which of these individual items will be fuel adjusted; otherwise, those items will not be fuel adjusted. If applicable, designating which new pay items will be added for fuel adjustment must be determined during development of the Work Order and clearly shown on the Work Order form. The Base Index price on any new eligible pay items added by Work Order will be the Base Index price posted for the month in which bids were received for that particular project. The Current Index price for any new eligible pay items added by Work Order will be the Index price posted for the month preceding the estimate on which the Work Order is paid.

When quantities differ between the last monthly application of payment prepared upon final acceptance and the final application of payment, adjustment will be made using the appropriate current index for the period in which that specific item of work was last performed.

In the event any of the base fuel prices in this contract increase more than 100 percent (i.e. fuel prices double), the Department will review each affected item of work and give the Design-Builder written notice if work is to stop on any affected item of work. The Department reserves the right to reduce, eliminate or renegotiate the price for remaining portions of affected items of work.

Any amounts resulting from fuel adjustment will not be included in the total cost of work for determination of progress or for extension of contract time.

I elect to use this provision

I elect not to use this provision

Date: November 6, 2013

Signature: 

Lee K. Fintel, Senior Vice President

Design-builder: G4S Technology LLC

Vendor No.: _____

EXHIBIT 6.3(d)
ADJUSTMENT FOR STEEL

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PRICE ADJUSTMENT FOR STEEL
DESIGN-BUILD PROJECTS

June 30, 2011

In the event the Design-Builder elects to seek adjustment for steel items designated in the Price Proposal/Contract as Price Adjustment Items such items will be subject to price adjustment as set forth herein. If new pay items which involve steel are established by Work Order, they will not be subject to Price Adjustment unless specifically designated in the Work Order to be subject to Price Adjustment.

The Design-Builder will submit their monthly application for payment associated with eligible work packages with an adjustment up or down as appropriate for cost changes in steel used on specific items of work identified in the Price Proposal/contract in accordance with this provision. Provided at the end of this provision is a master listing of standard bid items the Department has determined are eligible for steel price adjustment. Inventoried materials from the listing of eligible items are specifically excluded for consideration. In addition, concrete items where reinforcing steel is normally included in the unit bid price for the item such as (but not limited to) drop inlets, median barriers, sound barrier walls, bridge railing and parapets, are not eligible for consideration under this provision.

The requirements of this provision shall apply only to material cost changes that occur between the date of the opening of the Price Proposal and the date the material is shipped to the fabricator. To be eligible for this price adjustment, Design-Builder is required to fill out the accompanying Form for Price Adjustment for Eligible Steel Items on Design-Build Projects and submit the same with its Price Proposal for the Project. By signing the Form and submitting it with its Price Proposal Design-Builder declares its intention to participate in the price adjustment in its contract with the Department. For the purposes of this provision, the prices listed on the Form for Price Adjustment for Eligible Steel Items on Design-Build projects are fixed for cost and adjustment calculations regardless of quantities incorporated into final design. Further, in order for steel items to be eligible for adjustment, once shipped to the fabricator, the items shall be specifically stored, labeled, or tagged, recognizable by color marking, and identifiable by project for inspection and audit verification.

Design-Builder shall upon request furnish documentation supporting the price per pound for eligible steel items as shown on the Form for Price Adjustment for Eligible Steel Items on Design-Build Projects furnished with its Price Proposal. Design-Builder must use the format as shown with this Form; no other format for presenting this information will be permitted. Design-Builder shall certify that all items of documentation are original and were used in the computation of the price per pound amount for the represented eligible pay items for the month the Price Proposal was opened. This documentation shall support the base line material price ("Base Price") of the steel item only. Base price per pound shall not include the following cost components: fabrication, shipping, storage, handling, and erection.

Failure to submit all documentation required or requested supporting the per pound prices on eligible steel items will result in Design-Builder being ineligible for a price adjustment of any or all steel items.

Price adjustment of each qualifying item under consideration will be subject to the following condition:

There is an increase or decrease in the cost of eligible steel materials in excess of 10 percent up to a maximum of 60 percent from the Base Price when compared with the latest published price index ("Price Index") in effect at the time material is shipped to the fabricator.

The Price Index the Department is using is based on The U.S. Department of Labor, Bureau of Labor Statistics, Producers Price Index (PPI) which measures the average price change over time of the specific

steel eligible item from the perspective of the seller of goods. The Master List table provided at the end of this provision indicates the Producers Price Index (PPI) steel category index items and the corresponding I.D. numbers to which VDOT items will be compared. **Please note:** The Producers Price Index (PPI) is subject to revision 4 months after original publication, therefore, price adjustments and payments will not be made until the index numbers are finalized.

The price adjustment will be determined by computing the percentage of change in index value beyond 10 percent above or below the index on the date of opening of Design-Builder's Price Proposal to the index value on the date the steel material is shipped to the fabricator (Please see included sample examples). Weights and date of shipment must be documented by a bill of lading provided to the Department. The final price adjustment dollar value will be determined by multiplying this percent increase or decrease in the index (after 10%) by the represented quantity of steel shipped, by the Base Price per pound subject to the limitations herein.

Price increase/decrease will be computed as follows:

$$A = B \times P \times Q$$

- Where;
- A = Steel price adjustment in lump sum dollars
 - B = Average weighted price of steel submitted in Design-Builder's Price Proposal for project in price per pound as listed on the Form for Price Adjustment for Eligible Steel Items on Design-Build Project
 - P = Adjusted percentage change in PPI average from shipping date to date of opening of Price Proposal minus 10% (0.10) threshold
 - Q = Total quantity of steel in pounds shipped to fabricator for specific project

The need for application of the adjustments herein to extra work will be determined by the Engineer on an individual basis and, if appropriate, will be specified on the Work Order.

This price adjustment is capped at 60 percent. This means the maximum "P" value for increase or decrease that can be used in the above equation is 50% (60%-10% threshold).

Calculations for price adjustment shall be shown separate from the monthly progress payment for work packages and will not be included in the total cost of work for determination of progress or for extension of contract time.

Upon Department review and due process consideration for redress by Design-Builder, any apparent evidence to unbalance the price supplied by Design-Builder in favor of items subject to price adjustment will result in ineligibility for Department participation under this provision.

Sample Calculation of a Price Adjustment (increase)

Project bid on April 28, 2004.

Project has 450,000 lb. of eligible structural steel.

Design Builder's *f.o.b. supplier price for structural steel submitted in the Price Proposal is \$0.2816 per pound.

*free on board

Adjusted** BLS Producers Price Index (PPI) most recently published average at time of opening of the Price Proposal is 139.6.

All eligible steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 161.1

Adjustment formula is as follows:

$$A = B \times P \times Q$$

- Where;
- A = Steel price adjustment in lump sum dollars
 - B = Average weighted price of steel submitted in the Price Proposal for Design-Build project in \$ per pound
 - P = Adjusted percentage change in PPI average from shipping date to date of submitted Price Proposal minus 10% (0.10) threshold
 - Q = Total quantity of eligible steel shipped to fabricator in October 2004 for this project in pounds

$$B = \$0.2816$$

$$P = (161.1 - 139.6) / 139.6 - 0.10 = 0.054$$

$$Q = 450,000 \text{ lb.}$$

$$A = 0.2816 \times 0.054 \times 450,000$$

$$A = \$6,842.88 \text{ pay adjustment to Design-Builder}$$

Sample Calculation of a Price Adjustment (decrease)

Project bid on April 28, 2004.

Project has 450,000 lb. of eligible structural steel.

Design-Builder's *f.o.b. supplier price for structural steel submitted in the Price Proposal is \$0.2816 per pound.

*free on board

Adjusted BLS Producers Price Index (PPI) most recently published average at time of opening of the Price Proposal is 156.6.

All eligible steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 136.3

Adjustment formula is as follows:

$$A = B \times P \times Q$$

- Where;
- A = Steel price adjustment in lump sum dollars
 - B = Average weighted price of steel submitted in the Price Proposal for Design-Build project in \$ per pound
 - P = Adjusted percentage change in PPI average from shipping date to date of submitted Price Proposal minus 10% (0.10) threshold
 - Q = Total quantity of eligible steel shipped to fabricator in October 2004 for this project in pounds

$$B = \$0.2816$$

$$P = (156.6 - 136.3)/156.6 - 0.10 = 0.030$$

$$Q = 450,000 \text{ lb.}$$

$$A = 0.2816 \times 0.030 \times 450,000$$

$$A = \$3,801.60 \text{ credit to Department}$$

MASTER LISTING

STANDARD BID ITEMS ELIGIBLE FOR STEEL PRICE ADJUSTMENT

March 18, 2009

BLS Series I. D.

ITEM NUMBER	ITEM DESCRIPTION	UNITS	Number WPU used in \$ adjust.
00519	SHEET PILE, STEEL	SF	avg. 1017 & 101
00540	REINF. STEEL	LB	101704
00542	EPOXY COATED REINF. STEEL	LB	101704
00560	STRUCTURAL STEEL JB-1	LB	avg. 1017 & 101
11030	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
11181	PATCH.HYDR.CEM.CONC. PAVE.	SY	101704
13290	GUARDRAIL GR-8 (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13292	GUARDRAIL GR-8A (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13294	GUARDRAIL GR-8B (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13310	GUARDRAIL TERMINAL GR-6 (NCHRP 350)	LF	avg. 1017 & 101
13320	GUARDRAIL GR-2	LF	avg. 1017 & 101
13323	GUARDRAIL GR-2A	LF	avg. 1017 & 101
13331	RAD. GUARDRAIL GR-2	LF	avg. 1017 & 101
13333	RAD. GUARDRAIL GR-2A	LF	avg. 1017 & 101
13335	GUARDRAIL GR-3	LF	avg. 1017 & 101
13341	GUARDRAIL TER. GR-6(WEATHERING STEEL	LF	avg. 1017 & 101
13351	GUARDRAIL GR-8	LF	avg. 1017 & 101
13352	GUARDRAIL GR-8A	LF	avg. 1017 & 101
13353	GUARDRAIL GR-8B	LF	avg. 1017 & 101
13355	GUARDRAIL GR-10	LF	avg. 1017 & 101
13421	MEDIAN BARRIER MB-3	LF	avg. 1017 & 101
13450	MEDIAN BARRIER MB-5	LF	avg. 1017 & 101
13451	MEDIAN BARRIER MB-5A	LF	avg. 1017 & 101
13452	MEDIAN BARRIER MB-5B	LF	avg. 1017 & 101
13545	REINF. STEEL	LB	101704
14502	REINFORCING STEEL	LB	101704
15290	PATCH.CEM.CONC.PAVE.TY.CRCP-A	SY	101704
15302	PATCH.CEM.CONC.PAVE. TY. II	SY	101704
15305	PATCH.CEM.CONC.PAVE.TY. IV-A	SY	101704
17323	GUARDRAIL BEAM *	LF	avg. 1017 & 101
17325	RADIAL GUARDRAIL BEAM *	LF	avg. 1017 & 101
17327	RUB RAIL	LF	avg. 1017 & 101
17353	CABLE GR-3	LF	avg. 1017 & 101
17521	GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17523	RADIAL GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17525	RUB RAIL (WEATHERING STEEL)	LF	avg. 1017 & 101
22501	FENCE FE-W1	LF	avg. 1017 & 101
22643	FENCE FE-CL	LF	avg. 1017 & 101
22645	FENCE FE-CL VINYL COATED	LF	avg. 1017 & 101
23043	WATER GATE FE-4 TY.III	LF	avg. 1017 & 101
23501	FENCE FE-W1 (FABRIC ONLY)	LF	avg. 1017 & 101
45522	4" STEEL ENCASE. PIPE	LF	101706
45532	6" STEEL ENCASE. PIPE	LF	101706
45562	16" STEEL ENCASE. PIPE	LF	101706
45572	18" STEEL ENCASE. PIPE	LF	101706

45582	24" STEEL ENCASE. PIPE	LF	101706
45584	24" JACKED STEEL ENCASUREMENT PIPE	LF	101706
45592	30" STEEL ENCASE. PIPE	LF	101706
50402	SIGN POST STEEL 3"	LF	101706
50404	SIGN POST STEEL 4"	LF	101706
50406	SIGN POST STEEL 6"	LF	101706
50410	SIGN POST STEEL 10"	LF	101706
50412	SIGN POST STEEL 12"	LF	101706
50414	SIGN POST STEEL 14"	LF	101706
50416	SIGN POST STEEL 16"	LF	101706
50418	SIGN POST STEEL 18"	LF	101706
51317	SIG. POLE MP-1 20' ONE ARM 30'	EA	101706
51319	SIG. POLE MP-1 20' ONE ARM 32'	EA	101706
51325	SIG. POLE MP-1 20' ONE ARM 38'	EA	101706
51327	SIG. POLE MP-1 20' ONE ARM 40'	EA	101706
51329	SIG. POLE MP-1 20' ONE ARM 42'	EA	101706
51331	SIG. POLE MP-1 20' ONE ARM 44'	EA	101706
51337	SIG. POLE MP-1 20' ONE ARM 50'	EA	101706
51339	SIG. POLE MP-1 20' ONE ARM 52'	EA	101706
51341	SIG. POLE MP-1 20' ONE ARM 54'	EA	101706
51344	SIG. POLE MP-1 20' ONE ARM 56'	EA	101706
51346	SIG. POLE MP-1 20' ONE ARM 58'	EA	101706
51347	SIG. POLE MP-1 20' ONE ARM 60'	EA	101706
51348	SIG. POLE MP-1 20' ONE ARM 62'	EA	101706
51368	SIG.POLE MP-1 20'TWO ARMS 36'& 42'	EA	101706
51400	SIG.POLE MP-1 CO.LU.ONE ARM 38	EA	101706
51402	SIG.POLE MP-1 CO.LU.ONE ARM 40	EA	101706
51408	SIG.POLE MP-1 CO.LU.ONE ARM 46	EA	101706
51412	SIG.POLE MP-1 CO.LU.ONE ARM 50	EA	101706
51414	SIG.POLE MP-1 CO.LU.ONE ARM 52	EA	101706
51416	SIG.POLE MP-1 CO.LU.ONE ARM 54	EA	101706
51418	SIG.POLE MP-1 CO.LU.ONE ARM 56	EA	101706
51420	SIG.POLE MP-1 CO.LU.ONE ARM 58	EA	101706
51422	SIG.POLE MP-1 CO.LU.ONE ARM 60	EA	101706
55162	LIGHTING POLE LP-1 30'-4'	EA	101706
55163	LIGHTING POLE LP-1 30'-6'	EA	101706
55166	LIGHTING POLE LP-1 30'-12'	EA	101706
55169	LIGHTING POLE LP-1 35'-6'	EA	101706
55171	LIGHTING POLE LP-1 35'-10'	EA	101706
55176	LIGHTING POLE LP-1 40'-8'	EA	101706
55185	LIGHTING POLE LP-2 TYPE A	EA	101706
55186	LIGHTING POLE LP-2 TYPE B	EA	101706
55187	LIGHTING POLE LP-2 TYPE C	EA	101706
55188	LIGHTING POLE LP-2 TYPE D	EA	101706
55189	LIGHTING POLE LP-2 TYPE E	EA	101706
55190	LIGHTING POLE LP-2 TYPE F	EA	101706
55192	LIGHTING POLE LP-2 TYPE H	EA	101706
60452	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
61700	REINF. STEEL	LB	101704
61704	CORROSION RESISTANT REINF. STEEL	LB	101704
61705	EPOXY COATED REINF. STEEL	LB	101704
61750	STRUCT.STEEL HIGH STRG.PLT.GIRDERS	LB	avg. 1017 & 101
61811	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
61812	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017. & 101
61813	STR.STEEL PLATE GIRDER ASTM A709 GRADEHPS50W	LB	avg. 1017 & 101
61814	STR.STEEL PLATE GIRDER ASTM A709 GRADEHPS70W	LB	avg. 1017 & 101
61820	STR.STEEL ROLLED BEAM ASTM A709 GRADE 36	LB	avg. 1017 & 101

61821	STR.STEEL ROLLED BEAM ASTM A709 GRADE50	LB	avg. 1017 & 101
61822	STR.STEEL ROLLED BEAM ASTM A709 GRADE50W	LB	avg. 1017 & 101
61990	STEEL GRID FLOOR	SF	avg. 1017 & 101
64110	STEEL PILES 10"	LF	avg. 1017 & 101
64112	STEEL PILES 12"	LF	avg. 1017 & 101
64114	STEEL PILES 14"	LF	avg. 1017 & 101
64768	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101
64778	DRIVING TEST FOR 14" STEEL PILE	LF	avg. 1017 & 101
65200	REINF. STEEL	LB	101704
65204	CORROSION RESISTANT REINF. STEEL	LB	101704
65205	EPOXY COATED REINF. STEEL	LB	101704
67086	PED. FENCE 6'	LF	avg. 1017 & 101
67088	PED. FENCE 8'	LF	avg. 1017 & 101
67089	PED. FENCE 10'	LF	avg. 1017 & 101
68100	REINF. STEEL	LB	101704
68104	CORROSION RESISTANT REINF. STEEL	LB	101704
68105	EPOXY COATED REINF. STEEL	LB	101704
68107	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
68108	STR. STEEL PLATE GIRDER ASTM A709 GR50W	LB	avg. 1017 & 101
68109	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS50W	LB	avg. 1017 & 101
68110	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS70W	LB	avg. 1017 & 101
68112	STR.STEEL ROLLED BEAM ASTM A709 GR.36	LB	avg. 1017 & 101
68113	STR.STEEL ROLLED BEAM ASTM A709 GR.50	LB	avg. 1017 & 101
68114	STR.STEEL ROLLED BEAM ASTM A709 GR. 50W	LB	avg. 1017 & 101
68115	STRUCT. STEEL	LB	avg. 1017 & 101
68270	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
69060	SHEET PILES, STEEL	SF	avg. 1017 & 101
69100	REINF. STEEL	LB	101704
69104	CORROSION RESISTANT REINF. STEEL	LB	101704
69105	EPOXY COATED REINF. STEEL	LB	101704
69110	STEEL PILES 10"	LF	avg. 1017 & 101
69112	STEEL PILE 12"	LF	avg. 1017 & 101
69113	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101

I elect to use this provision

I elect not to use this provision

Date: November 6, 2013

Signature: 

Lee K. Fintel, Senior Vice President

Design-Builder: G4S Technology LLC

Vendor No.: _____

Exhibit 11.1-10
Correspondence Tracking Log for Project Records

VDOT Project: XYZ Project
Project:
CONTRACT ID #:

ID Number	Process	Description / Issue	Pay Package Reference	Date Received or Sent	From	To	Status (Open/Closed)	Record File Location Or Insert Hyperlink (ctrl + k)
C0001111DB00-1	CORR	VDOT to Design-Builder - Notice of Intent Letter	n/a	05/09/2007	VDOT	Design-Builder	Closed	
C0001111DB00-2	CORR	Performance and Payment Bonds	n/a	05/11/2007	Design-Builder	AAA	Closed	
C0001111DB00-3	CORR	Certificate of Insurance	n/a	05/15/2007	Design-Builder	COC	Closed	
C0001111DB00-4	CORR	SWPP Certification Permit	n/a	05/15/2007	Design-Builder	Design-Builder	Closed	
C0001111DB00-5	CORR	C112 - Binding Agreements	n/a	05/17/2007	Design-Builder	BBB	Closed	
C0001111DB00-6	CORR	VDOT Request for Design-Builder Preconstruction Meeting	n/a	06/09/2007	VDOT	Design-Builder	Closed	
C0001111DB00-7	CORR	Design-Builder to VDOT - Escrow Document Review Meeting	n/a	06/15/2007	Design-Builder	VDOT	Closed	
C0001111DB00-8	CORR	VDOT to Design-Builder - CTB Award	n/a	06/21/2007	VDOT	Design-Builder	Closed	
C0001111DB00-9	MISC	Design-Builder Questions Regarding Final Contract Document Timeline	n/a	06/22/2007	Design-Builder	VDOT	Closed	
C0001111DB00-10	CORR	Design-Builder to VDOT - Preconstruction Meeting	n/a	07/17/2007	Design-Builder	VDOT	Closed	
C0001111DB00-11	CORR	VDOT to Design-Builder - Final Contract Documents	n/a	07/18/2007	VDOT	Design-Builder	Closed	
C0001111DB00-12	MEET	Preconstruction Meeting Minutes	n/a	07/23/2007	Design-Builder	VDOT	Closed	
C0001111DB00-13	CORR	VDOT to Design-Builder - Notice to Proceed	n/a	08/02/2007	VDOT	Design-Builder	Closed	
C0001111DB00-14	CORR	Design-Builder to VDOT Permit Application Request	1	08/02/2007	Design-Builder	VDOT	Closed	
C0001111DB00-15	EMAIL	Geotechnical Investigations - Preliminary Data	2	08/08/2007	Design-Builder	Design-Builder	Closed	
C0001111DB00-16	CORR	Design-Builder to VDOT - Flood Plain Study Inquiry	3	08/09/2007	Design-Builder	VDOT	Closed	
C0001111DB00-17	CORR	Payment Requisition # 1 - First submission	1,2,3	08/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-18	CORR	Payment Requisition # 1 - Second submission	1,2,3	08/13/2007	Design-Builder	VDOT	Closed	
C0001111DB00-19	MEMO	VDOT Acknowledgement of Receipt of Preliminary Roadway Plans	4	08/14/2007	VDOT	Design-Builder	Closed	
C0001111DB00-20	MEMO	VDOT to Design-Builder - ROW Plan Submittal 1 Comments	5	08/22/2007	VDOT	Design-Builder	Closed	
C0001111DB00-21	CORR	VDOT ID Outstanding Issues to Design-Builder	5	08/24/2007	VDOT	Design-Builder	Closed	
C0001111DB00-22	CORR	VDOT to Design-Builder - Comments Regarding Preliminary Roadway Plans	4	09/05/2007	VDOT	Design-Builder	Closed	
C0001111DB00-23	CORR	Payment Requisition # 2	4,5	09/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-24	MEMO	NVRPA Comments - Bridge Details	6	09/16/2007	NVRPA	Design-Builder	Closed	
C0001111DB00-25	CORR	Design-Builder to VDOT - Outstanding Issues	n/a	09/18/2007	Design-Builder	VDOT	Closed	
C0001111DB00-26	CORR	FWD: FOIA Request Mrs. Smith	n/a	09/20/2007	VDOT	Design-Builder	Closed	
C0001111DB00-27	CORR	FOIA Response to Mrs. Smith	n/a	09/23/2007	Design-Builder	VDOT	Closed	
C0001111DB00-28	MEMO	Memo to File - Reporting Requirements	n/a	09/25/2007	DDD	File	Closed	
C0001111DB00-29	CORR	Conflict of Interest Request for Determination	n/a	09/27/2007	OAS	VDOT	Closed	
C0001111DB00-30	CORR	VDOT Acknowledgement of Receipt of Final Roadway Plans	7	10/04/2007	VDOT	Design-Builder	Closed	
C0001111DB00-31	CORR	Payment Requisition # 3	6,7	10/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-32	CORR	VDOT to Design-Builder - Comments Regarding Final Roadway Plans	7	10/17/2007	VDOT	Design-Builder	Closed	
C0001111DB00-33	MEET	Permit Coordination Meeting Minutes	8	10/26/2007	VDOT	Design-Builder	Closed	
C0001111DB00-34	CORR	Town of Leesburg Comment - Utility Relocation Plans	9	10/27/2007	Design-Builder	VDOT	Open	

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
Design-Build Project Schedule

July 10, 2013

Exhibit 11.1

1. General

Design-Builder shall develop and maintain a project schedule, which shall be used by all involved parties to plan and execute all work required to complete the project. The project schedule will be used by the Department to monitor the project, assess progress, and evaluate the effects of time-related issues on the project. The project schedule shall be prepared, maintained, and submitted in accordance with this provision, unless otherwise directed in writing by the VDOT Project Manager.

- A. Scheduling Conference** – At the meeting held after the Date of Commencement, Design-Builder shall attend a Scheduling Conference with the VDOT Project Manager to discuss Design-Builder’s overall plan to accomplish the Work; the detail work plan for the initial one hundred and twenty (120) calendar days; and scheduling information, project specific requirements, and other key issues necessary for the preparation, maintenance, and submittal of the project schedule.
- B. Project Scheduler** – For projects with awarded Contract Price of \$35 million or more, Design-Builder shall designate a Project Scheduler for the project and shall submit his/her qualifications for the VDOT Project Manager’s written approval prior to submission of the Preliminary or Baseline Schedule. The Project Scheduler must have at least three (3) years of verifiable experience in successfully preparing and maintaining schedules on large scale projects of similar type and complexity. Design-Builder shall provide current contacts for verification of the Project Scheduler’s qualifications and experience. The Project Scheduler shall be primarily responsible for the development and maintenance of the project schedule and shall be present in all scheduling meetings and discussions on major issues concerning the project schedule.

2. Schedule Submission Requirements

- A. Preliminary Schedule** – Unless otherwise stated in Exhibit 1, within fifteen (15) days of Design-Builder’s receipt of Department’s Notice to Proceed, Design-Builder shall submit to Department, for its review and approval, a Preliminary Schedule. At its discretion, Design-Builder may submit in lieu of the Preliminary Schedule, a Baseline Schedule according to Section 11.1.4 of the Agreement and Section 2.B below. Until such time as a Baseline Schedule has been approved by Department, Design-Builder shall provide an update of the Preliminary Schedule every month. The Preliminary Schedule will be used

to monitor and assess progress of the Work until a Baseline Schedule is approved by the Department. The Preliminary Schedule submission shall consist of:

1. **Preliminary Schedule**: A Preliminary Schedule showing at a minimum:
 - i) The detailed activities depicting the sequence and dates for any work planned during the first one-hundred and twenty (120) calendar days, including as applicable project milestones, review by the Department, FHWA, and other regulatory agencies; as well as environmental, permits, scope validation period, design, right-of-way, utility, and construction activities.
 - ii) Summary level activities depicting the sequence and general timing for work planned after the first one-hundred and twenty (120) calendar days. At Design-Builder's discretion, detailed activities may be shown in lieu of summary level activities.
 - iii) Quantities and dollar value of work associated with each activity for which Design-Builder expects to receive payment.
 - iv) The project critical path (based on the longest path).
2. **Preliminary Schedule Narrative**: A Preliminary Schedule Narrative describing the Design-Builder's overall plan to accomplish the entire scope of Work and the detailed plan for work planned during the initial one-hundred and twenty (120) calendar days. The narrative shall describe the sequence of work, means and methods, productivity, and other significant scheduling assumptions on which the Preliminary Schedule is based. The narrative shall also describe the project critical path (longest path), work planned during each construction season, and any known or foreseeable issues that may impact the schedule.
3. **Preliminary Earned Value Schedule**: A Preliminary Earned Value Schedule showing Design-Builder's anticipated monthly earnings for the entire Project. The Preliminary Earned Value Schedule shall be prepared using Department's Form C-13CPM, which shall be based on monthly costs data generated from the Preliminary Schedule. The Preliminary Earned Value Schedule submission shall include:
 - i) An Activity Cost-loading Report (ACR), showing a breakdown of the quantities and costs for each activity. The ACR shall be grouped by pay items and sorted by activity ID showing:
 - a) For each activity the Activity ID, Activity Name, Price/Unit, Budgeted Unit (quantity), Budgeted Cost, Actual Cost, Remaining Cost, and At Completion Cost.

- b) Pay item sub-totals of the budgeted units and costs for associated activities.
- c) The overall total budgeted cost for the Project.

ii) An Earned Value Schedule using the VDOT Form C-13CPM.

B. Baseline Schedule – Unless otherwise stated in Exhibit 1, within ninety (90) days of Design-Builder’s receipt of Department’s Notice to Proceed, Design-Builder shall submit to Department, for its review and approval, a Baseline Schedule showing the Design-Builder’s initial detailed plan to accomplish the entire scope of the Project according to the Agreement. If the Department does not approve such submission, Design-Builder shall revise and resubmit a Baseline Schedule to Department within seven (7) calendar days of its receipt of Department’s comments on such submission. This process shall continue until such time as the Department approves a Baseline Schedule. Upon approval of the Baseline Schedule, it will be established as the Project “**Schedule of Record (SOR)**”. The SOR is the official and only schedule with which all parties will plan and execute all work required to complete the Project and against which progress of the Project and the Design-Builder’s performance will be assessed. The Baseline Schedule submission shall consist of:

1. **Baseline Schedule:** A Baseline Schedule depicting the detailed activities required to complete the entire scope of the Project, including as applicable, work to be performed by subcontractors, the Department, and other involved parties. The Baseline Schedule shall be prepared according to the following:

- i) Design-Builder shall prepare and maintain the Baseline Schedule using scheduling software that is capable of meeting all requirements of this provision. Design-Builder’s scheduling software shall be wholly compatible with the Department’s scheduling software system and shall have the capability of creating a back-up copy of the working schedule in “XER” format. The Department’s scheduling software system is the latest version of Primavera’s Project Management software (currently P6 version 7.0). At the Design-Builder’s request, secured access via the internet may be granted to allow the Design-Builder to develop and maintain its schedule in the Department’s scheduling software system. Submission of data from another software system where data conversion techniques or software is used to import into Primavera's scheduling software is not acceptable and will be cause for rejection of the submitted schedule.
- ii) For each schedule submission, the Project ID shall be unique and shall be defined using the Contract ID as a prefix followed by the submission number (i.e. C00012345DB12_B01, C00012345DB12_U01, etc.).

- iii) The project “Must Finish By” date shall be defined with a specified date equal to the “Final Completion” date of the Contract.
- iv) The Baseline Schedule shall be developed using a hierarchical WBS, broken down by major phases of the Project, as applicable (i.e. project milestones, project management, design, public involvement, environmental, right-of-way, utility, and construction, etc.). Each major phase of the Project shall be broken down by phase/stage, feature, as applicable. Each phase, stage, or feature shall then be further broken down into rational work packages, as applicable.
- v) Each work package shall be broken down into discrete and definable activities, with activity durations generally twenty (20) working days or less. Longer durations may be allowed as approved by the VDOT Project Manager for certain administrative or level of effort activities that are typically performed over longer periods of time. The Work shall be broken down in sufficient details to identify the phase, stage, feature, type of work, deliverable, and specific location in which the work occurs, including as applicable:
 - a) Project milestones;
 - b) Administrative activities such as key submittals, notifications, and review by the Department, FHWA, and other regulatory agencies. Activity durations for submissions and approvals or consents required by the Department shall be no less than the Department’s minimum review duration identified in Section 3.1 of the General Conditions of Contract;
 - c) Design activities showing all work required to complete each stage of design and deliverable;
 - d) Public involvement activities;
 - e) Scope Validation Period;
 - f) Environmental and permitting activities;
 - g) Right-of-way acquisition activities showing all lots/parcels;
 - h) Utility relocations and adjustments activities broken down by type and specific location;
 - i) Procurement, fabrication, delivery activities of materials;

- j) Construction start-up activities such as mobilization, staging area, surveying, clearing and grubbing, construction access, etc.;
 - k) Maintenance of Traffic activities;
 - l) Construction activities broken down by phase, stage, feature, type of work, and specific location, as applicable;
 - m) Other necessary miscellaneous activities that consume time such as installation and removal of temporary systems or structures such as causeways, shoring, etc.; as well as settlement period, load test, curing, demolition, testing and acceptance period, punch list, clean-up, demobilization, etc.
- vi) Each activity shall be named to identify the phase, stage, feature, type of work, and specific location in which the work occurs, as applicable.
 - vii) Activity calendars shall be assigned using project-level calendars. Use of global calendars is not allowed and shall be cause for rejecting the schedule.
 - viii) Activity codes shall be defined and assigned to the individual activities to allow for filtering, grouping, and sorting of activities by project phase, responsibility, area, phase, stage, feature, work type, Work Orders, DBE, and other major work category, as applicable. Activity codes shall be assigned using project-level activity codes. Use of global activity codes is not allowed and shall be cause for rejecting the schedule.
 - ix) Constraints shall be used sparingly and on a case by case basis, as necessary. Constraints such as “Mandatory Start” or “Mandatory Finish” that violate network logic are not allowed and shall be cause for rejecting the schedule. If the Contract includes a specified start-no-earlier-than milestone, then the Contract milestone activity shall be constrained with a “Start On or After” constraint, with a date equal to the date specified in the Contract. If the Contract includes a specified Interim Milestone or Substantial Completion Milestone, then the Contract interim completion milestone activity or substantial completion milestone activity shall be constrained with a “Finish On or Before” constraint, with a date equal to the date specified in the Agreement.
 - x) Each activity associated with a pay item for which Design-Builder expects to receive payment shall be cost-loaded, using the scheduling software “Material” resource type and according to the following:
 - a) A material resource shall be defined for each pay item shown in the Schedule of Items submitted in the Proposal, or as approved

by the VDOT Project Manager. Pay item ID codes shall be congruent to the extent possible with the VDOT five-digit standard and non-standard pay item numbers (for example: 00100 – Mobilization).

- b) Each proposed pay item material resource shall indicate the Resource ID, Resource Name, Unit of Measure, and Price/Unit as shown in the Schedule of Items, or as approved by the VDOT Project Manager. The pay item material resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by the pay item number (i.e. C00012345DB12.00100).
 - c) The “Auto Compute Actuals” and “Calculate costs from units” boxes for each pay item material resource shall be marked.
 - d) A project-specific 20-80 resource curve shall be defined in the scheduling software using the Contract ID as a prefix and assigned to each assigned pay item resource to allocate costs to each associated activity over its duration based on the 20-80 earned value progress payment rules, according to Part 4, Article 6, and Section 6.2.
 - e) The budgeted units and cost for each assigned pay item resource shall be defined to indicate the quantity and dollar value of work that the activity represents.
 - f) The aggregate sum of the budgeted units and costs for all activities associated with a pay item shall equal the total quantity and value of the proposed pay item as shown in the Schedule of Items provided in the Proposal.
 - g) The aggregate sum of the budgeted costs for all activities shall equal the current total Contract Price. Current total Contract Price will be considered to mean the current Contract amount including the original Contract Price and any approved adjustments for authorized changes to the Work. Anticipated payments or payments for adjustments such as asphalt, fuel, steel, retainage, incentives, disincentives, etc., shall not be included.
- xi) For projects with awarded Contract Price of \$35 million or more, the Baseline Schedule shall be resource-loaded to indicate the labor (manpower), material (re-usable materials), and equipment (machinery or equipment) required to accomplish each activity that represents a major operation. The Baseline Schedule shall be resource-loaded according to the following:

- a) Project-specific labor resources using “Labor” resource type as defined in the scheduling software shall be defined and assigned to indicate labor classification, trade, or crew that will perform the work. The labor Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.Pipe – Drainage Pipe Crew). Also, the Max Units/Time shall be defined for each labor resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.
 - b) Project-specific material resources using “Material” resource type as defined in the scheduling software shall be defined and assigned to indicate re-usable material that will be used to perform the work. The material Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.CF1 – Column Forms Set #1). Also, the Max Units/Time shall be defined for each material resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.
 - c) Project-specific equipment resources using “Non-Labor” resource type as defined in the scheduling software shall be defined and assigned to indicate equipment or machinery that will be used to perform the work. The non-labor Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.CRN – Crane). Also, the Max Units/Time shall be defined for each non-labor resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.
 - d) Assigned resource calendars shall be defined using the Contract ID as a prefix.
- xii) The project schedule software settings shall be defined according to the following Primavera P6 settings:
- a) Schedule dates shall be shown in the “Month-Day-Year” date format, with 2-digit numbers for the month, day, and year (e.g. 05-01-13).
 - b) Duration type for all activities shall be specified as “Fixed Duration & Units”.

- c) The baseline for Earned Value calculations shall be specified as “Project Baseline”.
 - d) The Earned Value technique for computing performance percent complete for the entire project WBS hierarchy shall be specified as “Custom percent complete”, with a percent complete value of 20.
 - e) The “Link Budget and At Completion Cost for not started activities” checkbox in the Project Details Calculation tab shall be marked.
 - f) The “Reset Remaining Cost and Units to Original” in the Project Details Calculation tab shall be specified.
 - g) The “Subtract Actual from At Completion” under “When updating actual units or costs” in the Project Details Calculation tab shall be specified.
 - h) The “Recalculate Actual Units and Cost when duration % complete changes” checkbox in the Project Details Calculation tab shall be unmarked.
 - i) The “Update units when costs changes on resource assignments” checkbox in the Project Details Calculation tab shall be marked.
 - j) The “Link Actual and Actual This Period Units and Cost” checkbox in the Project Details Calculation tab shall be marked.
 - k) Specify “Retained Logic” in the Scheduling Options dialog box for scheduling progressed activities.
 - l) Specify “Longest Path” in the Scheduling Options dialog box for defining critical activities.
 - m) Specify “Finish Float = Late Finish – Early Finish” in the Scheduling Options dialog box as the schedule calculation option to compute total float.
- xiii) The project schedule shall be calculated using the precedence diagram network logic method (PDM) and the Critical Path Method (CPM). The use of resource-leveling to determine sequence, order, or timing of the activities is not allowed and shall be cause for rejecting the schedule.

2. **Baseline Schedule Narrative:** A Baseline Schedule narrative describing Design-Builder's overall plan to accomplish the Work, as reflected on the Baseline Schedule including, as applicable:
- i) Project milestones including, as applicable Contract milestones and other key events such as start/finish dates for each major phase or stage of the project, major traffic switches, etc.
 - ii) Work to be performed by the Department and other involved parties, including when the work must be performed.
 - iii) The proposed overall sequence of Work, including where the work will begin and how the work will progress.
 - iv) A description of the project critical path (based on the longest path).
 - v) Scheduling assumptions including, the proposed means and methods, anticipated daily production rates, and general procedures for accomplishing major operations that are expected to drive the schedule.
 - vi) A log identifying the schedule constraints used in the Baseline Schedule and reason for using each constraint.
 - vii) A description of the project calendar(s) used in the Baseline Schedule, identifying the Calendar ID, standard number of work days per week, number of shifts per day, and number of hours per day as well as the anticipated number of non-working days per month for each calendar with considerations, as applicable, for holidays, normal weather conditions; as well as for seasonal or other known or specified restrictions (i.e. traffic, local events, environmental, permits, utility, etc.).
 - viii) The Contractor's resource plan indicating the number of crews, crew make-up, and major equipment needed to accomplish the Work as planned. The resource plan shall also describe how Design-Builder plans on meeting the resource requirements.
 - ix) A log of the applicable DBE participation activities in the schedule for which the Design-Builder intends to claim credit for attaining the DBE goal required in the Contract. The list shall indicate the proposed start/finish dates and durations of the DBE participation activities.
 - x) Any known or foreseeable issues that may impact the schedule. Also, describe how the issues will impact the schedule and any actions taken or needed to avoid or mitigate the impact.

3. **Baseline Earned Value Schedule:** A Baseline Earned Value Schedule showing Design-Builder's anticipated monthly earnings for the entire Project. The Baseline Earned Value Schedule submission shall include:
 - i) An Activity Cost-loading Report (ACR), showing a breakdown of quantities and costs for each activity. The ACR shall be grouped by pay items and sorted by activity ID showing:
 - a) For each activity the Activity ID, Activity Name, Price/Unit, Budgeted Unit (quantity), Budgeted Cost, Actual Cost, Remaining Cost, and At Completion Cost.
 - b) Pay item sub-totals of the budgeted units and costs for associated activities.
 - c) The overall total budgeted cost for the Project.
 - ii) An Earned Value Schedule using the VDOT Form C-13CPM, which shall be based on monthly costs data generated from the Baseline Schedule.

C. Schedule Updates – On or before the tenth (10th) day of each month and as part of the monthly reports required by Section 11.1.9 of Part 3 of the Agreement, Design-Builder shall submit to Department, for its review and approval, an update of the Baseline Schedule (“**Schedule Update**”). The Schedule Update shall reflect the current status of the Project and the plan to complete the remaining work as of the first (1st) day of the month (data date). If Department does not approve such submission, Design-Builder shall revise and resubmit a Schedule Update to Department within seven (7) calendar days of its receipt of Department's comments on such submission. The Schedule Update submission shall consist of:

1. **Schedule Update:** A Schedule Update showing the as-built status of completed and ongoing activities; as well as the sequence and dates during which the remaining activities are scheduled to be completed as of the data date. The Schedule Update shall be based on the most recent approved Schedule and shall be prepared according to the following:
 - i) All activities that are completed prior to the current data date shall show actual start and finish dates. All on-going activities shall show an actual start date and remaining duration to indicate the amount of time required to complete the remaining work as of the current data date.
 - ii) Activity percent complete for on-going activities shall be based on amount of work completed as of the current data date relative to the total amount of work planned.

- iii) Actual units and cost for each assigned work item resource shall be updated based on the 20-80 earned value progress rules (i.e. 20% at initiation and 100% at completion), in accordance with Part 4, Article 6, and Section 6.2.
 - iv) Activity logic shall be modified as necessary to correct out-of-sequence progress for on-going and remaining activities to reflect the Design-Builder's current plan for completing the remaining work.
 - v) The project schedule shall be calculated using the current data date.
2. **Schedule Update Narrative:** A Schedule Update Narrative describing the current status of the project, any deviations from scheduled performance, and any changes in Design-Builder's work plan, and the current work plan for accomplishing the remaining work as of the data date. The Schedule Update Narrative shall include a description of:
- i) The current status of project milestones including the Contract fixed completion date. It shall also describe any deviations from the date(s) specified in the Contract. If a milestone activity is scheduled to occur later than the date specified in the Contract, provide an explanation stating why the milestone date is forecasted to occur late. Also, describe any actions taken or proposed to correct the delay.
 - ii) The current status of the Project in terms of progress earnings percent complete based on the actual total earnings to date relative to the current approved Contract value; as well as any progress deficiencies relative to planned progress as indicated on the SOR. If progress is falling behind, describe reasons for the deficiency and any actions taken or proposed to correct the progress deficiency.
 - iii) The project critical path and any deviations from the SOR.
 - iv) The work performed since the previous Schedule Update and any deviations from the work scheduled.
 - v) Any major changes in the Contractor's work plan in terms of sequence of construction, shifts, means and methods, manpower, equipment, or materials.
 - vi) Any changes made to the SOR since the previous submission. A Claim Digger report (or equivalent) may be used to identify the changes.
 - vii) Number of days lost due to adverse weather or other factors during the current update period. Provide a list of the lost days, including a description and start/finish times of the weather event or factor;

activities affected and how the activities were affected, and any impacts on the critical path or project milestones. Also, describe any actions taken or proposed to mitigate any resulting delays.

- viii) The status of pending issues such as access, permits, conflicts with other related or adjacent work, Work Orders, time extension requests, etc.
- ix) Any problems encountered or anticipated since the previous submission, including an explanation of any corrective actions taken or required to mitigate or avoid the effects.
- x) Work planned for the next update period and any actions needed to be taken by the Department or other involved parties.

3. **Schedule Update Earned Value**: A Schedule Update Earned Value showing the actual progress earnings to date and the projected earnings for each remaining month, as of the data date. The Schedule Update Earned Value submission shall include:

- i) An Activity Cost-loading Report (ACR) showing the updated cost data in the current Schedule Update as of the data date.
- ii) An updated Form C-13CPM showing the actual earnings to date and projected monthly earnings for the remaining periods as of the data date based on cost data generated from the current Schedule Update.

D. Revised Baseline Schedule – If Department believes that the Work is being performed significantly different from the SOR, or major modifications in logic, activity duration, manpower, or cost are necessary, or are required to incorporate approved changes in the Work, it will submit a written request to Design-Builder. Design-Builder shall respond in writing within seven (7) days, either agreeing with Department’s proposed revision, and henceforth providing a “**Revised Baseline Schedule**”, as required by the VDOT Project Manager, or providing justification why the requested revisions should not be accomplished. If revisions cannot be agreed upon either through written correspondence or subsequent meetings, Department and Design-Builder shall agree to attempt to resolve the issues through the dispute resolution process of Article 10 in the General Conditions of Contract. If the Department and the Design-Builder cannot agree on the proposed revisions, the Design-Builder shall proceed under the previously approved Baseline Schedule. At no time shall Design-Builder continue to reflect items of non-concurrence from Department in the Schedule Updates. The Revised Baseline Schedule shall be prepared and submitted in the form of a Baseline Schedule, according to Section 2.B above, except it shall reflect the current status of the completed and on-going activities and actual earnings to date as of the current data date.

Upon approval by the Department, the Revised Baseline Schedule shall replace any previously approved Baseline Schedule as the SOR for the remainder of the Project.

E. Final As-built Schedule – As part of its submission of Final Application for Payment, Design-Builder shall submit the final Schedule Update (**Final As-built Schedule**). The Final As-built Schedule shall show the actual start and finish dates for all activities in the schedule. Design-Builder shall certify in writing that the Final As-built Schedule accurately reflects the dates on which all activities contained in the schedule were actually performed. The Final As-built Schedule shall be submitted in the form of a Schedule Update according to Section 11.1.5 above.

3. Schedule Submittal Format and Reports

Unless otherwise approved in writing by the VDOT Project Manager, Design-Builder shall submit for each Preliminary Schedule, Baseline Schedule, Schedule Update, or Baseline Revision Schedule submission, the following submittal items and reports, in the formats specified below. Each electronic file submittal shall have a unique file name prefixed by the Contract ID to identify the Contract and type, number, item, and data date of the submission (e.g. C00012345DB01_B01_01-01-13.xer, C00012345DB01_B01_Narrative_01-01-13.pdf, C00012345DB01_B01_FormC-13CPM_01-01-13.xlsx, etc.). The submittals shall include.

1. A transmittal letter to the VDOT Project Manager, identifying the date of submittal and which Schedule is being submitted for review.
2. Two (2) sets of data compact disks (“CD”) containing a backup copy of the working schedule in the Primavera proprietary exchange format (“XER”) file format; as well as other required electronic file submittals as defined in Section 11.1.8.4 below. Each CD shall be labeled to indicate the Contract ID, type of submission, filename, and data date.
3. Two (2) sets of paper copies of the following schedule reports:
 - i) Schedule calculation log.
 - ii) A legible time-scaled bar-chart plot of the Schedule, organized by WBS, to show for each activity the Activity ID, Activity Name, Original Duration, Remaining Duration, Start and Finish dates, Activity Percent Complete, and Total Float. The bar-chart plot shall identify the project critical path (longest path).
4. Electronic file copies by email of the following:
 - i) A backup copy of the working schedule in “XER” file format.
 - ii) A copy of the time-scaled bar-chart plot of the project schedule in “PDF” file format.

- iii) A tabular Predecessor and Successor Report (PSR) in “PDF” file format to show the predecessors and successors for each activity. The PSR shall be sorted by WBS and in ascending order by Activity ID and shall show for each activity:
 - a) Activity ID;
 - b) Activity Name;
 - c) Original Duration;
 - d) Remaining Duration;
 - e) Early Start;
 - f) Early Finish;
 - g) Late Start;
 - h) Late Finish;
 - i) Free Float;
 - j) Total Float;
 - k) Critical (“Yes” or “No”);
 - l) For each predecessor/successor activity, show the Activity ID, Activity Name, Relationship Type, Lag, Free Float, Total Float, Driving (“Yes” or “No”), and Critical (“Yes” or “No”).
- iv) A copy of the schedule narrative in “PDF” file format.
- v) A copy of the Activity Cost-loading Report (“ACR”) in “PDF” file format.
- vi) A working file copy of the Earned Value Schedule (Form C-13CPM) in “xls” or “xlsx” file format.
- vii) A copy of the Earned Value Schedule S-Curve in “PDF” file format.

4. Monitoring the Work and Assessing Progress

The VDOT Project Manager will monitor the Work regularly and will assess progress of the Work monthly relative to the SOR to identify deviations from Design-Builder’s scheduled performance and to determine if progress of the Work is satisfactory according to the following:

1. **Monthly Progress Meetings** – At the monthly progress meeting held in accordance with Part 4 General Conditions, Article 2, Section 2.1.8, Design-Builder shall furnish a detailed 4-week look-ahead schedule based on the current schedule update and shall discuss the current status of the project, on-going work, and work planned for the following four (4) weeks.

2. **Progress Evaluation** – Progress will be evaluated by the VDOT Project Manager at the time of the monthly progress pay application on the basis of the Design-Builder’s latest approved Schedule Update. The Design-Builder’s actual progress will be considered unsatisfactory if any of the following conditions occur.
- i) The actual total earnings percentage for work completed to date, based on the current Pay Application, falls behind the anticipated cumulative late earnings percentage indicated in the SOR by one (1) percent or more.
 - ii) The current projected completion date of a Contract milestone is more than fourteen (14) days after the milestone completion date specified in the Agreement, as applicable.
 - iii) The current projected completion date of the project is more than thirty (30) days after the lattermost of the Final Completion date or its extension.
3. **Progress Deficiency and Schedule Slippage** – When a monthly progress evaluation shows that the actual progress of the Work is unsatisfactory, the VDOT Project Manager will issue a written notice of unsatisfactory performance to the Design-Builder. Within 14 days from the date of receipt of the VDOT Project Manager’s notice, Design-Builder shall respond by submitting a written statement describing any actions taken or proposed by the Design-Builder to correct the progress deficiency. If the Design-Builder’s response includes a proposed recovery plan, the current progress schedule update shall be modified accordingly to show the Design-Builder’s proposed recovery plan. Design-Builder may submit to the VDOT Project Manager a written explanation and supporting documentation to establish that such delinquency is attributable to conditions beyond its control. If the VDOT Project Manager approves the Design-Builder’s recovery plan, the modified progress schedule update showing the recovery plan will be treated as the current update and will not replace the SOR.

If the Design-Builder fails to respond within the time required, or the response is unacceptable, its prequalification status may be changed as provided in Section 102.01 of Part 5, and the Design-Builder may be temporarily disqualified from bidding on contracts with the Department as provided in Section 102.08 of Part 5, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate. The VDOT Project Manager may postpone taking these actions when a time extension is under consideration.

5. **Schedule Impact Analysis (SIA)**

In the event of an excusable delay that extends the completion date of the project beyond the Final Completion date, the Design-Builder shall submit a request for an adjustment to the Agreement within the time period specified in Article 8 of Part 4 – General Conditions, unless directed otherwise in writing by the Engineer. For prospective delays the Contractor shall prepare and submit a SIA based on the TIA method. For retrospective delays the

Contractor shall prepare and submit a SIA based on the Contemporaneous Impact Analysis method. The Contractor shall submit along with its request for an adjustment to the Contract a SIA statement and applicable SIA schedules in accordance with the following.

1. SIA Statement – The SIA statement shall include the following.

- i) A description of the delay event, including time, date, and location of the event, if appropriate.
- ii) An explanation of why the delay constitutes a change to the Agreement, including references to applicable portions of the Contract.
- iii) A description of the activities or work items affected and any impact on the project critical path, milestones, or completion date of the project, as applicable.
- iv) A description of any shifts in the project critical path and the reasons for the shifts for each successive schedule update contemporaneous with the delay event relative to the preceding schedule update, as applicable.
- v) A SIA summary showing the data date and calculated completion dates for all applicable milestones and the project completion date for each successive SIA schedule, including as applicable, the SOR, pre-delay unimpacted schedule, any contemporaneous monthly schedule updates, and the post-delay impacted schedule. The SIA summary shall also show any incremental schedule gains or slippages on the project completion date for each SIA schedule. The SIA summary shall also categorized the schedule gain/slippage as excusable compensable, excusable non-compensable, or non-excusable.
- vi) A description of any revisions made to the SIA schedules since the pre-delay schedule update, including added or deleted activities, and changes in logic, activity durations, calendars, and constraints; as well as the reasons for the revisions.
- vii) Any actions taken or needed to avoid or mitigate the delay impacts.
- viii) Any additional information needed to justify the request or facilitate timely resolution of the issue.

2. SIA Schedules – The SIA schedule submission shall include the following.

- i) The SOR in place prior to the date the delay event started, showing the project critical path and any applicable milestones.

- ii) The most recently accepted project schedule update in place prior to the date the delay event started, showing the current status of the project, including any variances in the durations and completion dates of the critical path activities, milestones, and the project completion date, as applicable, relative to the SOR.
- iii) A pre-delay unimpacted schedule, which shall be based on the most recently accepted project schedule update in place prior to the start date of the delay event updated to show the current status of the project, as of the date the delay event started. The pre-delay unimpacted schedule shall also show any variances in the durations and completion dates of the critical path activities, milestones, and the project completion date, as applicable, relative to the most recently accepted project schedule update.
- iv) Any contemporaneous monthly schedule updates submitted during the delay event, showing the current status of the project, including any variances in the durations and completion dates of the critical path activities, milestones, and the project completion date, as applicable, relative to the previous monthly schedule update.
- v) A post-delay impacted schedule, showing the delay events, affected activities, and the current status of the project, including any variances in the durations and completion dates of the critical path activities, milestones, and the project completion date, as applicable, relative to the pre-delay unimpacted schedule.

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PROPOSAL GUARANTY**

KNOW ALL MEN BY THESE PRESENTS, THAT WE G4S Technology LLC As principal, and Liberty Mutual Insurance Company Surety, are held and firmly bound unto the Commonwealth of Virginia as obligee, in the amount of FIVE PERCENT OF THE DOLLAR VALUE OF THE BID, lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these presents.

SIGNED, sealed and dated this 5th Day of November, 20 13

WHEREAS, the above said principal is herewith submitting its proposal for: I-64 Active Traffic and Safety Management System

PROJECT NUMBER: 0064-007-913, C501
Federal Project No. OC-0642 (164)
Contract ID Number: C00104815DB70

NOW, THEREFORE, the condition of the above obligee is such, that if the aforesaid principal shall be awarded the contract upon said proposal and shall within the time specified in the Specifications after the notice of such award enter into a contract and give bond for the faithful performance of the contract, then this obligation shall be null and void; otherwise to remain in full force and effect and the principal and surety will pay unto the obligee the difference in money between the amount of the bid of the said principal and the amount for which the obligee may legally contract with another party to perform the said work if the latter amount be in excess of the former; but in no event shall the liability exceed the penal sum hereof.

G4S Technology LLC

(Principal*)

By:

[Signature]
(Officer, Partner or Owner) (Seal)

(Principal*)

By:

(Officer, Partner or Owner) (Seal)

(Principal*)

By:

(Officer, Partner or Owner) (Seal)

Liberty Mutual Insurance Company

(Surety Company)

By:

[Signature] (Attorney-in-Fact**) (Seal) Claudette Alexander Hunt

175 Berkeley Street, Boston, MA 02116

(Address)

By:

(Surety Company)

(Attorney-in-Fact**) (Seal)

By:

(Address)

*Note: If the principal is a *joint venture*, each party thereof must be named and execution made by same hereon. If there is more than one surety to the bid bond, each surety must be named and execution shall be made by same hereon.

Electronic Bid Only: In lieu of completing the above section of the Contract Performance Bond, the Principal shall file an Electronic Bid Bond when bidding electronically. By signing below the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the Commonwealth of Virginia under the same conditions of the bid bond as shown above.

Electronic Bid Bond ID# _____

Company/Bidder Name _____

Signature and Title _____

**Attach copy of Power of Attorney

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 5953087

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Caroline K. Lamarre; Claudette Alexander Hunt; Joseph M. Pietrangelo

all of the city of Miami, state of FL each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 16th day of January, 2013.



STATE OF WASHINGTON ss
COUNTY OF KING

American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

On this 16th day of January, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12 Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

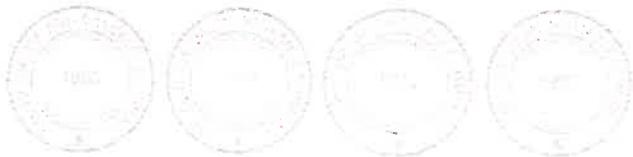
ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of November, 2013.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

PROJECT: 0064-007-913, C-501

FHWA:

This form must be completed, signed and returned with bid; and failure to do so may result in the rejection of your bid. **THE CONTRACTOR SHALL AFFIRM THE FOLLOWING STATEMENT EITHER BY SIGNING THE AFFIDAVIT AND HAVING IT NOTARIZED OR BY SIGNING THE UNSWORN DECLARATION UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES. A SEPARATE FORM MUST BE SUBMITTED BY EACH PRINCIPAL OF A JOINT VENTURE BID.**

STATEMENT. In preparation and submission of this bid, I, the firm, corporation or officers, agents or employees thereof did not, either directly or indirectly, enter into any combination or arrangement with any persons, firm or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Article 1.1 or Chapter 12 of Title 18.2 (Virginia Governmental Frauds Act), Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia.

AFFIDAVIT

The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at Douglas (Omaha), Nebraska, this 6th day of November, 20 13
County (City), STATE

G4S Technology LLC By: [Signature] Sr. Vice President
(Name of Firm) (Signature) Title (print)

STATE of Nebraska COUNTY (CITY) of Douglas (Omaha)

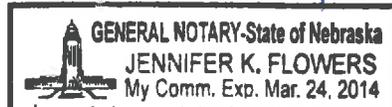
To-wit: I Jennifer K Flowers, a Notary Public in and for the State and County(City) aforesaid, hereby certify that this day Lee K Fintel

personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this 6th day of November, 20 13

Jennifer K Flowers My Commission expires 3-21-14
Notary Public

OR
UNSWORN DECLARATION



The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at _____, this _____ day of _____, 20 _____
County (City), STATE

By: _____
(Name of Firm) (Signature) Title (print)

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
AFFIDAVIT**

PROJECT: 0064-007-913, C501

FHWA:

This form must be completed, signed, notarized and returned with bid; and failure to do so, may result in the rejection of your bid. A separate form must be submitted by each principal of a joint venture bid.

1. I, the firm, corporation or officers, agents or employees thereof have neither directly nor indirectly entered into any combination or arrangement with any person, firm or corporation or entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract, the effect of which is to prevent competition or increase the cost of construction or maintenance of roads or bridges.

During the preceding twelve months, I (we) have been a member of the following Highway Contractor's Associations, as defined in Section 33.1-336 of the Code of Virginia (1970). (If none, so state).

NAME	Location of Principal Office
None	
_____	_____
_____	_____
_____	_____

2. I (we) have _____, have not , participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that I/We have _____, have not , filed with the joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)], and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contract or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contract and subcontract unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

(Continued)

ORDER NO.:
CONTRACT ID. NO.:

Form C-105
page 2

3. The bidder certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offence 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 above; and
 - (d) Where the bidders is unable to certify to any of the statements in this certification, the bidder shall show an explanation below.

Explanations will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any explanation noted, indicate below to whom it applies, initiating agency, and dates of action. Providing false information may result in federal criminal prosecution or administration sanctions. The bidder shall provide immediate written notice to the Department if at any time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of change circumstances.

The undersigned is duly authorized by the bidder to make the foregoing statements to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at Douglas (Omaha), Nebraska , this 6th day of November , 20 13
County (City), STATE

G4S Technology LLC
(Name of Firm)

By: [Signature] Senior Vice President
(Signature) Title (print)

STATE of Nebraska

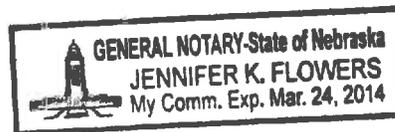
COUNTY (CITY) of Douglas (Omaha)

To-wit: I Jennifer K. Flowers , a Notary Public in and for the State and County(City) aforesaid, hereby certify that this day Lee K. Fintel

personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this 6th day of November , 20 13
[Signature] My Commission expires 3-24-14

Notary Public



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
MINIMUM DBE REQUIREMENTS

PROJECT NO. 0064-007-913, C-501

FHWA NO. _____

*** INSTRUCTIONS ***

THIS FORM CAN BE USED BY THE CONTRACTOR TO SUBMIT THE NAMES OF DBE FIRMS TO BE UTILIZED ON THE PROJECT. THE CONTRACTOR SHALL INDICATE THE DESCRIPTION OF THE CATEGORY (S, M, SP or H) AND THE TYPE OF WORK THAT EACH DBE WILL PERFORM AND THE ALLOWABLE CREDIT PER ITEM(S). ADDITIONAL SHEETS TO SHOW THE ALLOWABLE CREDIT PER ITEM MAY BE ATTACHED IF NECESSARY. **PLEASE NOTE:** THE AMOUNT OF ALLOWABLE CREDIT FOR A DBE SUPPLIER IS 60% OF THE TOTAL COST OF THE MATERIALS OR SUPPLIES OBTAINED AND 100% FOR A DBE MANUFACTURER OF THE MATERIALS AND SUPPLIES OBTAINED. A CONTRACTOR MAY COUNT 100% OF THE FEES PAID TO A DBE HAULER FOR THE DELIVERY OF MATERIALS AND SUPPLIES TO THE PROJECT SITE, BUT NOT FOR THE COST OF THE MATERIALS AND SUPPLIES THEMSELVES.

DBE REQUIREMENT 3.0 %

PERCENT ATTAINED BY BIDDER 3.06 %

NAMES(S) AND CERTIFICATION NO. OF DBE(S) TO BE USED	USED AS SUBCONTR. (S) MFG. (M) SUPPLIER (SP) HAULER (H)	TYPE OF WORK AND ITEM NO(S)	\$ AMOUNT OF ALLOWABLE CREDIT PER ITEM
LAS Trucking & Construction, Inc. 664220	SUBCONTR (S)	TRAFFIC CONTROL	\$140,955.50
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL			\$ 140,955.50

TOTAL CONTRACT VALUE \$ 4,599,262.00 x REQUIRED DBE 3 % = \$ 137,977.86

I/WE CERTIFY THAT THE PROPOSED DBE(S) SUBMITTED WILL BE USED ON THIS CONTRACT AS STATED HEREON AND ASSURE THAT DURING THE LIFE OF THE CONTRACT, I/WE WILL MEET OR EXCEED THE PARTICIPATION ESTABLISHED HEREON BY THE DEPARTMENT.

G4S Technology LLC
BIDDER

BY


SIGNATURE

Senior Vice President
TITLE

BY

November 6, 2013
DATE

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
CERTIFICATION OF BINDING AGREEMENT
WITH
DISADVANTAGED BUSINESS ENTERPRISE FIRMS**

Project No.: 0064-007-913, C501

Federal Project No.: OC-0642 (164)

This form is to be submitted in accordance with the Department's Special Provision for Section 107.15.

It is hereby certified by the below signed Contractors that there exists a written quote, acceptable to the parties involved preliminary to a binding subcontract agreement stating the details concerning the work to be performed and the price which will be paid for the aforementioned work. This document is not intended to, nor should it be construed to, contain the entire text of the agreement between the contracting parties. This document does not take the place of, nor may it be substituted for, an official subcontracting agreement in those situations that may require such an agreement. A copy of the fully executed subcontract agreement shall be submitted to the Engineer within fourteen (14) business days after contract execution.

It is further certified that the aforementioned mutually acceptable quote and fully executed subcontract agreement represent the entire agreement between the parties involved and that no conversations, verbal agreements, or other forms of non-written representations shall serve to add to, delete, or modify the terms as stated.

The prime Contractor further represents that the aforementioned mutually acceptable quote and fully executed subcontract agreement shall remain on file for a period of not less than one year following completion of the prime's contract with the Department or for such longer period as provisions of governing Federal or State law or regulations may require. For purposes of this form, the term Prime Contractor shall refer to any Contractor utilizing a DBE subcontractor, regardless of tier, in which they are claiming DBE credit toward the contract goal.

Contractors further jointly and severally represent that said binding agreement is for the performance of a "commercially useful function" as that term is employed in 49 C.F.R. Part 26.55 (c), (d).

**TO BE SIGNED BY THE SUBCONTRACTOR TO THE PRIME CONTRACTOR, AND ANY LOWER TIER
SUBCONTRACTORS HAVING A CONTRACT WITH THE BELOW NAMED DBE FIRM**

Prime Contractor G4S Technology LLC

By:  Senior Vice President
Signature Title
Lee K. Fintel Date: November 7, 2013

First Tier Subcontractor if Applicable _____

By: _____ Signature Title
Date: _____

**Second Tier
Subcontractor If
Applicable**

By: _____
Signature Title
Date: _____

**Third Tier
Subcontractor If
Applicable**

By: _____
Signature Title
Date: _____

DBE Contractor

L.A.S. Trucking & Construction
By: Lisa A. Dittis President
Signature Title
Date: 11.5.13

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
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WITH
DISADVANTAGED BUSINESS ENTERPRISE FIRMS

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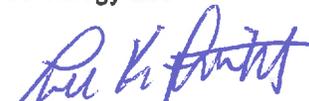
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TO BE SIGNED BY THE SUBCONTRACTOR TO THE PRIME CONTRACTOR, AND ANY LOWER TIER
SUBCONTRACTORS HAVING A CONTRACT WITH THE BELOW NAMED DBE FIRM

Prime Contractor G4S Technology LLC

By: 
Lee K. Fintel, Senior Vice President

Date: November 7, 2013

First Tier
Subcontractor if
Applicable

By:

signature

DOB

Date: _____

Second Tier
Subcontractor if
Applicable

By: _____
Signature Title
Date: _____

Third Tier
Subcontractor if
Applicable

By: _____
Signature Title
Date: _____

DBE Contractor

WALKER AND ASSOCIATES

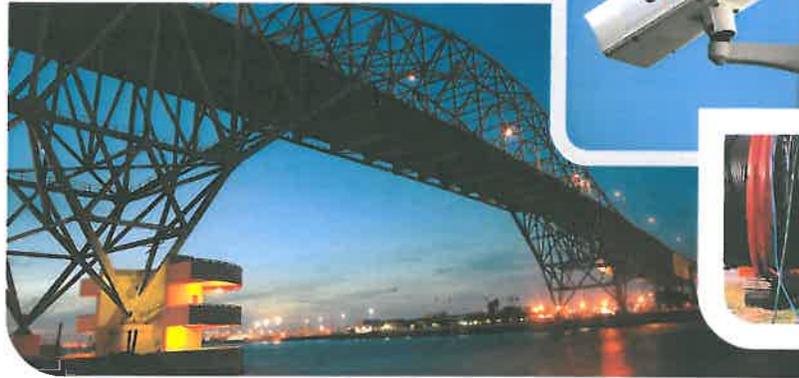
By: Michael Smith
Signature

General Sales Manager
Title

Date: 11/7/13



Securing Your World



POST NOTICE OF INTENT TO AWARD SUBMITTALS

Proposal for

**I-64 ATSMS, ALBEMARLE AND AUGUSTA
COUNTIES, VIRGINIA**

PROJECT NO. 0064-007-913

CONTRACT ID# C00104815DB70

Submitted to

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION (VDOT)

Attention: 1401 East Broad Street

Richmond, VA 23219

On

NOVEMBER 21, 2013

By

G4S TECHNOLOGY LLC (FORMERLY ADESTA, LLC)

1200 Landmark Center | Omaha, NE 68102 | 402.233.7700



G4S Technology LLC
1200 Landmark Center
Suite 1300
Omaha, NE 68102

Telephone: 855-G4S-USA1
Fax: 402-233-7650
Email: info.g4stechnology@usa.g4s.com
www.g4stechnology.com

November 21, 2013

Joseph Clarke, P.E.
Commonwealth of Virginia
Department of Transportation
1401 East Broad St.
Richmond, VA 23219

**RE: I-64 Active Traffic and Safety Management System (ATSMS)
Staunton District
State Project Number: 0064-007-913, C501
Post Notice of Intent to Award Submission**

Dear Mr. Clarke,

G4S Technology LLC (G4S Technology) (formerly Adesta, LLC) submits the following information to the Commonwealth of Virginia Department of Transportation in response to the Post Notice of Intent to Award for the I-64 ATSMS Project.

- 4.4 Post Notice of Intent to Award Submittal
- 4.4.1 Organizational Chart and Narrative
- 4.4.2 Key Personnel Resumes
- 4.4.3 DPOR License Information
- 4.4.4 DBE Subcontracting Plan
- 4.4.5 Proposal Schedule and Narrative
- 4.4.6 Schedule of Values
- 4.4.7 Monthly Payment Schedule
- 4.4.8 Escrow Proposal Documents – Separate Envelope

Please let us know if there are any questions or clarifications by contacting our local representative, Doug VanderKolk, Regional Sales Manager by email at doug.vanderkolk@usa.g4s.com or by phone at (540) 903-4810.

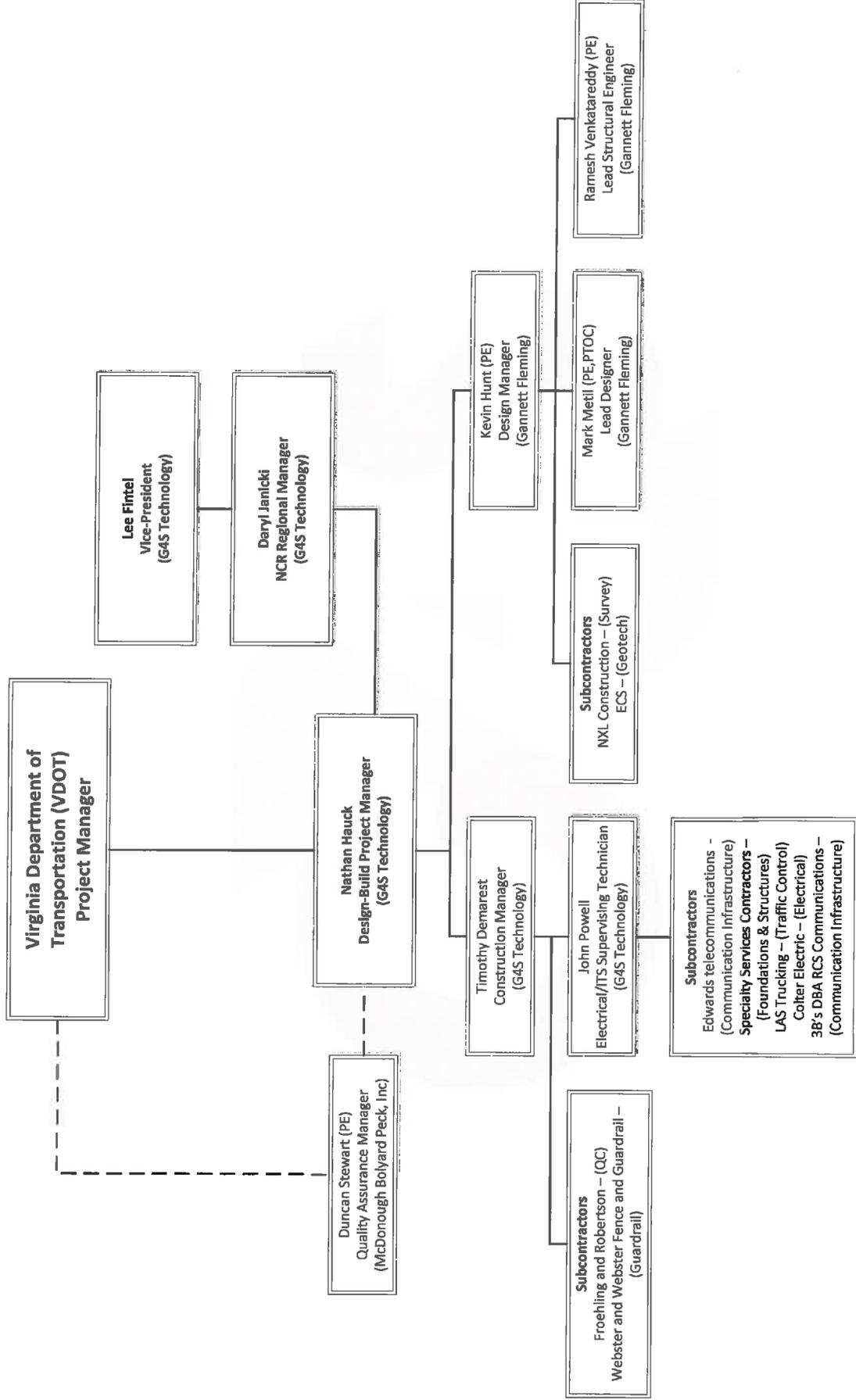
Sincerely,

A handwritten signature in blue ink, appearing to read 'Lee K. Fintel'.

Lee K. Fintel
Senior Vice President



1.0 ORGANIZATIONAL CHART (Reference RFP, Part 1, Section 4.4.1, Page 12 of 34)





**Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)**

The G4S Technology design-build team will work closely with the Virginia Department of Transportation (VDOT) from start to finish during design, construction, and post-construction phases of the project. We will ensure single point accountability while drawing on the extensive experiences of our team. This seamless approach ensures project schedules are maintained — while reducing unnecessary costs.

The organization chart provided is the proposed organization for the VDOT I-64 Project. The proposed G4S Technology team organizational structure provides the design-build project manager complete oversight over the entire project. This type of organizational structure provides for open communication from all key personnel on the contract to the project manager. This also provides a path for both the National Capital Region (NCR) Regional Manager and G4S Technology Vice President to provide executive level oversight and support or assistance to the project manager, as needed.

We identified the team members who are responsible for major project and show the reporting relationships in managing, designing, quality assurance, quality control, and project construction.

Team Major Functions and Reporting Requirements provide a breakdown of the areas of responsibilities assigned to the team’s key personnel.

Position:	Name:	Reports to:
Design-Build Project Manager	Nathan Hauck	NCR Regional Manager
Major functions	<ul style="list-style-type: none"> • Serving as G4S Technology's single point-of-contact. • Responsible for: <ul style="list-style-type: none"> • Project design. • Project construction. • Quality management. • Contract administration. • Providing presentations to VDOT as required. • Maintaining contract administration for VDOT, project team members, and subcontractors. • Maintaining quality assurance and safety. • Chairing project status meetings. • Preparing monthly status reports. • Approving all project change orders and contract amendments. • Approving purchases of equipment and services. • Coordinating documentation submittals. 	
Position:	Name:	Reports to:
Quality Assurance Manager	Duncan Stewart, PE	Vice President / NCR Regional Manager
Major functions	<ul style="list-style-type: none"> • Providing and maintaining an independent quality assurance project. 	



Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)

	<ul style="list-style-type: none"> • Responsible for the Quality Assurance (QA) inspection and testing of all materials used, including ITS and power and communication network, and work performed on the project, to include monitoring of the contractor's Quality Control (QC) project. • Ensuring that all work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. • Registered, licensed, professional engineer in the Commonwealth of Virginia. • Conducting QA audits • Evaluating the site test results and recommending corrective activities. • Monitoring equipment reliability in the field and identifying areas where reliability improvement is needed. 	
Position:	Name:	Reports to:
Design Manager	Kevin Hunt PE	Design-Build Project Manager
Major functions	<ul style="list-style-type: none"> • Coordinating the individual design disciplines, including ITS, and ensuring the overall project design is in conformance with the contract documents. • Establishing and overseeing a QA/QC project for all pertinent disciplines involved in the design of the project including review of design, working plans, shop drawings, specifications, and constructability of the project. 	
Position:	Name:	Reports to:
Construction Manager	Timothy Demarest	Design-Build Project Manager
Major functions	<ul style="list-style-type: none"> • Onsite during construction operations. • Managing the construction process to include all QC activities • Ensuring the materials used and work performed meet contract requirements and the "approved for construction" plans and specifications. 	
Position:	Name:	Reports to:
Lead Designer	Mark Metil PE	Design Manager
Major functions	<ul style="list-style-type: none"> • Serving as the lead designer for the project. • Overseeing the ITS architecture, system engineering and design including device selection, power/communication systems, network diagrams, cable/wiring, fiber optic splicing, configuration/integration plans, implementation sequence, devices/systems acceptance tests, Standard Operating Procedures (SOP), training projects for maintenance/operation before and after project acceptance, and preparation of working drawings and specifications. 	



Position:	Name:	Reports to:
Lead Structural Engineer	Ramesh Venkatareddy PE	Design Manager
Major functions	<ul style="list-style-type: none"> Serving as the lead structural engineer for the project. Overseeing structural design of support structures and foundations for ITS devices and overhead signs. Reviewing designs and verifying and modifying designs, if necessary, based on field conditions and construction activities related to dismantling and removing portions of existing structures, installing foundation structures, handling and erecting luminaries, poles, cantilevers, overhead spans, gantries, and repairs to existing structures. 	
Position:	Name:	Reports to:
Electrical/ITS Supervising Technician	John Powell Master Electrician	Construction Manager
Major functions	<ul style="list-style-type: none"> Serving as the lead electrical and ITS supervisor during construction and shall be responsible for wiring, splicing, ITS device installation, inspection and testing. 	

Lines of Authority for Key Personnel

The project manager has full authority to direct all G4S Technology personnel and subcontractors in the project performance. The design-build project manager should have direct contact with all key aspects of the entire project, and therefore all key personnel report directly to the design-build project manager. Each of the key personnel is accountable to the design-build project manager for all of the responsibilities of his/her group and has authority to direct their staff in the performance of their work and as required to meet VDOT’s expectations. Through the regional manager and vice president of operations, the design-build project manager has access to the G4S Technology corporate resources. These include the accounting, IT, legal, and human resources departments and can access and use subject matter experts and other resources from other projects and departments throughout the company.

Quality Assurance Project

G4S Technology created our VDOT I-64 organization so there is a clear separation between Quality Assurance (QA) and construction, including the separation between QA and construction Quality Control (QC). Our QA Manager, Duncan Stewart, reports directly to the Design-Build Project Manager (Nathan Hauck) and the VDOT Project Manager to ensure independent quality.

Organizational relationships with proposed subcontractors

We partner with only the highest quality companies and product vendors for our customers. We use a stringent pre-qualification process that verifies potential subcontractors’ corporate experience, financial stability, history of performance, and key individuals experience and their capacity to contribute at the level G4S Technology requires. This ensures our entire team delivers products and services that meet or exceed VDOT’s goals and expectations. We are



**Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)**

subcontractor and vendor independent; therefore, we have many high quality corporations and products to choose from when assembling our team and designing systems.



2.0 KEY PERSONNEL RESUMES (Reference RFP, Part 1, Section 4.4.2, Page 12 of 34)

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Nathan J. Hauck, Project Manager
b. Project Assignment: Design-Build Project Manager
c. Name of Firm with which you are now associated: G4S Technology LLC (Formally Adesta, LLC)
d. Years experience: With this Firm <u>14</u> Years With Other Firms <u>4</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years: 2011-2013- G4S Technology (Formally Adesta, LLC) - Project Manager- Responsible for ITS, Communication and Security project oversight throughout New Jersey, Maryland, Virginia and Pennsylvania. 2008-2011- G4S Technology (Formally Adesta, LLC) -Construction Manager- Responsible for day to day operations to include but not limited to project design, scheduling, procurement, construction, turn-up and testing for the Pennsylvania Turnpike Commission's ITS Design Build Installation. 2004-2008- Adesta LLC -Construction Superintendent- Responsible for day to day operations to include but not limited to project design, scheduling, procurement, construction, turn-up and testing for a CCTV Security System covering six marine terminals located at the Port of Baltimore, Maryland. Supervised construction activities for physical security system at Shasta Dam in Shasta, CA. 1999-2004- Adesta LLC -OSP Engineer- Provided design, construction supervision and maintenance support for a Fiber Optic Cable Network to support communications and various ITS devices covering over 400 miles which encompassed the entire Denver Metro area and along I-70 in Colorado for CDOT. Designed and supervised construction of 150 CCTV devices along the New Jersey Turnpike and Garden State Parkway. Performed field engineering for Fiber-To-The-Curb (FTTC) in the Longmont, CO. 1998-1999- The Phone Connection- Technician- Responsible for system installation, LAN design/installation, and fiber installation-which included fiber termination, telephone system installation, service and repair. 1996-1998- East Coast Telecommunications- Foreman- Supervised outside plant construction and inside plant installations of communication networks for various military facilities.
e. Education: Degree(s)/Year/Specialization: Diploma, General Studies, Gaither High School, Tampa, FL 1996
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 10 & 30 Hour OSHA Construction Safety Certificate First Aid & CPR Certified VDOT/VTCA Erosion & Sediment Control Contractor Certification (Cert #6004C)

- g. Document the extent and depth of experience and qualifications relevant to the Project.
1. *Note your specific responsibilities and authorities for each assignment, not those of the firm.*
 2. *Note whether experience is with current firm or with other firm.*
 3. *Provide beginning and end dates for each assignment.*

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

2011-2013- Project Manager- G4S Technology LLC (Formally Adesta, LLC)- New Jersey Turnpike Authority (NJTA)- Responsible for maintaining the NJTA's fiber optic cable system which is utilized for the management of ITS/ATSMS devices and EZ-Pass communications. Position responsibilities include the management of redesign and construction of existing underground fiber optic infrastructure to facilitate roadway widening projects. Management of design and construction of communication laterals to facilitate the installation of new ITS, ATSMS devices, maintenance facilities and toll plazas.

2009-2011- Construction Manager- G4S Technology LLC (Formally Adesta, LLC)- Pennsylvania Turnpike Commission- Intelligent Transportation System- Managed day to day operations for the installation of nineteen (19) Dynamic Message Signs (DMSs), fifteen (15) CCTV devices and fiber optic cable installations in five (5) tunnels along the Pennsylvania Turnpike. Responsibilities included but not limited to participating in the design phase by confirming constructability at device locations. Managed the installation of devices to include managing the project schedule, supervised the installation of foundations, structures, guiderail and traffic control. Supervised the integration, turn-up and testing of devices. First point of contact with customer. Attended weekly scheduling meetings with customer's construction department along with monthly progress meetings with customer's project management staff.

2004- OSP Engineer- Adesta LLC- - New Jersey Turnpike Authority- CCTV System Phase 2- Designed and supervised construction of sixty (60) CCTV camera devices along the New Jersey Turnpike and Gardner State Parkway. Responsibilities included but not limited to design for optimal field-of-view and power connectivity. Scheduled and supervised construction at each device location. Assisted technicians with the integration, turn-up and testing of devices.

2002- OSP Engineer- Adesta, LLC- New Jersey Turnpike Authority- CCTV System Phase 1- Designed and supervised construction of ninety (90) CCTV camera devices along the New Jersey Turnpike and Gardner State Parkway. Responsibilities included but not limited to design for optimal field-of-view and power connectivity. Scheduled and supervised construction at each device location. Assisted technicians with the integration, turn-up and testing of devices.

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Duncan K. Stewart, PE
b. Project Assignment: Quality Assurance Manager
c. Name of Firm with which you are now associated: MBP
d. Years experience: With this Firm <u>13</u> Years With Other Firms <u>2</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years: Engineer, Senior Engineer, Project Manager, Branch Operations Manager, MBP, 1999-Present: Mr. Stewart has more than 15 years of hands-on construction experience providing project controls, critical path method (CPM) scheduling, resident engineering, training, claims analysis, and program and project management. He has provided these services for several transportation, airport, K-12 school, commercial, municipal, federal, and military projects. Field Engineer, Interstate 95, Richmond, VA (1997-1999): As Field Engineer, responsible for approximately 100 lane miles of Interstate 95. Project involved daily management of various construction and maintenance projects including roadway, bridge and incidental items. Duties also included field inspection, strategic maintenance planning and contract management.
e. Education: Degree(s)/Year/Specialization: BE/1997/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2002/Professional Engineer (PE)/036991
g. Document the extent and depth of experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) Project Name: Airport Connector Road Name of Firm: MBP Start Date: 2008 End Date: 2011 Project Role/Responsibilities: As Quality Assurance Manager, oversaw quality assurance processes for structures, roadways, and bridges on the project. Also, researched, identified and implemented solutions to construction problems, while managing a staff of several inspectors and technicians. Project Name: Richmond District-Wide Name of Firm: MBP Start Date: 2006 End Date: 2008 Project Role/Responsibilities: As Project Manager, provided quality assurance, inspection, project controls,

claims support and administrative management for multiple procurement and construction phase contracts in the Richmond District.

Project Name: VDOT Finals Region 2

Name of Firm: MBP

Start Date: 2008 End Date: Ongoing

Project Role/Responsibilities: As Project Manager, provided quality assurance and auditing on approximately \$200 million of completed VDOT project records for compliance and independent oversight. Overall responsibility for completing all tasks on-time and to the degree of quality management, reporting and as-built documents.

Project Name: Zions Crossroads

Name of Firm: MBP

Start Date: 2012 End Date: Ongoing

Project Role/Responsibilities: As Quality Assurance Manager, established the quality assurance/quality control (QA/QC) plan and was responsible for the successful implementation of the plan. Other responsibilities included the oversight of the QC construction inspection, materials testing, and sampling of work performed by the design-builder's quality control. Mr. Stewart was responsible for verifying quality compliance and seeing that there were minimal interruptions due to quality issues and that the project was delivered to the contract requirements. He oversaw the entire quality assurance and quality control program, all materials testing, and IA/IV interactions with VDOT and FWHA. He also supervised MBP and subconsultant inspectors and technicians.

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Kevin Hunt, PE, PTOE, Project Manager
b. Project Assignment: Design Manager
c. Name of Firm with which you are now associated: Gannett Fleming, Inc.
d. Years experience: With this Firm <u>5</u> Years With Other Firms <u>8</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years: Gannett Fleming, Inc., Philadelphia, PA 2008 – Present Project Manager responsible for intelligent transportation systems (ITS) planning, design, and construction support services. Responsible for ITS project delivery, including coordination with subject matter experts and client management. Pennoni Associates, King of Prussia, PA 2005-2008 Project Engineer responsible for various ITS design, signal system, traffic engineering, and planning projects. Edwards and Kelcey, West Chester, PA 2000-2005 Project Engineer responsible for traffic engineering studies, including corridor analyses, accident analyses, and capacity analyses. Also reviewed three separate PS&E packages for ITS projects.
e. Education: Degree(s)/Year/Specialization: B.S./1998/Civil Engineering M.S./2003/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2013/ Professional Engineer / 0402052683
g. Document the extent and depth of experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) ▪ PTC ITS Design-Build, Pennsylvania Turnpike Commission (PTC). Lead ITS Engineer for the preliminary and final design of ITS field devices at the approaches to four turnpike tunnels and other main line and Northeast Extension locations. This project involves the design and installation of completely functional systems including 19 dynamic message signs (DMSs) 15 closed-circuit television (CCTV) camera systems, 3 arrow boards, wireless communication to the devices, and fiber-optic cable through the tunnels as well as a wireless communications system required to connect all devices to the PTC Traffic Management Center (TMC). Responsible for preparing preliminary and final design plans and conducting site evaluations.

Firm: Gannett Fleming; Dates: 10/09 to 10/11

- **I-91 ITS Design-Build, Northampton, MA, Massachusetts Department of Transportation (MassDOT).** Lead ITS Engineer for the preliminary and final design of ITS field devices along approximately 60 miles of I-91 and I-291 in western Massachusetts from the Connecticut state line to the Vermont state line. Responsible for updating the project's concept of operations and functional system requirements documents, field-locating the ITS devices, preparing all preliminary and final design site plans, conducting acceptance testing, and developing training plans. The project includes installation and integration of 34 CCTV cameras, 17 DMS, and a fiber-optic and wireless communications system into a District TMC and the Statewide TMC in Boston. As a supplement to the original design-build project, the design, installation, and integration of an additional three CCTV cameras and three DMSs along I-91 and I-90 was completed. *Firm: Gannett Fleming; Dates: 06/08 to 02/12*
- **Route 18 Extension, Section 3A ITS, Middlesex County, NJ, New Jersey Department of Transportation (NJDOT).** As Lead Engineer for the ITS portion of the Route 18 Extension, Section 3A reconstruction project, responsible for the design of ITS devices along Route 18 in Piscataway Township from Buckingham Drive to I-287. The project included the deployment of three CCTV cameras and fiber-optic cable. The ITS devices are connected to existing systems for communication back to the NJDOT Traffic Operations Center - North. Responsible for developing the Final ITS System Definition Report, preliminary and final design plans, and specifications. *Firm: Gannett Fleming; Dates: 12/09 to 10/11*
- **ITS Standards, Specifications, and Deployment Manual, Doha, Qatar, State of Qatar Public Works Authority.** Lead ITS Engineer responsible for the development of ITS standard documents for the State of Qatar. This task involved the development of three separate publications including a comprehensive *ITS Deployment Manual*, *Civil and Structural Standards for ITS*, and *Standard ITS Specifications*. Devices described within the standard documents included traffic detection and monitoring systems such as loops, microwave, video, magnetometers, and Bluetooth®; DMSs, CCTV cameras, roadway weather information systems, air quality monitoring, over-height detection systems, weigh-in-motion systems, dynamic lane control signs, ramp meters, and communications. *Firm: Gannett Fleming; Dates: 1/12 to 2/13*
- **ITS Design – PWA Expressway Projects, Doha, Qatar, State of Qatar Public Works Authority.** Lead ITS Engineer responsible for the preliminary and final ITS design along two corridors. Responsible for overseeing the location of the devices and preparation of concept and detailed design plans. The projects included the installation of fiber optic cables along the length of the project, DMS, CCTV, magnetometers, over-height vehicle detection systems, weigh-in-motion systems, dynamic lane control signs, Bluetooth®, RWIS, license plate readers, and hard-shoulder running. The communications systems will be tied into the interim TMC in Doha. *Firm: Gannett Fleming; Dates 1/13 to 10/13*

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Timothy Demarest / Construction Project Manager, CSPM
b. Project Assignment:	Construction Manager
c. Name of Firm with which you are now associated:	G4S Technology LLC
d. Years experience: With this Firm <u>3</u> Years With Other Firms <u>32</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years:	
G4S Technology LLC, Springfield, VA	September 2010 – Present
Construction Project Manager Responsible for overseeing all operations of multiple projects including contract management, material procurement, planning, scheduling, financial reporting, quality assurance and control, safety and contract performance. Ensure there is full compliance with applicable safety, building code, and other regulations. Manage and coordinate all aspects of fiber optics, microwave, shelter and standby power systems installation and systems commissioning. Manage the installation of CCTV and access control systems installation, testing and acceptance of systems.	
LaserCraft, Inc., Norcross, Georgia	2008 – 2010
Construction Project Manager Responsible for managing all aspects and phases of camera installation projects simultaneously. Managed projects in accordance with contract requirements and procedures, enforced quality control and implemented site safety, formulated comprehensive project plans and schedules in cohesion with architects and engineers. Obtained necessary DOT approvals and permits. Performed site surveys to develop, document, and manage detailed project scopes of intersection layouts and installation requirements. Ensured full compliance with applicable safety, building code, and other regulations. Tracked overall progress and milestones to ensure projects remained on schedule. Proactively identified and resolved potential issues that could have negatively impacted successful completion. Maintained project documentation and produced regular reports that supported informed decision-making. Served as liaison and coordinator between clients, project teams, departments, divisions, and subcontractors.	
Demarest Construction, Inc., Manassas, Virginia	1978 – 2008
Owner and President Managed all aspects and phases of multiple residential and commercial projects simultaneously with a solid reputation for achieving deadline and budget goals while maintaining quality standards. Analyzed opportunities and leveraged extensive experience to prepare detailed and accurate bids and proposals. Interacted extensively with clients to fully understand their needs and vision. Collaborated closely with architects, engineers, and contractors to formulate comprehensive project plans and schedules. Obtained necessary government approvals and permits. Developed and maintained relationships with various agencies and officials. Prepared and oversaw project budgets, fund allocation and financial statements review to ensure achievement of goals. Researched, selected, and negotiated agreements with subcontractors and suppliers, as well as monitored performance to ensure contractual obligations and quality standards were achieved. Ensured full compliance with applicable safety, building code, and other regulations. Tracked overall project progress and milestones to ensure timely completion.	

e. Education: Degree(s)/Year/Specialization:

CSPM Certification (Certified Security Project Manager)
CVI Certified (Chemical-terrorism Vulnerability Information)
Massachusetts One Federal Building Sidera Networks Clearance
Dulles and Reagan Airports TSA Clearance
Amtrak Clearance & Safety Trained
MBCR Clearance & Safety Trained
CPR and AED Trained
First Aid Trained
Certified OSHA Safety Trainer

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

g. Document the extent and depth of experience and qualifications relevant to the Project.

1. *Note your specific responsibilities and authorities for each assignment, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. *Provide beginning and end dates for each assignment.*

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

G4S Technology LLC September 2011 – May 2013

Managed the design build project Mass Broadband 123. This consist of a 1,200 mile aerial and underground fiber optic network connecting DOT's, Police, Fire, 911 Emergencies, Town Municipal Buildings, Libraries, Hospitals etc. in over 120 communities throughout western and north central Massachusetts. Responsibilities included the complete route design and construction of the project. Also directed the overall planning, scheduling, procurement, safety, tracked performance, budgets, and subcontractors and held weekly project coordination meetings with the customer. Supervising daily a team of fifteen (15) OSP Specialists, three (3) CADD Engineers and thirty five (35) subcontractor crews.

G4S Technology LLC September 2010 – August 2011

Managed the design build project AMTRAK 1011 supervising multiple subcontractors performing construction and installation activities at three geographically separated rail stations simultaneously. Responsibilities included outdoor and indoor fiber optic plant work, power generation, HVAC, security system equipment including cameras. The overall planning, scheduling, procurement, safety, tracking performance, budgets and related construction.

LaserCraft, Inc., Norcross, Georgia (September 2009 – August 2010)

Managed the design build camera project of nineteen (19) intersections in Knoxville Tennessee. Responsibilities included the overall planning, scheduling, procurement, safety and tracking the performance of crews. Coordination and working with TDOT. Also supervising subcontractors performing construction installation activities which included camera installation, electrical / fiber optic aerial and underground plant work, pad and pole mount cabinets.

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Mark Metil, PE, PTOE, Director of Transportation Operations and Planning
b. Project Assignment:	Lead Designer
c. Name of Firm with which you are now associated:	Gannett Fleming, Inc.
d. Years experience: With this Firm <u>21</u> Years With Other Firms <u>6</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years:	<p>Gannett Fleming, Inc., Camp Hill, PA 1992 – Present Director of Transportation Operations and Planning responsible for participating in and overseeing data collection; travel forecasting; traffic impact studies; traffic signal system design; signing and pavement marking plans; maintenance and protection of traffic plans; and conducting analyses of existing and proposed roadway intersections, corridors, and networks. Responsibilities also include participating in and overseeing security/safety and operational audits, reviews of planned and existing facilities, and the development of intelligent transportation systems (ITS) projects.</p>
e. Education: Degree(s)/Year/Specialization:	B.S./1986/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	1996/Civil Engineering/No. 030893
g. Document the extent and depth of experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)	<ul style="list-style-type: none">• S.R. 0180, Section 084 ITS Deployment, Lycoming and Union Counties, PA, Pennsylvania Department of Transportation, District 3-0. [2012-present][55349] Project Traffic Engineer responsible for the design of six dynamic message signs, six highway advisory radio (HAR) installations, and three closed-circuit television (CCTV) cameras. The project involved the completion of preliminary and final design including plans, specifications, and estimates (PS&E), with ITS integration into District 3-0's Regional Traffic Management Center (TMC). <i>Firm: Gannett Fleming; Dates: 05/12 to 01/13</i>• S.R. 0080, Section 112 ITS Deployment, Columbia and Montour Counties, PA, Pennsylvania Department of Transportation, District 3-0. Project Traffic Engineer responsible for the design of four DMSs, four HAR installations, and one CCTV camera. The project involved the completion of preliminary and final design including PS&E, with ITS integration into District 3-0's Regional TMC. <i>Firm: Gannett Fleming; Dates: 05/12 to 01/13</i>• S.R. 0080, Section 109 ITS Deployment, Northumberland County, PA, Pennsylvania Department of

Transportation District 3-0. Project Traffic Engineer for the design of four DMSs, four HAR installations, and one CCTV installation at the interchange of I-80 and I-180. The project involved the completion of preliminary and final design including plans, specifications, and estimates (PS&E), with ITS integration into District 3-0's Regional TMC. Firm: Gannett Fleming; Dates: 09/12 to 02/13

- **Regional Operations Plan (ROP), South Central PA, Pennsylvania Department of Transportation (PennDOT), Bureau of Highway Safety and Traffic Engineering.** Project Manager responsible for the development of an ROP for the south central region of Pennsylvania. The purpose of the ROP was to lay out the strategic transportation operations program for the region, involving the identification, definition, and prioritization of operationally focused projects, including ITS device deployments. The project involved substantial outreach and coordination with PennDOT's District 8-0, metropolitan planning organizations, and regional planning organizations, as well as other stakeholders. *Firm: Gannett Fleming; Dates: 09/04 to 04/09*
- **Gettysburg Area Traffic Signal Enhancement and ITS Deployment, Gettysburg, PA, Pennsylvania Department of Transportation, District 8-0.** Project Manager responsible for supervising engineering activities for this project with the goal of increasing safety and reducing congestion in the Gettysburg area. The project involved upgrades to the existing closed-loop signal system including system retiming, controller upgrades, communication upgrades, video detection, emergency preemption, and light-emitting diode signal implementation. The work also included the deployment of changeable message signs, CCTV, countdown pedestrian indications, illuminated pedestrian indications, and wayfinding signing. An extensive data collection program included 24-hour and peak-hour intersection traffic volume recordings during the tourist and non-tourist seasons, as well as before-and-after travel time and delay studies. *Firm: Gannett Fleming; Dates: 03/04 to 03/09*

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Ramesh Venkatareddy, PE, Senior Project Engineer
b. Project Assignment:	Lead Structural Engineer
c. Name of Firm with which you are now associated:	Gannett Fleming, Inc.
d. Years experience: With this Firm <u>4</u> Years With Other Firms <u>13</u> Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years:	<p>Gannett Fleming, Inc., Baltimore, MA 2009– Present Senior Project Engineer responsible for designing and detailing highway bridges, highway structures, maintenance facilities, and other structures. Performs structural analyses, design, inspections, load ratings, and shop drawings reviews and prepares reports and repair and rehabilitation plans.</p> <p>Brudis & Associates, Inc., Columbia, MD 2006 – 2009 Structural Engineer responsible for project management, design, inspection, analyses, and structural rating of various structures related to transportation projects, including bridges, parking structures, and retaining walls.</p> <p>Prime Engineering & Architecture, Inc., Baltimore, MD 2004 – 2006 Structural Inspection Leader for the inspection of drainage inlets; Structural Engineer for the design and preparation of rehabilitation plans for an aging pipe arch culvert.</p> <p>STV, Inc., Baltimore, MD 2003 – 2004 Structural Engineer for the design or review of structures related to highway design and bridge projects.</p> <p>Kennedy, Porter & Associates, Inc., Baltimore, MD 1995 – 2003 Structural Engineer for the design or review of bridge-related structures.</p>
e. Education: Degree(s)/Year/Specialization:	B.S./1998/ Civil Engineering M.S./1995/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2008/Civil/0402044545
g. Document the extent and depth of experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)	<ul style="list-style-type: none">• Engineering Services for Transportation Facilities, Montgomery County, MD, Montgomery County. Senior Project Engineer/Bridge Design Team Lead responsible for developing pre-type, size, and location (TS&L) plans and back-checking calculations for two 60-foot-long bridges on Snouffer School Road over Cabin Branch. <i>Firm: Gannett Fleming; Dates: 07/08 to On-going</i>

- **Open-End SHA Bridge Consultant Services, Statewide MD, Maryland State Highway Administration (SHA).** Senior Project Engineer/Design Lead responsible for pre-type, size, and location (TS&L) design of a single-span bridge in Carroll County; peer review of two interstate bridges plans, specifications, and estimates (PS&E) construction documents designed by others on I-70; and load rating of 10 multi-span bridges on various interstate highways. *Firm: Gannett Fleming; Dates: 07/10 to On-going*
- **U.S. Route 301 Toll Plazas, New Castle County, DE, Delaware Department of Transportation.** Senior Project Engineer back-checking calculations and reviewing design sketches for a single-span gantry structure over six lanes and other structures. *Firm: Gannett Fleming; Dates: 10/08 to On-going*
- **U.S. Route 301 Toll Facility Project, New Castle County, DE, Delaware Department of Transportation.** Senior Structural Engineer on a project to conduct studies and prepare designs for the construction of a total of seven toll facility sites along proposed sections of U.S. Route 301. Responsible for the review and back-checking of calculations made by others. *Firm: Gannett Fleming; Dates: 10/08 to On-going*
- **Amtrak Security Improvements Design-build Pennsylvania, Delaware, Maryland, and Washington, Maryland State Highway Administration (SHA).** Senior Structural Engineer providing engineering services for a design-build project for security enhancements at 11 facilities. Gannett Fleming was a subconsultant to G4S on this contract, which included the installation of approximately 600 security cameras, electronic entry control, and physical access control elements such as bollards, fencing, and gating. Responsible for device mounting designs and site inspections at Washington's Union Station. *Firm: Gannett Fleming; Dates: 08/10 to 04/12*

ATTACHMENT 4.4.2

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	John William Powell/Security Specialist III/Project Manager
b. Project Assignment:	Electrical/ITS Supervising Technician
c. Name of Firm with which you are now associated:	G4S Technology LLC (formerly Adesta, LLC)
d. Years experience: With this Firm (5)Years With Other Firms (22)Years Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years:	<p>G4S Technology, LLC November 2008 - Present Security Systems Specialist III/Construction Manager/Project Manger Assists in the development of system designs and networks based on customer requirements and specifications for communications and security applications. Develops cost estimates for these systems and networks, including equipment costs, material costs, and installation costs. Works with other engineers in other disciplines to develop total solutions for customers. Provides leadership on assigned projects to ensure engineering is completed to G4S standards. Participates in design reviews and project coordination meetings. Generates technical diagrams, engineering and as-built drawings, scopes of work, test plans and procedures, implementation plans, project schedules, and bid packages. Interacts with subcontractors, vendors, and suppliers. Provisions, configures, and tests system components. Performs verification testing on new systems, integrates them with existing equipment and systems, and activates them for service.</p> <p>Walker Seal Companies Inc. November 2007 – July 2008 Service Manager Responsible for estimating, design, installation, and logistic support activities for various electrical projects. Responsibilities included coordinating, estimating, implementation, and invoicing of projects assigned to the Electrical Service Division.</p> <p>The Russell Gage Corporation May 2007 – November 2007 Operations Manager Responsible for estimating, design, installation, and logistics support activities associated with The Russell Gage Corp scope of work supporting the Integrated Security Services Contract (ISSC) for the Pentagon and National Capital Region, which included the installation, repair, and preventive maintenance of all security booths, fencing, bollards, and barriers.</p> <p>DRS Technologies, Inc. (Formerly Radian, Inc.) October 2000 – April 2007 Operations Manager Served as Operations Manager for the Integrated Security and Identification System (ISIS) Contract. Responsible to the ISIS Program Manager for the day-to-day management of the AMAG (over 2000 nodes) and CCTV (over 700 cameras) security system design, installation and maintenance activities supporting the Pentagon renovation. Served as company representative in program related coordination with staff members of the Defense Protective Service (DPS), and later, the Pentagon Force Protection Agency (PFPA), and the Government contract management agency, The Naval Surface Warfare Center (NSWC), Crane Division. Responsible for ensuring compliance with US Navy contract requirements, and on-time deliverables. Responsible for the preparation and management of program-related cost estimates, proposals and schedule.</p> <p>On-Site Project Manager/Senior Field Technician Served as on-site security systems project manager for the Pentagon Wedge 1 renovation project. Provided physical security guidance to the Pentagon renovation architects and construction managers. Edited and approved architectural drawings to ensure that adequate security measures were incorporated into the renovation design. Provided construction expertise and approval for all structural, mechanical, and electrical security system installations. Assisted DPS/PFPA at various design review and construction progress meetings pertaining to the Pentagon renovation. Provided physical security advice and assistance to the Pentagon Renovation and Planning Office and project engineers concerning security- related problems associated with the renovation of the Pentagon. Coordinated and monitored performance of Radian crews</p>

and other contractors providing security construction to ensure that the approved AMAG and CCTV security systems were installed properly. Spearheaded the reconstruction of the Wedge 1 security systems as part of the Phoenix Project after the September 11, 2001 terrorist attack, achieving completion ahead of schedule, and the receipt of a team and personal Phoenix Award by the Secretary of Defense.

R.E. Lee Electric Corporation

May 1993 – October 2000

General Superintendent, Project Manager and Project Estimator

Served as the General Superintendent for scheduling all projects, scheduling all rental equipment, tracking of labor hours and materials, ordering materials for all projects, ordering all equipment repairs, supervising foremen and company personnel.

Long Electric Company

March 1987 – May 1993

Electrician Foreman

Served as a foreman for electrical and security projects for Government and commercial clients.

Bee & H Electric Company

July 1986 - March 1987

Electrician Apprentice/Foreman

Professional career began as an electrician apprentice, installing commercial/residential systems.

e. Education: Degree(s)/Year/Specialization:

1986-High School Diploma

1985-1986-Certificate in Computer Programming

1986-1990-Electrical Tradesman School (Virginia Journeyman Electrician License)

1991-Virginia Master Electrician License

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

1991-Board of Contractor Tradesman Number: 2710057686

g. Document the extent and depth of experience and qualifications relevant to the Project.

1. *Note your specific responsibilities and authorities for each assignment, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. *Provide beginning and end dates for each assignment.*

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

AMTRAK 1011 Project-G4S Technology LLC-2010/2011

Served as Construction Manager on Amtrak's \$12M+ Mid-Atlantic Security Project 1011 at the Washington DC, New Carrollton, and Baltimore stations. The scope included removing an existing video management system and replacing it with a complex integration of a Bosch brand video management system supporting 188 cameras, an Object Video brand video analytics/detection system, and a Vidsys brand command and control system. Installation of new electrical circuits, video display panels, communication cabling (Fiber/Cat 6), step down transformers, uninterruptable power supplies (UPS), extended battery banks, HVAC system upgrade and generator install at the Washington DC site.

Pentagon Renovation Project-DRS Technologies, Inc. (Formerly Radian, Inc.) (October 2000 – April 2007)

Provided physical security guidance to the Pentagon renovation architects and construction managers. Provided construction expertise and approval for all structural, mechanical, and electrical security system installations. Assisted DPS/PFPA at various design review and construction progress meetings pertaining to the Pentagon renovation. Provided physical security advice and assistance to the Pentagon Renovation and Planning Office and project engineers concerning security-related problems associated with Pentagon renovation.

University of Maryland Campus Wide Project-R.E. Lee Electric Corporation (May 1993 – May 1998)

Served as the General Superintendent for the University of Maryland Renovation Project and was responsible for all major electrical renovations campus-wide. Electrical renovations/installations included:

- Installation/maintenance of High Voltage Switch Gear
- Installation/maintenance of High Voltage Transformers
- Installation/maintenance of breakers and safety switches
- Installation of wood/concrete lighting and power poles
- Installation/maintenance of stadium lighting
- Installation of power and communication duct banks
- Installation of concrete foundations and bases
- Interior/exterior HV voltage/low voltage feeders



3.0 DPOR LICENSE INFORMATION (Reference RFP, Part 1, Section 4.4.3, Page 14 of 34)

ATTACHMENT 4.4.3

State Project No. 0064-007-913, C-501

SCC and DPOR Information - Individuals

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 4.2.5 and that all individuals listed are active and in good standing.

DPOR INFORMATION FOR INDIVIDUALS (RFP Sections 4.4.3.1 and 4.4.3.2)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
G4S Technology LLC	John William Powell	7432 Alban Blvd Suite B226 Springfield, VA 22150	9 Whitestone Drive Stafford, VA 22556	Master Electrician	2710057686	2/28/14
Gannett Fleming, Inc.	Kevin Hunt	1515 Market Street, Suite 2020 Philadelphia PA 19102	1515 Market Street, Suite 2020 Philadelphia PA 19102	Professional Engineer	0402052683	10/31/15
Gannett Fleming, Inc.	Mark Metil	P.O. Box 67100 Harrisburg PA 17106	2939 Cumberland Boulevard Camp Hill, PA 17011	Professional Engineer	0402030893	12/31/14
Gannett Fleming, Inc.	Ramesh Venkaareddy	7133 Rutherford Road, Suite 300 Baltimore MD 21244	12324 Wake Forest Road Clarksville, MD 21029	Professional Engineer	0402044545	2/28/14
McDonough Bolyard Peck, Inc. (d/b/a MBP)	Duncan Stewart, PE	Richmond, VA	7400 Beaufont Springs Drive, Suite 403 Richmond, VA 23225	Professional Engineer	0402036991	06/30/2014



4.0 DBE SUBCONTRACTING NARRATIVE (Reference RFP, Part 1, Section 4.4.4, Page 14 of 34)

G4S Technology LLC (G4S Technology) (formerly Adesta, LLC) is firmly committed to using qualified disadvantaged business concerns on the I-64 project. We provided opportunity for disadvantaged businesses to participate as suppliers of both materials and services on this project. We actively solicited those that demonstrated high standards of quality, service, timeliness, and cost effectiveness. We regularly rely on disadvantaged businesses not only for their products and services, but the competitive characteristics that often elude large subcontractors such as agility, flexibility, innovation, and responsiveness.

We have a commitment to employ the materials and services of qualified disadvantaged business during this contract execution. In the following paragraphs, we present an overview of our plan which summarizes our goals for subcontracting DBEs; describe the methodology used for selection of our subcontractors; and provide the management techniques we use to manage our subcontracts and ensure compliance with the plan.

Our project team includes a key disadvantaged business subcontractor to provide specialized expertise necessary to meet specific contract requirements. Our historical approach of obtaining the best professional and technical expertise available to meet specific contract requirements has been highly successful. We select firms, which are recognized by both the DOT and communications industries, to provide specialized services including construction, engineering, logistics, supplies, and testing. We are constantly seeking to identify new disadvantaged businesses to participate in the successful completion of our contractual commitments. The melding of our in-house expertise with that of subcontracted firms provides a quality product and sound approach to the contract requirements. When requirements exceed our in-house resource capabilities, G4S Technology follows our proven method of outsourcing by subcontracting with the most qualified companies including qualified DBEs.

In developing and establishing our disadvantaged business subcontracting participation for this contract, G4S Technology is committed to employing the goods and services of such companies whenever and wherever possible. Historically, G4S Technology has subcontracted with qualified disadvantaged businesses to supplement our unique skill sets. In making decisions regarding subcontracting opportunities, we are guided by the demands of the I-64 project and the application of good business practices. In addition, our personnel engaged in the selection of subcontractors were directed to use their best efforts to seek qualified disadvantaged business enterprises as subcontractors, suppliers, and consultants. To effectively meet the goals set forth, we performed the following good faith efforts:



**Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)**

- Advertised in local publications for extended periods of time, notifying opportunities for DBE's to participate in the VDOT I-64 ATSMS project.
- Consulted VDMBE on policies and procedures for establishing and identifying DBE participation levels.
- Assisted disadvantaged business concerns by identifying ideal contracting opportunities, provided extra time for the bid preparation, provided access to specifications and plans to facilitate the participation.
- Provided adequate and thorough consideration of disadvantaged business quotations in all bid considerations.
- Counseled and discussed subcontracting opportunities with representatives of disadvantaged business firms.
- Documented our efforts to include DBEs on our team.

We are committed to the goal of 3% disadvantaged business participation on the I-64 contract. The current G4S Technology plan for the I-64 project includes DBE subcontracted dollars to be \$140,955.50, or 3.06% of overall contract value. We anticipate that during contract execution, we will subcontract services and products to other disadvantaged business concerns. However, currently we have executed legally binding agreements with one (1) disadvantaged business for maintenance of traffic during the project identified here:

- L A S Trucking, Inc., Certification #664220

In making subcontracting determinations, G4S Technology researched the proposed subcontractor's past performance, capabilities, resource capacity, and financial soundness. G4S Technology's findings have been measured against the applicable contract requirements. Overall efficiency and effectiveness with regard to the project cost/schedule, administrative expenses assessed, and the ability to deploy an existing skilled work force, is considered in our in-house subcontractor evaluation.

G4S Technology's determination of subcontracting goals to disadvantaged businesses is in part based on our experience in soliciting and gaining disadvantaged business participation in our past projects. We know that most disadvantaged business concerns operate most efficiently in their local environment. G4S Technology provides subcontractor assistance in the form of guidance, technical assistance, and information that makes the execution of subcontract responsibilities more efficient and productive. As part of our overall project management process, we shall use proven skills and methodologies for the management of the subcontractors selected for the I-64 contract. G4S Technology requires our subcontractors report to the G4S Technology Project Manager or Construction Manager. G4S Technology requires our subcontractors to adhere to the approach prescribed in our Quality Control and Safety Plans.



G4S Technology's continued good faith efforts include a multi-faceted approach to recruitment, qualification, assistance, and selection of qualified DBEs.

Recruitment - The following are some of the sources G4S Technology used in the past and intends to use for this contract in its outreach attempts to broaden the use of disadvantaged business concerns:

- Lists of subcontractors previously retained.
- VDOT's list of pre-qualified subcontractors.
- Contacts made by the subcontractors directly to G4S Technology.
- Referrals from new and existing customers concerning disadvantaged business concerns with a history of successful performance in the area.
- Local Publications, VDMBE, MWAA and EEO offices.

Disadvantaged business subcontractors meeting contract performance profiles are identified and, if possible, interviewed for capabilities, applicable experience, and project interest. The results of our recruitment activity are submitted to our contracts team, who continue these efforts with subcontractor pre-qualifications.

Qualifications – The same management and supervisory staff that engage in disadvantaged business recruitment also provides an assessment of each subcontractor's ability to effectively support the I-64 project. Additionally, information obtained during the pre-qualification process is carefully examined to ensure the presence of other pertinent qualifications such as management, proper licenses, financial stability, proper levels of insurance, and bonding capacity. Each stage of the disadvantaged business qualification process is documented in accordance with contract requirements.

Assistance – G4S Technology will make continual good faith efforts to work with prospective disadvantaged business subcontractors. Our endeavors include but are not limited to:

- Assisting DBE's with becoming familiar working in a DOT contract environment.
- Assisting with specific DOT requirements not typically used in disadvantaged business contracts.
- Identifying additional disadvantaged business opportunities for prospective disadvantaged business subcontractors.
- Identifying workshops, seminars and training programs available.
- Monitoring activities to evaluate performance and maintain compliance with the DBE goals.



**Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)**

To ensure that disadvantaged businesses have an equitable opportunity to compete for subcontracts, G4S Technology will make a special effort to provide these business concerns with timely information on pending work, and provide specification information, delivery schedules, and work windows. G4S Technology takes precautionary measures to ensure the same information is provided to all of the selected disadvantaged businesses and is released to them at the same time, to ensure equitable opportunity to compete. Because of the numerous goods and services needed for this project, we will make every effort to give all disadvantaged businesses an unbiased opportunity to compete for subcontracted goods and services throughout the life of the contract. The principal types of supplies and services under the I-64 program that G4S Technology intends to make available include:

- Site investigations and surveys.
- Electrical.
- Installation.
- Systems integration.
- Logistics services.
- Outside plant construction.

Our contract team is responsible for maintaining, at a minimum, the following records to document compliance with DBE goals for this project:

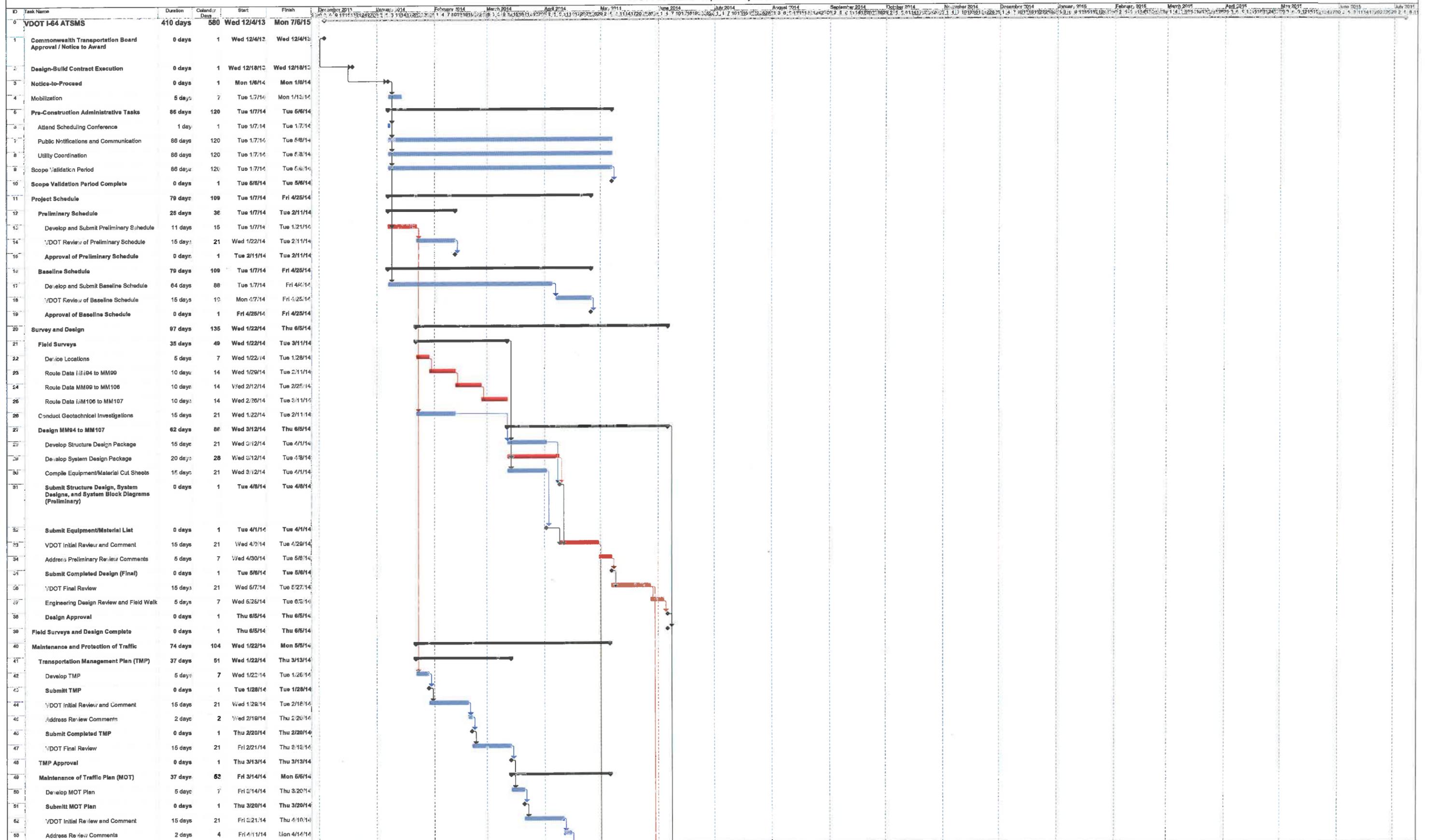
- Ensuring that procurement packages are structured to encourage and require disadvantaged business concerns to participate to the maximum extent possible.
- Assuring inclusion of disadvantaged business concerns in all solicitations for products or services they are capable of providing.
- Reviewing solicitations to assure that no statements or clauses are included which may tend to restrict or prohibit disadvantaged business participation.
- Ensuring contract staff document reasons for not selecting low bids submitted by disadvantaged business concerns.
- Ensuring the establishment and maintenance of records of solicitations, subcontract award activity and actual performance metrics.
- Monitoring and accurately reporting attainment of proposed goals.



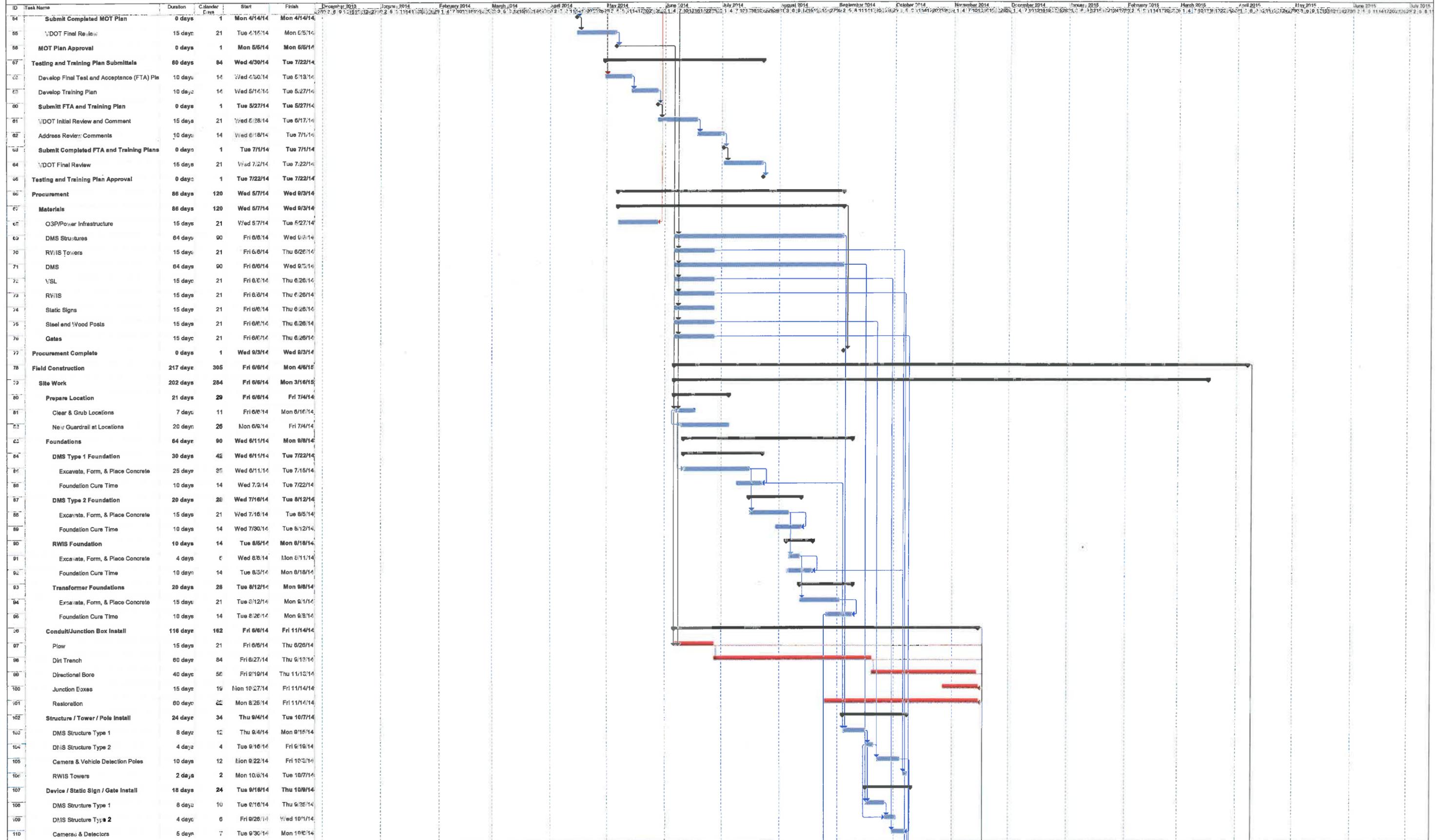
**Virginia Department of Transportation (VDOT)
I-64 Active Traffic and Safety
Management System (ATSMS)**

5.0 PROPOSAL SCHEDULE (Reference RFP, Part 1, Section 4.4.5, Page 15 of 34)

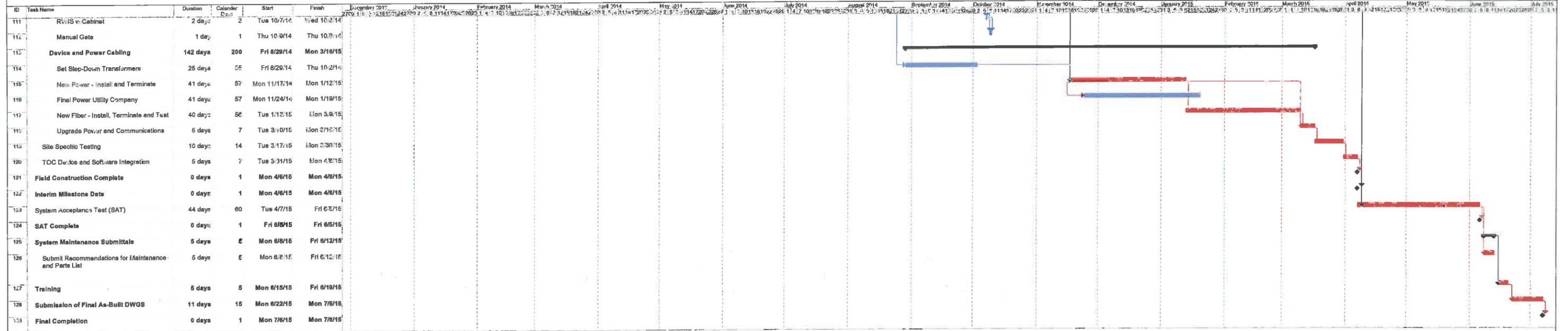
VDOT I-64 ATSMS Proposed Project Schedule



VDOT I-64 ATSMS Proposed Project Schedule



VDOT I-64 ATSMS Proposed Project Schedule





Proposal Schedule Narrative

G4S Technology has provided a proposal schedule for the entire project outlining our proposed overall plan to accomplish the work for the I-64 ATSMS project. This proposal schedule was created on the basis that Notice of Award would occur on December 4, 2013 and final completion on July 6, 2015. This schedule also identifies key milestones associated with major tasks throughout the project.

Our proposal schedule was built using Microsoft Project and shows the anticipated critical path. In addition to the hard copy presented to VDOT, we included a PDF copy and a back-up copy in MPP format.

Project Milestones

Key milestones identified in our proposal schedule are as follows:

- Commonwealth Transportation Board approval / Notice to award.
- Design-Build contract execution.
- NTP.
- Scope validation period.
- Approval of preliminary schedule.
- Approval of baseline schedule.
- Submittal of design.
- Submittal of equipment/material list.
- Design approval.
- Traffic management plan approval.
- Maintenance of traffic plan approval.
- Testing and training plan approval.
- Procurement complete.
- Field construction complete.
- Interim milestone date.
- System acceptance test complete.
- Final completion.

These milestones serve as major tracking points throughout the course of the project and will continue to be updated on a monthly basis within the baseline schedule. This helps our project management team and VDOT identify problem areas or delays requiring immediate attention.

Critical Path

As shown on our proposal schedule, the critical path begins with a VDOT approved preliminary schedule. From there, it flows through the survey, design and design review, power and



communications conduit installation, device cabling and wiring (including final power connections), system acceptance test, and finally the submission of final as-builts/turnover documents. Procurement delays, weather delays, or unexpected subsurface conditions can alter this critical path at any time. Our project management team will continually monitor the critical path and make necessary adjustments to the schedule to mitigate these issues should they occur.

Project Management

G4S Technology has a long history of working on ITS deployments, building fiber optic and wireless communications networks, and implementing large-scale security systems. As the prime contractor, G4S Technology has proven our flexibility to work in any setting through years of experience. Our managers employ time-tested and proven techniques and institute controls to ensure project completion on time and within budget.

G4S Technology understands the project management team is a crucial part of the project success. Our tiered reporting structure allows for timely project execution, thorough engineering services, professional installations, and dedicated customer support. Our extensive portfolio of successful projects and project management experience allows us to assign the most effective project team members. Structured as an integrated organization, G4S Technology employs engineering and management staff that have worked together on numerous projects, allowing rapid mobilization and uniformity for new opportunities.

Before the start of a new project, G4S Technology prepares a resource/staffing plan identifying the people, materials, and equipment required to accomplish the project. This plan:

- Identifies the skill sets required for the major components of the project.
- Provides a skills matrix showing skill sets required for each major component of the project.
- Provides the roles and responsibilities of all personnel involved with the project.

Our team will work closely with VDOT to construct the system per the requirements specified in the Request for Proposal (RFP).

Scope Validation Period

Following the NTP, our team will begin the scope validation period. This 120-day period includes activities such as:

- Review and compare of the then-existing contract documents including the RFP documents and the proposal.
- Site inspections.
- Site investigations.



- Site surveys.
- Geotechnical investigations.
- Verify and validate scope issues.

G4S Technology will promptly notify VDOT in writing if scope issues exist. We will follow up by presenting supporting documents that may have an impact on price and/or the schedule. Together, G4S Technology and VDOT will work closely to address these scope issues and pave the way to a successful project for all involved.

Project Schedule

Upon attending the scheduling conference and within 15 Days of Notice to Proceed (NTP), G4S Technology will prepare and submit a preliminary schedule to VDOT that will become the basis for monitoring the performance of the work until the baseline schedule has been approved. Within 90 days of NTP, G4S Technology will prepare and submit to VDOT, for review and approval, the baseline schedule. This baseline schedule will be maintained and updated through the life of the contract.

Survey and Design

Our team member, Gannett Fleming (GF) will lead the survey and design activities. Most of these activities take place during the scope validation period. Some of the individual design activities that are addressed are geotechnical investigations, site/civil work, field surveys, utility one-calls, structural design, and plan and document preparation. All proposed routes and locations will be investigated and surveyed in detail.

For each conduit route or ITS device location, the team will finalize the exact location through a field view with VDOT. We have field-located thousands of miles of conduit and hundreds of ITS devices. We understand the unique challenges involved in selecting the optimum location. We will consider line-of-sight, horizontal and vertical curvature, static sign spacing, trees/brush, and other field conditions when finalizing the locations.

We expect the VDOT review and approval process to be a two-step process; an initial review and a final review/approval. After approval of the initial design, the procurement and construction phases begin on tasks such as foundation and conduit installation.

Maintenance and Protection of Traffic

The single most important task on this project is providing a safe environment on the roadway corridor for everyone involved, either directly or indirectly. Within the envelope of project safety, special attention is focused on motorist safety and the impact on traffic.



The geographical location of this project brings many hazards for the general public while traveling through a construction zone. G4S Technology will follow all local, VDOT, and federal regulations when preparing the transportation management plan and the maintenance of protection plan. These plans will be submitted to VDOT concurrently with the initial design package submittal. Once reviewed and approved by VDOT, these plans will be deployed to ensure the safety of all involved is protected.

Testing and Training

G4S Technology will develop and submit for VDOT review and approval a detailed test plan and related test forms to document the test results. The test forms will detail test points to match the functional and equipment specifications. This testing also covers the operation of the subsystem as a whole, including multiple subsystem assemblies in the field, and the processing and user interfaces at the operations centers. We design these tests for execution by both VDOT personnel and G4S Technology.

G4S Technology will also develop and submit for review and approval a training plan that includes the identification of all modules and respective content, manuals, workbooks, training material, proposed training time, sequence, and proposed locations.

These plans will be submitted to VDOT following the initial review of the design package.

Procurement

G4S Technology will procure all major project materials required. As the completion and approval of the survey and design phases by VDOT become available, procurement and construction activities begin. The signs and structures will be ordered early, since they have long lead times.

During the procurement process, G4S Technology works closely with all vendors contributing to the success of the project. Vendor input determines the initial order dates to ensure materials are delivered on time. When feasible, we work with vendors to schedule drops at remote locations to facilitate more timely delivery of material to the job site and to minimize handling of the product before being installed.

G4S Technology will work with VDOT in choosing optimal sites on VDOT right of way to use as storage and staging areas. We work diligently to ensure that all needed materials for the construction of the ITS expansion have ample time to be delivered to each jobsite location. We work closely with subcontractors in scheduling the pickup of materials to be taken to work locations.



Field Construction

Our team employs multiple crews to perform foundation work, electrical and communications conduit construction, structural erection, wire and cable installation, and wire and cable terminations. These crews will work concurrently at different sites to meet the project schedule.

Construction of foundations occur during the procurement process. Items needed for this activity generally have a short lead time. After the foundations have properly cured, the structures and poles are placed.

Also, conduit runs for power fiber connections will be constructed during this time. Based on our initial surveys, the majority of conduit installation will be performed using trenching methods. There will be some directional boring for crossing roadways and other hard surface areas.

Once the structure and underground conduit is in place, crews begin installing and terminating wire/cable to each device. They power up each individual device and field test for functionality.

System Acceptance Test

After installation of all of the ITS devices and commissioning of the related subsystems, we will schedule the system tests. We review the completed daily performance forms and respond to the reported system problems within the approved time.

Final As-built Drawings and System Documents

G4S Technology will provide the final closeout documentation as specified to include as-built drawings and details, final versions of all systems operations and maintenance manuals, all equipment and system/subsystem warranties, all manufacturer equipment manuals, and all final NTCIP compliance documentation if applicable. At the successful conclusion of the system acceptance testing and final system documentation, VDOT will issue final acceptance of the system.



6.0 SCHEDULE OF ITEMS (Reference RFP, Part 1, Section 4.4.6, Page 15 of 34)

Attachment 4.4.6
State Project 0064-007-913, C-501

SCHEDULE OF ITEMS

This Schedule of Items shall identify the total material quantities and costs of each proposed work item, using item codes and units of measure that are consistent with VDOT's list of standard and non-standard item codes. Any work items considered for price adjustments shall be identified. The values and quantities shall be clearly supported by the escrowed pricing documents.

Date: 11/20/2013

VDOT Item Code ¹	Item Description	Fuel (F) or Price (P) Adjustment	Approximate Quantity	Units ¹	Budgeted Cost (\$)
00100	Mobilization		1	LS	15,044.60
00108	G4S Technology Supervision, Engineering, & Stand-alone Office		1	LS	814,820.30
02092	Provide Complete System Design, Includes Geotechnical Investigations		1	LS	528,262.90
00108	Provide QAM Services		1	LS	310,543.30
00108	Provide QC Services		1	LS	9,420.40
59050	Korenix 8+4G-port Managed Ethernet DIN Rail-Switch		29	EA	26,317.40
59050	Korenix 1000Base-LX single-mode transceiver 10Km,		58	EA	7,597.90
59050	Korenix 24VDC/1A Power Supply		29	EA	1,486.60
59050	Korenix 8+4G-port Managed Ethernet DIN Rail-Switch		8	EA	7,260.00
59050	Coming SPH-01P Single Panel Fiber Enclosure		29	EA	1,657.30
59050	Coming CCH-CS12-A9 Fiber CASSETTE 12P LC DPLX		29	EA	11,757.00
59050	Coming Fiber Patch Cable 1F LC LC SM 2M		58	EA	1,303.10
59050	JUNIPER EX4550 Switch 32-PORT 1/10G SFP+		5	EA	61,322.50
59050	JUNIPER 1YR J-CARE NEXTDAY SUPPORT		5	EA	7,330.60
59050	JUNIPER EX4550-VC1-128G, 128G VIRTUAL CHASSIS		5	EA	13,289.70
59050	JUNIPER EX 0.5M PORT VIRTUAL CHASSIS CABLE		5	EA	664.50
59050	JUNIPER 1000BASE-SX GIGABIT ETHERNET SFP		20	EA	6,455.00
59050	JUNIPER 650W AC POWER SUPPLY FOR EX455		5	EA	4,841.30
59050	JUNIPER AC POWER CABLE US 15A/125V NEMA 5-15		5	EA	161.40
59050	JUNIPER EX4550 Switch 32PORT 100M/1G/10G BASET		5	EA	90,812.90
59050	JUNIPER 1YR J-CARE NEXTDAY SUPPORT		5	EA	7,825.00
59050	JUNIPER EX4550-VC1-128G, 128G VIRTUAL CHASSIS		5	EA	13,289.70
59050	JUNIPER EX 0.5M PORT VIRTUAL CHASSIS CABLE		5	EA	664.50
59050	JUNIPER 650W AC POWER SUPPLY FOR EX455		5	EA	4,841.30
59050	JUNIPER AC POWER CABLE US 15A/125V NEMA 5-15		5	EA	161.40
59050	Coming SPH-01P Single Panel Fiber Enclosure		5	EA	285.80
59050	Coming CCH-CS12-A9 Fiber CASSETTE 12P LC DPLX		5	EA	2,027.10
59050	Coming Fiber Patch Cable 1F LC LC SM 2M		20	EA	449.40
59050	Moxa Video Encoder With;H.264 Support		6	EA	5,003.20
59050	Moxa 45W/2A, 24 VDC Power Supply		6	EA	645.50
59050	SPARES: Moxa Video Encoder With;H.264 Support		2	EA	1,667.80
59050	Unshielded CAT6, 6' outdoor rated patch cables		6	EA	110.20
59050	Pelco ES40/ES41 Esprit Series Camera Positioning System		10	EA	33,230.80
59050	Pelco Pole mount adapter for Esprit® systems.		10	EA	590.10
59050	Pelco Transmit control Compatible with NTCIP Camera Control		10	EA	1,676.60
59050	Pelco Remote data port. 24 VAC.		10	EA	1,704.70
59050	Pelco Spectra III™ remote monitor kit cable.		10	EA	655.70
62510	Pelco 4 Amp 24/26/28 VAC output Power Supply		10	EA	1,301.90
62510	Ditek 120V AC Surge Suppressor		10	EA	403.20
62510	Pelco Spare ES40/ES41 Esprit Series Camera Positioning System		2	EA	6,646.20
50902	SES America Type 1: Messenger 6000 Dynamic Message Sign		4	EA	172,490.80
50902	SES America Type 2: Messenger 6000 Dynamic Message Sign		2	EA	80,643.70
50902	SES America Spare Parts Package (1 per each type of sign)		1	EA	7,759.10
51966	SES America Services (Testing, Commissioning)		1	LS	6,745.20
59050	Econolite Microwave Vehicle Detector		1	EA	8,005.50
67260	Econolite Pole Mounted Aluminum Box		1	EA	1,044.20
59050	Econolite Spares Microwave Vehicle Detector		2	EA	16,011.00
59050	Unshielded CAT6, 6' outdoor rated patch cables		1	EA	18.40
59050	Comnet 1000Mbps Media Converter		10	EA	5,537.40
59050	Comnet 1000fx, 1310nm, 15km, LC, 2 Fiber		10	EA	791.10
59050	Fibertronics LC Pigtail 1Piece MM50 10Gb OM3 Fiber Pigtails		20	EA	84.90
59050	Unshielded CAT6, 6' outdoor rated patch cables		10	EA	183.60
59050	Lufft USA RWIS Station-Environmental Station		2	EA	88,218.30
59050	Lufft USA Water Level Sensor - Pressure Transducer		2	EA	9,252.20
51425	Lufft USA 4"x18' Pole with welded base, anchor bolts, and cap		2	EA	3,037.70
59050	Lufft USA SmartView3 Software 1-5 licenses		1	EA	6,075.30
59050	Lufft USA technical support personnel 2 days onsite		1	EA	3,164.30
59050	Unshielded CAT6, 6' outdoor rated patch cables		1	EA	18.40
59060	Vaisala SSI RWS Serial Port Expansion Kit, Solar Radiation Sen., Surface State Sen., Temp Sen., Surface Temp Probe, & Install		1	LS	43,746.70

Attachment 4.4.6
State Project 0064-007-913, C-501

SCHEDULE OF ITEMS

This Schedule of Items shall identify the total material quantities and costs of each proposed work item, using item codes and units of measure that are consistent with VDOT's list of standard and non-standard item codes. Any work items considered for price adjustments shall be identified. The values and quantities shall be clearly supported by the escrowed pricing documents.

Date: 11/20/2013

VDOT Item Code ¹	Item Description	Fuel (F) or Price (P) Adjustment	Approximate Quantity	Units ¹	Budgeted Cost (\$)
59050	Comnet 1000Mbps Media Converter		2	EA	1,107.50
59050	1000fx, 1310nm, 15km, LC, 2 Fiber, MSA Compliant		2	EA	159.30
59050	LC Pigtail 1Piece MM50 10Gb OM3 Fiber Pigtails, Aqua, 3 meters		4	EA	17.00
59050	Unshielded CAT6, 6' outdoor rated patch cables		2	EA	36.80
59050	Comnet 1000Mbps Media Converter		12	EA	6,644.90
59050	Comnet 1000fx, 1310nm, 15km, LC, 2 Fiber		12	EA	949.30
59050	Fibertronics LC Pigtail 1Piece MM50 10Gb OM3 Fiber Pigtails		24	EA	101.80
59050	Unshielded CAT6, 6' outdoor rated patch cables		12	EA	220.30
59050	McCain 332D ITS Comm Hub Cabinet		4	EA	29,819.60
62510	RGA Traffic FXM650-48, 120V, UPS 8hrs backup		29	EA	179,927.20
62510	RGA Traffic FXM650-48, 120V, UPS 8hrs backup		4	EA	9,543.30
51955	Provide Single Lane Closure (Normal Work Hours)		38	DAY	63,346.90
51955	Provide Single Lane Closure (Night Work)		12	DAY	20,004.40
51955	Provide Shoulder Closure		85	DAY	84,393.00
13400	Provide and Install W-Beam Guardrail Mainline		900	LF	16,216.70
13401	Provide and Install W-Beam Guardrail End Treatment		6	EA	18,386.30
13590	Remove and Reset Guardrail Mainline for Construction Activities		550	LF	7,247.30
51160	3/4" x 10' Copper Clad Ground Rod (4 per DMS foundation, 1 per location: CCTV/VDS/RWIS/Transformer)		64	EA	1,533.00
51614	#2 Bare Tinned Copper Wire (10' per rod)		735	LF	912.30
51160	Grounding Cadwell Shots - 3/4"		64	EA	538.10
56021	1" PVC Conduit (for ground, 10' per rod)		640	LF	376.70
56032	2" GRS Conduit (10' per foundation)		350	LF	2,137.10
56036	3" GRS Conduit (10' per foundation)		350	LF	4,544.20
51425	Butterfly DMS Type 1 Structure		4	EA	119,678.90
51425	Butterfly DMS Type 2 Structure		2	EA	46,853.10
51425	60' CCTV Pole, Class 2 Wood		10	EA	9,587.10
51425	20' VDS Break-Away Pole, Steel		1	EA	5,118.20
51425	Excavate, Furnish and Place Foundation for DMS Type 1 Butterfly Type Structure. Install Conduit, Grounding, Anchor Bolts. F/I Concrete & Rebar		4	EA	85,071.50
51425	Excavate, Furnish and Place Foundation for DMS Type 2 Butterfly Type Structure. Install Conduit, Grounding, Anchor Bolts. F/I Concrete & Rebar		2	EA	25,796.80
51248	Furnish and Place Foundation for RWIS Tower		2	EA	2,804.00
51425	Install Butterfly DMS Type 1 Structure		4	EA	13,578.40
51425	Install Butterfly DMS Type 2 Structure		2	EA	3,394.60
51425	Drill and Install 60' CCTV Pole (direct bury, actual 45' above grade), Install Grounding		10	EA	26,047.30
51425	Drill/Place Concrete Footing (VDS), Install 20' Break-away Pole, and Install Grounding		1	EA	2,604.80
51425	Install 30' RWIS Fold Down Tower		2	EA	4,412.80
68042	Furnish and Install VDS Cabinet Concrete Pads and Grounding		1	EA	331.00
68042	Furnish and Install RWIS Cabinet Concrete Pads and Grounding		2	EA	4,412.80
68042	Furnish and Install HUB Cabinet Concrete Pads and Grounding		4	EA	1,323.90
68042	Furnish and Install Transformer Cabinet Concrete Pads and Grounding		20	EA	6,619.10
62530	Lightning Protection for Structures		1	LS	9,315.80
67260	Install Pole Mounted Cabinet		6	EA	6,619.10
56032	Install 2" GRS from Cabinet to Sign (30'/sign)		180	LF	3,832.20
51951	Install DMS (Includes Mount DMS , Install and Terminate Cable/Wiring, Install Equipment and UPS in Cabinet, and Field Test)		6	EA	9,573.00
59050	Install Pole Mounted Cabinet		10	EA	11,031.80
56032	Install 2" GRS from Cabinet to Top of Pole (40'/pole)		400	LF	8,516.00
59050	Install Camera (Includes Mount Camera ,Install and Terminate Cable/Wiring, Install Equipment and UPS in Cabinet, and Field Test)		10	EA	5,983.20
59050	Install Ground Mount Cabinet on Pad		1	EA	1,065.00
56032	Install 2" GRS from Foundation to Top of Pole (20'/pole)		20	LF	425.80
59050	Install VDS (Includes Mount VDS ,Install and Terminate Cable/Wiring, Install Equipment and UPS in Cabinet, and Field Test)		1	EA	598.40

Attachment 4.4.6
State Project 0064-007-913, C-501

SCHEDULE OF ITEMS

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Date: 11/20/2013

VDOT Item Code ¹	Item Description	Fuel (F) or Price (P) Adjustment	Approximate Quantity	Units ¹	Budgeted Cost (\$)
59050	Install Ground Mount Cabinet on Pad		2	EA	2,941.90
59050	Install RWIS (Includes Mount RWIS ,Install and Terminate LV Cable, Install Equipment and UPS In Cabinet, and Field Test)		2	EA	3,677.30
59050	Install Existing RWIS Upgrades (Includes Install and Terminate Cable/Wiring, Install Equipment in Cabinet, and Field Test)		1	EA	1,196.70
59050	Install Fog Sensor Media Converter Upgrade		12	EA	3,589.90
59050	Install Ground Mount Cabinet on Pad		4	EA	4,184.50
59050	Install and Terminate LV Cable, Install Equipment and UPS in Cabinet, and Field Test		4	EA	2,393.30
59050	Disconnect Power/Communications		3	EA	1,046.20
51963	Remove DMS and Turn Over to VDOT		3	EA	1,795.00
58492	Remove Structure and Dispose		3	EA	5,091.90
58492	Remove and Dispose Foundation, Restore Grade		3	EA	5,091.90
56030	2" HDPE, SDR 11		49700	LF	44,966.20
56034	3" UL Rated HDPE SDR 11 (Power)		63900	LF	106,226.80
56038	4" HDPE, SDR 11 Sleeve		1900	LF	5,410.80
56042	8" HDPE, SDR 11 Sleeve		420	LF	5,124.50
55110	#12AWG Green, Solid Copper Tracer Wire		81400	LF	9,272.40
67260	Warning Tape, 6", Yellow		68200	LF	2,158.00
67260	Location Marker, Fiber, Round 60", White w/ Orange Top (every 500')		80	EA	1,800.60
67260	Location Marker w/ Test Station, Fiber, Round 60", White w/ Orange Top (every 2,500')		20	EA	716.60
67260	Location Marker, Power, Round 60", White w/ Red Top (every 500')		122	EA	2,745.90
55588	Pullbox, Polyconcrete, 24"x13"x24" (Power or Comm) (167 power, 113 comm)		280	EA	61,623.00
55588	Splice MH, Polyconcrete, 24"x36"x24" (Comm)		31	EA	15,211.10
51160	5/8" x 8' Copper Clad Ground Rod (comm splice locations)		311	EA	1,957.90
51160	Ground Lug, #12 to 5/8" Ground Rod		311	EA	1,504.30
55110	#12 BS Copper (5'/location)		1680	LF	191.40
56030	Plow - (1) 2" HDPE Conduit		9205	LF	25,386.90
56034	Plow - (1) 3" HDPE Conduit		7590	LF	20,932.80
56042	Plow - (1) 3" & (1) 2"HDPE Conduit		22515	LF	62,095.00
56030	Trench - (1) 2" HDPE Conduit		2455	LF	9,780.00
56030	Trench - (2) 2" HDPE Conduit		55	LF	219.20
56034	Trench - (1) 3" HDPE Conduit		18070	LF	71,985.30
56042	Trench - (1) 3" & (1) 2" HDPE Conduit		4980	LF	19,838.80
56050	Directional Bore - (1) 2" HDPE Conduit		3955	LF	41,206.70
56051	Directional Bore - (1) 3" HDPE Conduit		1495	LF	15,576.30
56042	Directional Bore - (1) 3" & (1) 2" HDPE Conduit		4990	LF	51,990.30
56042	Directional Bore - (1) 4" HDPE Casing w/ (1) 2" HDPE Conduit		1035	LF	21,713.60
56042	Directional Bore - (1) 4" HDPE Casing w/ (1) 3" HDPE Conduit		745	LF	15,629.60
56042	Directional Bore - (1) 10" HDPE Casing w/ (1) 3" & (1) 2" HDPE Conduit		400	LF	11,186.90
67260	Install Pullbox (Power or Comm)		280	EA	85,802.60
09065	Install Splice Manhole (Comm)		31	EA	9,499.60
67260	Install Location Marker (Power or Comm)		202	EA	9,865.70
67260	Install Fiber Test Location Marker		20	EA	1,953.90
62510	Step-up / Step-down Transformer		20	EA	41,201.40
62510	Meter/Disconnect Pedestal		4	EA	511.90
62510	Meter Base		4	EA	1,072.40
62510	NEMA 3R Disconnect Switch		4	EA	1,008.30
62510	Load Center w/ 50A or 70A Breaker		33	EA	10,556.30
56036	3" GRS Conduit		80	LF	1,220.40
55003	3/0 AWG, Copper, Stranded, THHX Insulation		3150	LF	11,634.20
55001	1/0 AWG, Copper, Stranded, THHX Insulation		2100	LF	4,860.50
55020	2 AWG, Copper, Stranded, THHX Insulation		58800	LF	85,168.80
55040	4 AWG, Copper, Stranded, THHX Insulation		81900	LF	79,196.90
55080	8 AWG, Copper, Stranded, THHX Insulation		13650	LF	5,492.10
55100	10 AWG, Copper, Stranded, THHX Insulation		12600	LF	2,548.90
51599	12 AWG, Copper, Stranded, THHX Insulation		18900	LF	2,474.40
51614	350 MCM, Copper, Stranded, THHX Insulation		2100	LF	15,108.40

Attachment 4.4.6
State Project 0064-007-913, C-501

SCHEDULE OF ITEMS

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Date: 11/20/2013

VDOT Item Code ¹	Item Description	Fuel (F) or Price (P) Adjustment	Approximate Quantity	Units ¹	Budgeted Cost (\$)
55020	2 AWG, Copper, Stranded, THHX Insulation		1050	LF	1,520.90
55040	4 AWG, Copper, Stranded, THHX Insulation		1050	LF	1,015.30
55060	6 AWG, Copper, Stranded, THHX Insulation		6300	LF	4,784.30
62510	Install Step-up/Step-down Transformer		20	EA	22,063.60
62510	Install Meter Pedestal, Meter Base, Disconnect, & Load Center		4	EA	4,388.20
51614	Install Primary Power Cables in 3" HDPE, (3) 1/0's through #4		47600	LF	29,172.90
51614	Install Primary Power Cables in 3" HDPE, (3) #8's through #12's		15050	LF	9,223.80
51614	Install Secondary Power Cables in 3" HDPE, (4) #350's		525	LF	321.80
51614	Install Secondary Power Cables in 3" HDPE, (4) #2's through #6's		2100	LF	1,287.10
62510	Terminate Power Cables (service & device cabinets)		53	EA	14,111.30
59071	24 Count FOC, SM, Non-Armored		26400	LF	7,177.30
59071	96 Count FOC, SM, Non-Armored		73900	LF	53,828.90
59050	FOSC 450B Splice Closure, up to 144 FOC (29 laterals, 1 backbone)		30	EA	4,826.80
59050	FOSC B 24 Count Splice Tray		33	EA	539.30
59050	Heat Shrink Protectors, Single Fiber, 62 mm		668	EA	179.50
59071	Install 24 FOC		26400	LF	16,180.00
59071	Install 96 FOC		73900	LF	45,291.50
59050	24 Count Fiber Ring Cut to 96 Count Fiber Backbone (2 of 24 fibers used)		29	EA	8,886.70
59050	24 Count Lateral Termination (2 of 24 fibers used)		29	EA	4,443.40
59050	Terminate 96 Fiber Cable		8	EA	21,573.30
59050	96 Count Butt Splice		1	EA	2,696.70

¹ Use five-digit item codes and units of measure that are consistent with VDOT's list of standard and non-standard item codes (i.e. 00100-Mobilization; 00120-Regular Excavation, etc...).



**7.0 MONTHLY PAYMENT SCHEDULE (Reference RFP, Part 1, Section 4.4.7,
Page 15 of 34)**

VDOT I-64
Monthly Payment Schedule

Month	Draw Total
Jan-2014	\$ 57,937.84
Feb-2014	\$ 95,711.56
Mar-2014	\$ 148,537.85
Apr-2014	\$ 201,364.13
May-2014	\$ 201,364.13
Jun-2014	\$ 345,539.15
Jul-2014	\$ 323,831.10
Aug-2014	\$ 670,068.00
Sep-2014	\$ 700,574.73
Oct-2014	\$ 446,938.40
Nov-2014	\$ 304,930.49
Dec-2014	\$ 280,032.41
Jan-2015	\$ 261,365.42
Feb-2015	\$ 182,849.68
Mar-2015	\$ 141,342.93
Apr-2015	\$ 108,218.34
May-2015	\$ 42,885.28
Jun-2015	\$ 42,885.28
Jul-2015	\$ 42,885.28

Contract Total \$ 4,599,262.00



**8.0 ESCROW PROPOSAL DOCUMENTS (Reference RFP, Part 1, Section 4.4.8,
Page 15 of 34)**

G4S Technology has provided the Escrow Proposal Documents in accordance with Section 11.7 of the RFP in a separate seal envelope.