01.03

THIS AGREEMENT ("Agreement"), dated as of this 7th day of January, 2014, between the City of New York, acting through the Office of Management and Budget (OMB), with offices located at 255 Greenwich Street, New York, New York 10007, and Axon Nexus, with offices located at 174 Glen Street, Glens Falls, New York 12801.

WITNESSETH:

WHEREAS, the General Services Administration ("GSA") has entered into a contract with Contractor contained in Federal Supply Schedule 70 or in another Federal Supply Schedule contract containing information technology ("IT") Special Item Numbers ("SINs") (the "Federal Contract"); and

WHEREAS, the federal E-Government Act of 2002 and related GSA regulations authorize local governments, including cities, to purchase IT goods and services off of the Federal Contract for the use of the local governments in accordance with the terms and provisions of the Federal Contract; and

WHEREAS, the Department has determined that there is a need for the said IT goods and/or services, Contractor has agreed to provide said IT goods and/or services, and the parties have agreed to enter into an Agreement to purchase these IT goods and/or services in accordance with the Federal Contract and in accordance with the terms and conditions set forth below;

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE I. TERM, TERMINATION, AND MODIFICATION OF AGREEMENT

1.1 This Agreement shall commence on March 3, 2014, and terminate on March 2, 2015.

1.2 The Department may terminate this Agreement in writing with 30 days' notice, or at any time with the mutual consent of both parties.

1.3 This Agreement may also be modified through the mutual written consent of both parties.

ARTICLE II. PAYMENT

See pg. 3
$577,228.32 -CIC

2.1 The Department shall pay Contractor an amount not exceeding ~~$652,228.32~~ for the services set forth in this Agreement, in accordance with the cost proposal.

2.2 In accordance with New York City Administrative Code section 6-107.1, if the amount in Article 2.1 exceeds $25,000, Contractor agrees to accept payments under this Agreement from the City by electronic funds transfer. An electronic funds transfer is any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account. Prior to the first payment made under this Agreement, Contractor shall

designate one financial institution or other authorized payment agent and shall complete the "EFT Vendor Payment Enrollment Form" available from the Agency or at http://www.nyc.gov/dof in order to provide the commissioner of the Department of Finance with information necessary for Contractor to receive electronic funds transfer payments through the designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by Contractor shall constitute full satisfaction by the City for the amount of the payment under this Agreement. The account information supplied by Contractor to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

The Department may waive the application of the requirements of this Section to payments on contracts entered into pursuant to Charter section 315. In addition, the commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the Agency may waive the requirements of this Article 2.2 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the best interest of the City.

ARTICLE III. CONFLICTS AND TERMS OF AGREEMENT

During the term of the Agreement, conflicts between the various documents shall be resolved in the following order of precedence, such documents constituting the entire Agreement between the parties:

- Exhibit 1: This Document
- Exhibit 2: Project RFP including Attachments A, B, C and D and Cover Memo
- Exhibit 2: GSA Schedule 70 Contract Number G5-35F-00238M
- Exhibit 4: Contractor's Price and Project Proposal

ARTICLE IV. SCOPE OF SERVICES

Contractor shall provide the following services to OMB:

A Grant Management System (GMS) to aid OMB in administering a Hurricane Sandy Community Development Block Grant–Disaster Recovery (CDBG-DR) of over $3.2 Billion provided through the US Department of Housing and Urban Development (HUD). The system shall include a database, system logic, document management, user interface, workflow and reporting. The system will use the Microsoft Dynamics CRM platform in conjunction with Microsoft SharePoint and Microsoft's 365 Cloud Environment.

Prior to application development, the vendor will work with the City to define, in writing, the technical and business requirements for the data management platform, data import and exchange capabilities (including uploads into HUD's Disaster Recovery Grant Reporting (DRGR) system), structured workflows, and operating reports and dashboards.

In addition to software development, vendor will provide technical system documentation, security, testing, system maintenance and training, and, as needed, user licenses, additional storage and instances. Finally, there is a contingency because this type of software development is notoriously difficult to plan

Project costs by category are:

Analysis & Design	$120,000.00
System Build	$165,000.00
System Testing	$24,000.00
Installation & Deployment	$24,000.00
Training & Documentation	$18,000.00
Post-Launch Break-Fix	$75,000.00
Project Management	$67,200.00
Application Development Subtotal	**$493,200.00**
Annual Licenses (up to 100), as needed	$70,032.00
Additional Storage (100GB), if needed	$10,764.00
Additional Instances (2), if needed	$3,232.32
Annual not-to-exceed Costs	**$84,028.32**
Contingency	~~$75,000.00~~ e DISALLOWED BY NYC comptroller.
TOTAL (incl potential annual items & contingency)	~~$652,228.32~~ $577,228.32 OK

At least two consultants each will be dedicated to the Analysis and Design and System Build functions. The contingency funding will be available only at the direction of OMB and only with OMB's prior approval for unanticipated changes in scope.

ARTICLE V. COMPLIANCE WITH LOCAL LAWS

5.1 Pursuant to Local Law 34 of 2007, Contractor shall complete the Doing Business Data Form attached hereto as Attachment A and return it to the Department within 10 days of execution of this Agreement if Contractor is not currently included in the New York City Doing Business Database.

5.2. In accordance with Local Laws 30 and 33 of 2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code, respectively,

5.2.1. Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Agreement to (i) the

Commissioner of the Department of Investigation, (ii) a member of the New York City Council, the Public Advocate, or the Comptroller, or (iii) the City Chief Procurement Officer, ACCO, Agency head, or Commissioner.

5.2.2. If any of Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 5.2.1 of this Agreement, he or she shall be entitled to bring a cause of action against Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (i) an injunction to restrain continued retaliation, (ii) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (iii) reinstatement of full fringe benefits and seniority rights, (iv) payment of two times back pay, plus interest, and (v) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

5.2.3 Contractor shall post a notice provided by the City (Attachment B) in a prominent and accessible place on any site where work pursuant to the Agreement is performed that contains information about:

5.2.3.1 how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the Agreement; and

5.2.3.2 the rights and remedies afforded to its employees under New York City Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Agreement.

5.2.4 For the purposes of this Article, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

5.2.5 This Article is applicable to all of Contractor's subcontractors having subcontracts with a value in excess of $100,000; accordingly, Contractor shall include this rider in all subcontracts with a value a value in excess of $100,000.

5.3 Article 5.2 is not applicable to this Agreement if it is valued at $100,000 or less. Articles 5.2.1, 5.2.2, 5.2.4, and 5.2.5 are not applicable to this Agreement if it was solicited pursuant to a finding of an emergency. Article 5.2.3 is neither applicable to this Agreement if it was solicited prior to October 18, 2012 nor if it is a renewal of a contract executed prior to October 18, 2012.

ARTICLE VI. COMMERCIAL GENERAL LIABILITY INSURANCE [for use if Contractor will do work on-site]

6.1 Contractor shall maintain Commercial General Liability Insurance covering Contractor as Named Insured and the City as an Additional Insured in the amount of at least $1,000,000 per occurrence and an aggregate limit of at least $2,000,000. Such insurance shall protect the City and Contractor from claims for property damage and/or bodily injury, including death that may arise from any of the operations under this Agreement. Coverage under this insurance shall be at least as broad as that provided by the most recently issued Insurance Services Office ("ISO") Form CG 0001. There is no obligation that ISO Form CG 0001 itself be used, provided that Contractor can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.

6.2 Such Commercial General Liability Insurance shall name the City, together with its officials and employees, as an Additional Insured with coverage at least as broad as the most recently issued ISO Form CG 2010. There is no obligation that ISO Form CG 2010 itself be used, provided that Contractor can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form

6.3 All required insurance policies shall be maintained with companies that are authorized to issue the policy and have an A.M. Best rating of at least A- / "VII" or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the City Law Department.

6.4 All insurance policies shall be primary (and non-contributing) to any insurance or self-insurance maintained by the City.

6.5 Certificates of Insurance or certified copies of policies for insurance required in this Article must be submitted to and accepted by the Department prior to or upon execution of this Agreement. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form contained Attachment C or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier.

6.6 Contractor shall provide the City with a copy of any policy required under this Article upon the demand for such policy by the Department or the New York City Law Department.

APPENDIX B

NOTICE

THIS PACKAGE CONTAINS SUPPLEMENTARY GENERAL CONDITIONS FOR USE WITH PROCUREMENT CONTRACTS AND SUBRECIPIENT AGREEMENTS WHICH PROVIDE FOR AN ELIGIBLE ACTIVITY FUNDED IN WHOLE OR IN PART UNDER TITLE I OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974 (P.L. 93-383) AS AMENDED. IT MUST BE ANNEXED TO ALL SUCH CONTRACTS, AND EXPRESSLY MADE A PART OF, AND INCORPORATED BY REFERENCE INTO THOSE CONTRACTS.

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ARTICLE 1

DEFINITIONS

As used in this Contract:

(a) "Act" means Title 1 of the Housing and Community Development Act of 1974 (P.L. 93-383) as amended.

(b) "Agency" and/or "Recipient" means the entity, or entities, executing this Agreement on behalf of the City of New York.

(c) "City" means the City of New York.

(d) "Construction" means the building, rehabilitation, alteration, conversion, extension, demolition, painting or repair of any improvement to real property.

(e) "Contractor" and/or "Subrecipient" means the entity or entities executing this Agreement, other than the Agency.

(f) "Grant" means Community Development Block Grant Program funds provided to the Contractor through the City of New York and by the Federal Department of Housing and Urban Development.

(g) "HUD" means the Secretary of Housing and Urban Development or a person authorized to act on his or her behalf.

(h) "Program" means the New York City Community Development Block Grant Program approved by HUD as the same may from time to time be amended.

(i) "Subcontractor" means any person, firm or corporation, other than employees of the Contractor, or another Subcontractor who is engaged by the Contractor to furnish labor or labor and materials at the site of the work performed under this agreement.

ARTICLE 2

FEDERAL CONDITIONS

This Agreement is subject to:

(a) Title 1 of the Housing and Community Development Act of 1974 (P.L. 93-383) as amended (The Act) and all rules, regulations and requirements now issued or hereafter issued pursuant to the Act; the Agreement may be suspended and/or terminated without liability to the City if the Grant to the City pursuant to the Act is suspended or terminated, and unless and until the City or Agency receives Community Development funds in an amount that is deemed sufficient to enable it to fund this Agreement, the City or Agency is under no obligation to make any payments to the Contractor. In this regard, the Agency is under no obligation to make any payments to the Contractor, and shall not make any such payment, and the Contractor shall not commence performance, until:

(i) the Agency has received from the City's Office of Management and Budget instructions to proceed, evidencing compliance with the National Environmental Policy Act, as

amended, and with regulations of the U.S. Department of Housing and Urban Development, related thereto, found at 24 CFR Part 58, and;

(ii) the Contractor has been notified of such instructions by the Agency. Furthermore, the Contractor and the City mutually agree that the Contractor shall not advance any funds, from any source without limitation, to pay for costs intended to be paid for under this Agreement prior to the receipt and notification described in this paragraph (a), and the City shall not reimburse the Contractor for any costs incurred in violation of this provision.

(b) Title VIII of the Civil Rights Act of 1968 (P.L. 90-284; 42 U.S.C. §§ 3602-3620), as amended, which prohibits discrimination in the sale or rental of housing and in the provision of brokerage services based on race, color, religion, sex, national origin, disability, or familial status, and which requires affirmative action in the furtherance of Fair Housing objectives.

(c) Executive Order 11063, as amended by Executive Order 12259, pursuant to regulations issued at 24 CFR Part 107 which prohibits discrimination on the basis of race, color, religion, sex or national origin and requires equal opportunity in housing constructed, operated or provided with federal funds.

(d) Title VI of the Civil Rights Act of 1964 (P.L. 88-352; 42 U.S.C. §§ 2000d *et seq.*) and implementing regulations in 24 CFR Part 1, which states that no person shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any Program or activity made possible by, or resulting from, this agreement. The provisions of this Article 2(d) shall be incorporated in and made a part of all subcontracts executed in connection with this agreement.

(e) Section 3 of the Housing and Urban Development Act of 1968 (P.L. 90-448). Pursuant to 24 CFR § 135.38, the Contractor agrees to the following:

A. The work to be performed under this Agreement is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701 u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this Agreement agree to comply with HUD'S regulations in 24 CFR Part 135, which implement Section 3. As evidenced by their execution of this Agreement, the parties to this Agreement certify that they are under no contractual or other impediments that would prevent them from complying with the Part 135 regulations.

C. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the Subcontractor is in violation of the regulations in 24 CFR Part 135. The Contractor will not subcontract with any Subcontractor where the Contractor has notice or knowledge that the Subcontractor has been found in violation of the regulations in 24 CFR Part 135.

E. The Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the Contractor is selected but before the Agreement is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR Part 135.

F. Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this Agreement for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with Section 3 covered Indian Housing Assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this Agreement. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this Agreement that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

(f) Lead-Based Paint Poison Prevention provisions found in 24 CFR § 570.608, the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4821-4846), the Residential Lead Based Paint Hazard Reduction Act of 1992 (U.S.C. §§ 4851-4856, and 24 CFR Part 35, subparts A, B, J, K, and R. This Article 2(f) is to be included in all subcontracts, for work in connection with this Agreement, which relate to residential structures.

(g) Pursuant to the provisions in 24 CFR § 570.605, Section 202(a) of the Flood Disaster Protection Act of 1973 (42 U.S.C. § 4106), and the regulations in 44 CFR Parts 59-79 apply to this Agreement.

(h) Consistent with 24 CFR § 570.614, the Contractor warrants that all services, programs, and/or Construction (including design and alteration) under this Agreement shall be performed in accordance with all federal, state and local laws and regulations regarding accessibility standards for persons with disabilities including, but not limited to, the following: Section 504 of the Rehabilitation Act, the Architectural Barriers Act of 1968 (42 U.S.C. § 4151-4157), the Uniform Federal Accessibility Standards (Appendix A to 24 CFR Part 40 and Appendix A to 41 CFR Part 101-19, subpart 101-19.6), and the Americans with Disabilities Act (42 U.S.C. § 12131; 47 U.S.C. §§ 155, 201, 218, and 225).

(i) The Historic Preservation Act of 1966 (P.L. 89-665; 16 U.S.C. §§ 470 *et seq.*), the Archeological and Historic Preservation Act of 1974 (P.L. 93-291; 16 U.S.C. §§ 469-469c), Executive Order 11593 and regulations at 36 CFR Part 800. In general, this requires concurrence from the State Historic Preservation Officer for all rehabilitation and demolition of historic properties that are fifty years old or older or that are included on a Federal, state, or local historic property list.

(j) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. §§ 4601-4655) and regulations at 49 CFR Part 24.

(k) Uniform Administrative Requirements.

(i) Subrecipients that are governmental entities, including those that are public agencies or authorities, shall comply with the following:

a. Federal Office of Management and Budget (OMB) circular A-87, Cost Principles for State, Local and Indian Tribal Governments;

b. Federal Office of Management and Budget (OMB) circular A-133, Audits of States, Local Governments, and Non-Profit Organizations (rev. 6/27/03);

c. The sections of 24 CFR Part 85, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, that are set forth in 24 CFR § 570.502(a).

(ii) Subrecipients, except those which are governmental entities, public agencies or authorities, shall comply with the following:

a. Federal Office of Management and Budget (OMB) circular A-122, Cost Principles for Non-Profit Organizations;

b. In the event that the Contractor is an educational institution, Federal Office of Management and Budget (OMB) circular A-21, Cost Principles for Educational Institutions;

c. The sections of 24 CFR Part 84, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and other Non-Profit Organizations, that are set forth in 24 CFR § 570.502(b). The provisions of 24 CFR Part 84 implement OMB circular A-110;

d. Federal Office of Management and Budget (OMB) Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations (rev. 6/27/03).

e. Execution of a subrecipient agreement.

(iii) Contractors shall comply with the provisions of 24 CFR Part 85 and 48 CFR Part 31, as applicable.

(l) The Contractor agrees that if any income is generated from the Community Development Block Grant Program funded activities, Contractor shall return such income to the City's Community Development Block Grant Program unless expressly authorized by the City. Such funds are subject to all applicable requirements governing the use of Community Development Block Grant funds, including 24 CFR § 570.503(b)(3), which provides that, at the end of the program year, the City may require remittance of all or part of any program income balances (including investments thereof) held by the Subrecipient (except those needed for immediate cash needs, cash balances of a revolving loan fund, cash balances from a lump sum drawdown, or cash or investments held for section 108 security needs).

(m) If the Contractor is, or may be deemed to be, a religious or denominational institution or organization operated for religious purposes which is supervised or controlled by or in connection with a religious or denominational institution or organization, the Contractor agrees that in connection with services to be provided under this Agreement:

(i) it shall not discriminate against any employee or applicant for employment on the basis of religion and shall not limit employment or give preference in employment to persons on the basis of religion.

(ii) it shall not discriminate against any person applying for such public services on the basis of religion or religious belief and shall not limit such services or give preference to persons on the basis of religion or religious belief.

(iii) it shall provide no religious instruction or counseling, conduct no religious worship or services, engage in no religious proselytizing, and exert no other religious influence in the provision of such public services.

(iv) it shall not use CDBG funds for the acquisition, construction, or rehabilitation of structures to the extent that those structures are used for inherently religious activities. CDBG funds may be used for the acquisition, construction, or rehabilitation of structures only to the extent that those structures are used for conducting eligible activities under 24 CFR Part 570. Where a structure is used for both eligible and inherently religious activities, CDBG funds may not exceed the cost of those portions of the acquisition, construction, or rehabilitation that are attributable to eligible activities in accordance with the cost accounting requirements applicable to CDBG funds in 24 CFR Part 570. Sanctuaries, chapels, or other rooms that a CDBG-funded religious congregation uses as its principal place of worship, however, are ineligible for CDBG-funded improvements. Disposition of real property is subject to 24 CFR § 570.200(j)(5).

(n) Executive Order 11246, as amended, and the implementing regulations contained in 41 CFR Chapter 60, as amended, prohibit discrimination in employment due to race, color, religion, sex or national origin during the performance of all Federal or federally assisted contracts.

(i) During the performance of this Agreement the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employ-ment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will

receive consideration for employment without regard to race, color, sex, religion or national origin.

c. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other Agreement or understanding, a notice to be provided by the Agency contracting officer, advising the labor union or worker's representatives of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, as amended, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations and relevant orders of the Secretary of Labor.

e. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, as amended, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the Department and the Secretary of Labor for purposes of investigations to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Agreement or with any of such rules, regulations, or orders, this Agreement may be cancelled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted Construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, as amended, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, as amended, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

g. The Contractor will include the provisions of this Article 2(n) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, as amended, so that provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for non-compliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

(o) The Contractor agrees that if it enters a Construction subcontract as part of its Agreement with the City, and this Construction subcontract is for an amount more that $10,000, the notice found at FEDERAL EXHIBIT 1 of this Agreement must be included in that Construction subcontract.

ARTICLE 3 ADDITIONAL FEDERAL CONDITIONS FOR CONSTRUCTION

In the event that this Agreement involves Construction work, design for Construction or Construction services, all such work or services performed or administered by the Contractor shall be subject to the following requirements in addition to those set forth in Article 2.

(a) Federal Labor Standards: The Contractor will comply with the following:

(i) The Davis-Bacon Act (40 U.S.C. §§ 3141 *et seq.*): In Construction contracts involving an excess of $2000, unless exclusively in connection with the rehabilitation of residential property containing fewer than 8 units, all laborers and mechanics must be paid at a rate not less than those determined by the Secretary of Labor to be prevailing for the City, which rates are to be provided by the Agency. These wage rates are a federally mandated minimum only, and will be superseded by any State or City requirement mandating higher wage rates. The Contractor also agrees to comply with Department of Labor Regulations pursuant to the Davis-Bacon Act found in 29 CFR Parts 1, 3, 5 and 7 which enforce statutory labor standards provisions.

(ii) Sections 103 and 107 of the Contract Work Hours and Safe Standards Act (40 U.S.C. §§ 3701 *et seq.*), which provides that no laborer or mechanic shall be required or permitted to work more than eight hours in a calendar day or in excess of forty hours in any workweek, unless such laborer or mechanic is paid at an overtime rate of 1½ times his/her basic rate of pay for all hours worked in excess of these limits, under any Construction Agreement costing in excess of $2000. In the event of a violation of this provision, the Contractor shall not only be liable to any affected employee for his/her unpaid wages, but shall be additionally liable to the United States for liquidated damages.

(iii) The Copeland "Anti-Kickback" Act (18 U.S.C. § 874), as supplemented by the regulations contained in 29 CFR Part 3, requiring that all laborers and mechanics shall be paid unconditionally and not less often than once a week, and prohibiting all but "permissible" salary deductions.

(iv) The more complete detailed statement of Federal Labor Standards annexed hereto as FEDERAL EXHIBIT 2.

(v) The provisions of Article 3(a) of this Agreement shall be included in all subcontracts for work in connection with this Agreement.

(b) Executive Order 11246, as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR chapter 60) for Construction contracts or subcontracts in excess of $10,000.

Standard Federal Equal Employment Opportunity Construction Contract Specifications for Contracts and Subcontracts in Excess of $10,000.

1. As used in these specifications:
   a. "Covered area" means the geographical area described in the solicitation from which this Agreement resulted;
   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

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

d. "Minority" includes:

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

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

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

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

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

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

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this Agreement resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each Construction trade in which it has employees in the covered area. Covered Construction Contractors performing Construction work in geographical areas where they do not have a Federal or federally assisted Construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either

minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

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

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
   a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each Construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
   b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
   c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
   d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
   e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
   f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company

EEO policy on bulletin boards accessible to all employees at each location where Construction work is performed.

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

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

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

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

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

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

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

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

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

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

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications

provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the Program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

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

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246 or suspended or is otherwise excluded from or ineligible for participation in federal assistance programs.

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

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

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

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

ARTICLE 4

NONDISCRIMINATION

(a) The Contractor shall not, in any Program or activity receiving funds under this Agreement, discriminate against any person on the grounds of race, color, national origin, religion, sex, age, or disability. The Contractor agrees to comply with provisions of 24 CFR Part 6, 8, and 146.

ARTICLE 5

RECORDS AND AUDITS

(a) Records shall be maintained in accordance with requirements prescribed by HUD and/or the City with respect to all matters covered by this Agreement and retained for at least three years after the City makes final payments and all other pending matters concerning this Agreement are closed.

(b) At such times on such forms as HUD and/or the City may require, there shall be furnished to HUD and/or the City such statements, records, reports, data and information, as HUD and/or the City may request pertaining to matters covered by this Agreement. At a minimum, such forms will include the following:

(i) Annual Data Collection Report forms for the purpose of including specific Program description, accomplishment, expenditure and beneficiary information in the City's Annual Performance Report.

(ii) Annual Property Register forms for the purpose of tracking the use of CDBG purchased real property.

(c) At any time during normal business hours and as often as the City, the Agency, HUD, Inspector General, U.S. General Accounting Office, and/or the Comptroller General of the United States may deem necessary, the Contractor shall make available for examination to the City, HUD, Inspector General, U.S. General Accounting Office and/or representatives of the Comptroller General all of its books, accounts, records, reports, files, and other papers or property with respect to all matters covered by this Agreement and shall permit the City, HUD and/or representatives of the Comptroller General and the U.S. General Accounting Office to audit, examine, make excerpts of, and make transcriptions from such books, accounts, records, reports, files, and other papers or property and to make audits of all contracts, invoices, materials, payrolls, records or personnel, conditions of employment and other data relating to all matters covered by this Agreement.

ARTICLE 6

UNEARNED PAYMENTS

Unearned payments under this Agreement may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by HUD at any time, or if the Grant to the City under the Act is suspended or terminated. Unearned payments received by the Contractor will be returned to the City. All interest on funds advanced to the Contractor will be returned to the City.

ARTICLE 7

DISBURSEMENT RESTRICTIONS

No money under this Agreement shall be disbursed by the Agency to any Contractor except pursuant to a written contract which incorporates the applicable Supplementary General Conditions and unless the Contractor is in compliance with HUD requirements with regard to accounting and fiscal matters, to the extent they are applicable, and provided that the Agency has completed HUD requirements, including but not limited to environmental certifications pursuant to 24 CFR 58.

ARTICLE 8

DOCUMENTATION OF COSTS

All costs shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders or other accounting documents, pertaining in whole or in part to the Contract, shall be clearly identified and readily accessible.

ARTICLE 9

BONDING

The Agency must receive a statement from the Contractor's chief fiscal officer or their insurer assuring that all persons handling funds received or disbursed under this Agreement are covered by fidelity insurance in an amount and manner consistent with the coverage deemed necessary by the City of New York for its own employees. If the bond is cancelled or coverage is substantially reduced, the Contractor shall promptly notify the Agency of this fact in every case not later than 48 hours. In such event, the Agency shall not disburse any more funds to the Contractor until it has received assurance that adequate coverage has subsequently been obtained.

ARTICLE 10

ACCOUNTING SYSTEM

The Contractor shall submit to the Agency a detailed description of its accounting, reporting and internal control systems, including but not limited to the procedures for cash receipts, cash disbursements, payrolls, personnel policies, fixed petty cash controls and other systems which are necessary under the circumstances. The Agency shall evaluate and document all systems and only upon acceptance and approval of the accounting, reporting and internal control systems by the Agency, shall funds be disbursed to the Contractor, other provisions of the Agreement notwithstanding.

ARTICLE 11

COPYRIGHTS

(a) Any reports, documents, data, photographs, deliverables, and/or other materials produced pursuant to this Agreement and any and all drafts and/or other preliminary materials in any format related to such items produced pursuant to this Agreement, shall upon their creation become the exclusive property of the City.

(b) Any reports, documents, data, photographs, deliverables, and/or other materials, including software, produced pursuant to this Agreement ("Copyrightable Materials"), shall be considered "work-made-for-hire" within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C. § 101, and the City shall be the copyright owner thereof and of all aspects, elements and components thereof in which copyright protection might subsist. To the extent that the Copyrightable Materials do not qualify as "work-

made-for-hire," the Contractor hereby irrevocably transfers, assigns and conveys exclusive copyright ownership in and to the Copyrightable Materials to the City, free and clear of any liens, claims, or other encumbrances. The Contractor shall retain no copyright or intellectual property interest in the Copyrightable Materials. The Copyrightable Materials shall be used by the Contractor for no purpose other than in the performance of this Agreement without the prior permission of the City. The Department may grant the contractor a license to use the Copyrightable Materials on such terms as determined by the Department and set forth in the license.

(c) The Contractor acknowledges that the City may, in its sole discretion, register copyright in the Copyrightable Materials with the U.S. Copyright Office or any other government agency authorized to grant copyright registrations. The Contractor shall cooperate in this effort, and agrees to provide any further documentation necessary to accomplish this.

(d) The Contractor represents and warrants that the Copyrightable Materials: (i) are wholly original material not published elsewhere (except for materials that is in the public domain); (ii) do not violate any copyright law; (iii) do not constitute defamation or invasion of the right of privacy or publicity; and (iv) are not infringement, of any kind, of the rights of any third party. To the extent that the Copyrightable Materials incorporate any non-original material, the Contractor has obtained all necessary permissions and clearances in writing, for the use of such non-original material under this Agreement, copies of which shall be provided to the city upon execution of this Agreement.

(e) HUD reserves a royalty-free, nonexclusive, perpetual and irrevocable license to reproduce, publish, display, perform, distribute, or otherwise use, and to authorize others to use, for Federal or State government purposes, the copyright in any Copyrightable Materials developed under or the rights to which are purchased under this Agreement.

(f) If the Contractor publishes a work dealing with any aspect of performance under this Agreement, or with the results of such performance, the City shall have a royalty-free, non-exclusive irrevocable license to reproduce, publish or otherwise use such work for City governmental purposes.

ARTICLE 12

PATENTS

The Contractor shall promptly and fully report to the City any discovery or invention arising out of or developed in the course of performance of this Agreement. In addition, any discovery or invention arising out of or developed in the course of work aided by this Agreement shall be promptly and fully reported to HUD for determination by HUD as to whether patent protection on such invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered, in order to protect the public interest.

ARTICLE 13

SUBCONTRACTORS

(a) The provisions of this Agreement shall apply to Subcontractors and their officers, agents and employees in all respects as if they were employees of the Contractor. The Contractor shall not be discharged from its obligations and liabilities, but shall be liable for all acts and negligence of Subcontractors, and their officers, agents and employees, as if they were employees of the Contractor.

(b) Employees of the Subcontractor shall be subject to the same provisions as employees of the Contractor.

(c) The services furnished by Subcontractors shall be subject to the provisions hereof as if furnished directly by the Contractor, and the Contractor shall remain responsible therefor.

ARTICLE 14

SUSPENSION AND TERMINATION

(a) Where the Contractor fails to perform the work satisfactorily as enumerated in the part of this Agreement known as the scope of work, the City may withhold payment, in addition to any other remedy provided for by this Agreement. Where there is failure to comply with the Agreement terms, the City reserves the right to terminate the Agreement. The City further reserves the right to terminate the Agreement for convenience.

(b) The Contractor certifies that neither it nor its principals is currently in a state of debarment, suspension or other ineligible status as a result of prior performance, failure, fraud, or violation of City laws. The Contractor further certifies that neither it nor its principals is debarred, suspended, otherwise excluded from or ineligible for participation in Federal assistance programs. The City reserves the right to terminate this Agreement if knowledge of debarment, suspension or other ineligibility has been withheld by the Contractor.

(c) If this Agreement is between the City and a subrecipient, the City may suspend or terminate the Agreement if Subrecipient materially fails to comply with any terms of this Agreement, pursuant to 24 CFR § 85.43, and for convenience, pursuant to 24 CFR § 85.44.

ARTICLE 15

REVERSION OF ASSETS

(a) At the Contract's expiration, the Contractor shall transfer to the City all Community Development funds on hand at the time of expiration and any accounts receivable attributable to the use of Community Development funds.

(b) Any real property under the City's or the Contractor's control that was acquired in whole or in part with Community Development funds in excess of $25,000 will be used to meet the national objectives in Section 570.208 or disposed in a manner which results in the Program being reimbursed in the amount of the current fair market value of the property less any portion thereof attributable to expenditures of non-Community Development funds for acquisition of, or improvements to, the property.

(c) Any real property under the City's control that was improved in whole or in part with Community Development funds in excess of $25,000 will be used to meet the national objectives in Section 570.208 for a period equal to the life of those improvements. The term shall be determined by the Office of Management and Budget's Office of Community Development. If the City decides to dispose of or change the use of that property so that it no longer continues to meet a national objective, the Program shall be reimbursed in the amount of the current replacement cost of those improvements, divided by the number of years of the life of the improvements, multiplied by the number of years that remain in the life of the improvements.

(d) Any real property under the Contractor's control that was improved in whole or in part with Community Development funds in excess of $25,000 will be used to meet the national objectives in Section 570.208 for a period of five years after the date of completion of those improvements or disposed in a manner which results in the Program being reimbursed in the amount of the current replacement cost of those improvements.

(e) Title to all equipment in excess of $150 purchased or leased pursuant to this Agreement with Community Development funds or furnished by the City shall vest in the City and the same shall be conspicuously labeled as such.

ARTICLE 16

SMALL FIRMS, M/WBE FIRMS, AND LABOR SURPLUS AREA FIRMS

The Contractor shall take the following affirmative steps in the letting of subcontracts, if subcontracts are to be let, in order to ensure that minority firms, women's business enterprises, and labor surplus area firms are used when possible:

(a) Placing qualified small minority businesses and women's business enterprises on solicitation lists;

(b) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(c) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(d) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and

(e) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.

ARTICLE 17

ENVIRONMENTAL PROTECTION

For agreements, subcontracts, and subgrants of amounts in excess of $100,000, the Contractor shall comply with all applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. § 7401, Federal Water Pollution control Act (33 U.S.C. §§ 1251, *et seq.*) Section 508 of the Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Agency regulations (provisions of 40 CFR Part 50 and 2 CFR Part 1532 related to the Clean Air Act and Clean Water Act).

ARTICLE 18

ENERGY EFFICIENCY

The Contractor shall comply with mandatory standards and policies relating to energy efficiency that are contained in the New York State energy conservation plan issued in compliance with the Energy Policy Conservation Act (Pub. L. 94-163).

ARTICLE 19

(a) Hatch Act: The Subrecipient agrees that no funds provided, nor personnel employed under this Agreement, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V of the U.S.C.

(b) Lobbying: The Subrecipient agrees that no funds provided will be used by it or its subcontractors in violation of 24 CFR § 87.100.

(c) Conflict of Interest: The Subrecipient agrees to abide by the provisions of 24 CFR §§ 84.42, 85.36, and 570.611.

ARTICLE 20

BINDING AUTHORITY

If any provision in this Appendix B directly conflicts with any other provision in the Contract, the provision in Appendix B shall be controlling.

Federal Exhibits 1 and 2, are attached to, and made a part of this Appendix B.

Any subcontracts entered into pursuant to this Agreement shall incorporate the following City of New York provisions by reference, which shall be binding on every Subcontractor:

- Investigations;
- Executive Order 50; and
- Conflicts of Interest

FED. EXHIBIT 1

NOTICE TO BIDDERS

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246, as amended) FOR ALL CD FUNDED CONSTRUCTION CONTRACTS AND SUB-CONTRACTS IN EXCESS OF $10,000.

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

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

Goals and Timetables for Minorities

Trade	Goal (percent)
Electricians	9.0 to 10.2
Carpenters	27.6 to 32.0
Steamfitters	12.2 to 13.5
Metal Lathers	24.6 to 25.6
Painters	28.6 to 26.0
Operating Engineers	25.6 to 26.0
Plumbers	12.0 to 14.5
Iron Workers (structural)	25.9 to 32.0
Elevator Constructors	5.5 to 6.5
Bricklayers	13.4 to 15.5
Asbestos Workers	22.8 to 28.0
Roofers	6.3 to 7.5
Iron Workers (ornamental)	22.4 to 23.0
Cement Masons	23.0 to 27.0
Glazers	16.0 to 20.0
Plasterers	15.8 to 18.0
Teamsters	22.0 to 22.5
Boilermakers	13.0 to 15.5
All Other	16.4 to 17.5

Goals and Timetables for Women

From April 1, 1980 until the present	6.9

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

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority

and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall made a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any Construction subcontract in excess of $10,000 at any tier for Construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the Subcontractor; employer identification number of the Subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Agreement, the "covered area" is the City of New York.

HURRICANE SANDY CDBG-DR APPENDIX

NOTICE

THIS DOCUMENT CONTAINS CONDITIONS FOR USE WITH PROCUREMENT CONTRACTS AND SUBRECIPIENT AGREEMENTS, ALONG WITH APPENDIX B, WHICH PROVIDE FOR AN ELIGIBLE ACTIVITY FUNDED IN WHOLE OR IN PART BY CDBG-DR FUNDS APPROPRIATED PURSUANT TO THE DISASTER RELIEF APPROPRIATIONS ACT OF 2013 (P.L. 113-2). IT MUST BE ANNEXED TO ALL SUCH CONTRACTS ALONG WITH A LINK TO HUD DOCKET NO. FR056960-N-01 (MAR. 5, 2013) AND APPENDIX B, AND EXPRESSLY MADE A PART OF, AND INCORPORATED BY REFERENCE INTO THOSE CONTRACTS.

ARTICLE 1. DEFINITIONS

The definitions in Article 1 of Appendix B apply to this Hurricane Sandy CDBG-DR Appendix.

ARTICLE 2. ADMINISTRATIVE CAP

Pursuant to the Disaster Relief Appropriations Act of 2013 (P.L. 113-2) and Section VI(A)(10)(b) of HUD Docket No. FR056960-N-01, attached, a Subrecipient shall not be reimbursed for general administration costs that exceed five percent.

ARTICLE 3. FLOOD INSURANCE

Subrecipients shall implement procedures and mechanisms to ensure that assisted property owners comply with all flood insurance requirements set forth in Section VI(B)(31) of HUD Docket No. FR056960-N-01.

ARTICLE 4. CIVIL RIGHTS REQUIREMENTS

Subrecipients shall comply with all civil-rights related requirements, pursuant to 24 CFR § 570.503(b)(5).

ARTICLE 5. RELIGIOUS ORGANIZATIONS

In addition to the provisions in Article 2(m)(iv) of Appendix B, which cover a religious or denominational institution or organization operated for religious purposes which is supervised or controlled by or in connection with a religious or denominational institution or organization, payment may be authorized for a portion of eligible rehabilitation or construction costs attributable to the non-religious use of a facility that is not used exclusively for religious purposes, pursuant to Section VI(A)(4)(c) of HUD Docket No. FR056960-N-01.

ARTICLE 6. QUARTERLY REPORTS

The reports required by Article (5)(b) of Appendix B shall be provided by the Contractor or Subrecipient to the City on a quarterly basis, pursuant to Section VI(A)(2)(e) of HUD Docket No. FR056960-N-01.

ARTICLE 7. CONSTRUCTION STANDARDS

The Contractor or Subrecipient shall comply with the construction standards concerning energy efficiency set forth in section VI(A)(1)(a)(5) of HUD Docket No. FR-5696-N-01.

ARTICLE 8. PROGRAM INCOME

To the extent deemed necessary by the City, the Program Income provisions set forth in Article 2(1) of Appendix B may be waived and instead the City may apply the alternative program requirements set forth in Section VI(A)(17)(a)-(b) of Docket No. FR056960-N-01, which concern the definition of program income. In such event, the alternative requirements shall be set forth in the Subrecipient Agreement.

ARTICLE 9. PERFORMANCE REQUIREMENTS AND LIQUIDATED DAMAGES

Contractor and or Subrecipient shall be subject to the performance requirements and liquidated damages set forth in the Agreement.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

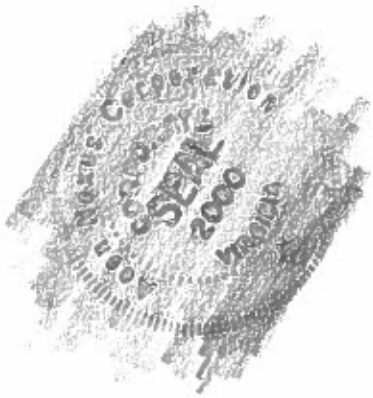
[Docket No. FR-5696-N-01]

Allocations, Common Application, Waivers, and Alternative Requirements for Grantees Receiving Community Development Block Grant (CDBG) Disaster Recovery Funds in Response to Hurricane Sandy

Available On-line at
http://portal.hud.gov/hudportal/documents/huddoc?id=CDBG-FR_Sandy_Notice.PDF

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates appearing by their respective signatures.

Corporate Contractor
Affix Corporate Seal:



AEON NEXUS CORPORATION
CONTRACTOR

BY: Omar Usmani
Name: Omar Usmani

SIGNATURE: _____

TITLE: Executive Partner

54-1983534
FED. EMPLOYER I.D. NO. OR SOC. SEC. NO.

DATE: January 10, 2014

THE CITY OF NEW YORK
OFFICE OF MANAGEMENT AND BUDGET

BY: _____
Dean Fuleihan

TITLE: Director

DATE: 2/18/14

Approved as to Form
Certified as to Legal Authority

Next page
Acting Corporation Counsel

STATE OF NEW YORK)
)ss.:
COUNTY OF UGW YORK)

On this 18th day of February, 2014, before me personally came Dean Fuleihan, personally known to me or proved to me on the basis of satisfactory evidence to be B Director of ~~the~~ Management + Budget of the **CITY OF NEW YORK**, the person described in and who is duly authorized to execute the foregoing instrument on behalf of the Commissioner, and s/he acknowledged to me that s/he executed the same for the purpose therein mentioned.

NOTARY PUBLIC FOR THE STATE OF

Prescott D. Ulrey
Notary Public, State of New York
No. 31-02UL5049524
Qualified in New York County
Commission Expires: 4-26-~~2010~~ 2014

STATE OF New York)
)ss.:
COUNTY OF Warren)

On this 10th day of January, 2014, before me personally came Omar Usmani, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument, who, being by me duly sworn, did depose and say that s/he is the Executive Partner of Acan Nexus Corporation, the **CORPORATION** described in and which executed the above instrument; that s/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that s/he signed her/his name thereto by like order.

NOTARY PUBLIC FOR THE STATE OF

MICHELLE L. SMITH
NOTARY PUBLIC-STATE OF NEW YORK
No. 01SM6225215
Qualified in Saratoga County
My Commission Expires July 19, 2014

CORPORATION COUNSEL CONTRACT APPROVAL

Agency OMB

E-PIN 00214G0002001

Contractor AEON NEXUS CORPORATION

Approved as to form

Certified as to legal authority

Electronically Signed By STEVEN CUSHMAN Date 02/04/2014 17:53

Acting Corporation Counsel

Attachment A
Doing Business Data Form

The City of New York
Mayor's Office of Contract Services
Doing Business Accountability Project

Doing Business Data Form

To be completed by the City agency prior to distribution

Agency: OM B Transaction ID: 00214G0002001

Check One:	Transaction Type (check one):			
☒ Proposal	☐ Concession	☐ Contract	☐ Economic Development Agreement	
☐ Award	☐ Franchise	☐ Grant	☐ Pension Investment Contract	

Any entity receiving, applying for or proposing on an award or agreement must complete a Doing Business Data Form (see Q&A sheet for more information). Please either type responses directly into this fillable form or print answers by hand in black ink, and be sure to fill out the certification box on the last page. **Submission of a complete and accurate form is required for a proposal to be considered responsive or for any entity to receive an award or enter into an agreement.**

This Data Form requires information to be provided on principal officers, owners and senior managers. The name, employer and title of each person identified on the Data Form will be included in a public database of people who do business with the City of New York; no other information reported on this form will be disclosed to the public. **This Data Form is not related to the City's VENDEX requirements.**

Please return the completed Data Form to the City office that supplied it. Please contact the Doing Business Accountability Project at DoingBusiness@cityhall.nyc.gov or 212-788-8104 with any questions regarding this Data Form. Thank you for your cooperation.

Section 1: Entity Information

Entity Name: Aeon Nexus Corporation

Entity EIN/TIN: 54-1983534

Entity Filing Status (select one):

☐ Entity has never completed a Doing Business Data Form. *Fill out the entire form.*

☐ Change from previous Data Form dated _____. *Fill out only those sections that have changed, and indicate the name of the persons who no longer hold positions with the entity.*

☒ No Change from previous Data Form dated 07/01/2013. *Skip to the bottom of the last page.*

Entity is a Non-Profit: ☐ Yes ☐ No

Entity Type: ☐ Corporation (any type) ☐ Joint Venture ☐ LLC ☐ Partnership (any type)
☐ Sole Proprietor ☐ Other (specify): _____

Address: _____

City: _____ State: _____ Zip: _____

Phone : _____ Fax : _____

E-mail: _____

Provide your e-mail address and/or fax number in order to receive notices regarding this form by e-mail or fax.

Section 2: Principal Officers

Please fill in the required identification information for each officer listed below. If the entity has no such officer or its equivalent, please check "This position does not exist." If the entity is filing a Change Form and the person listed is replacing someone who was previously disclosed, please check "This person replaced..." and fill in the name of the person being replaced so his/her name can be removed from the *Doing Business Database*, and indicate the date that the change became effective.

Chief Executive Officer (CEO) or equivalent officer

☐ This position does not exist

The highest ranking officer or manager, such as the President, Executive Director, Sole Proprietor or Chairperson of the Board.

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CEO: _____ on date: _____

Chief Financial Officer (CFO) or equivalent officer

☐ This position does not exist

The highest ranking financial officer, such as the Treasurer, Comptroller, Financial Director or VP for Finance.

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CFO: _____ on date: _____

Chief Operating Officer (COO) or equivalent officer

☐ This position does not exist

The highest ranking operational officer, such as the Chief Planning Officer, Director of Operations or VP for Operations.

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former COO: _____ on date: _____

Section 3: Principal Owners

Please fill in the required identification information for all individuals who, through stock shares, partnership agreements or other means, **own or control 10% or more of the entity.** If no individual owners exist, please check the appropriate box to indicate why and skip to the next page. If the entity is owned by other companies, those companies do **not** need to be listed. If an owner was identified on the previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list any individuals who are no longer owners at the bottom of this page. If more space is needed, attach additional pages labeled "Additional Owners."

There are no owners listed because (select one):

☐ The entity is not-for-profit ☐ There are no individual owners No individual owner holds 10% or more shares in the entity

☐ Other (explain): _____

Principal Owners (who own or control 10% or more of the entity):

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: ____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Principal Owners:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Section 4: Senior Managers

Please fill in the required identification information for all senior managers who oversee any of the entity's relevant transactions with the City (e.g., contract managers if this form is for a contract award/proposal, grant managers if for a grant, etc.). Senior managers include anyone who, either by title or duties, has substantial discretion and high-level oversight regarding the solicitation, letting or administration of any transaction with the City. **At least one senior manager must be listed, or the Data Form will be considered incomplete.** If a senior manager has been identified on a previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list individuals who are no longer senior managers at the bottom of this section. If more space is needed, attach additional pages labeled "Additional Senior Managers."

Senior Managers:

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Senior Managers:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Certification

I certify that the information submitted on these four pages and 0 additional pages is accurate and complete. I understand that willful or fraudulent submission of a materially false statement may result in the entity being found non-responsible and therefore denied future City awards.

Name: Meghan Barkley

Signature: _____ Date: 12/19/13

Entity Name: Aeon Nexus Corporation

Title: Director of Operations Work Phone #: 518-338-1551 x201

Please return this form to the City agency that supplied it to you, not to the Doing Business Accountability Project.

For information or assistance, call the Doing Business Accountability Project at 212-788-8104.

Printed on paper containing 30% post-consumer material

Attachment B
Whistleblower Protection Expansion Act Notice

1. In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code, respectively,

(a) Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Contract to (i) the Commissioner of the Department of Investigation, (ii) a member of the New York City Council, the Public Advocate, or the Comptroller, or (iii) the City Chief Procurement Officer, ACCO, Agency head, or Commissioner.

(b) If any of Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of subparagraph (a) of paragraph 1 of this rider, he or she shall be entitled to bring a cause of action against Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (i) an injunction to restrain continued retaliation, (ii) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (iii) reinstatement of full fringe benefits and seniority rights, (iv) payment of two times back pay, plus interest, and (v) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

(c) Contractor shall post a notice provided by the City in a prominent and accessible place on any site where work pursuant to the Contract is performed that contains information about:

(i) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the Contract; and
(ii) the rights and remedies afforded to its employees under New York City Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Contract.

(d) For the purposes of this rider, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

(e) This rider is applicable to all of Contractor's subcontractors having subcontracts with a value in excess of $100,000; accordingly, Contractor shall include this rider in all subcontracts with a value a value in excess of $100,000.

2. Paragraph 1 is not applicable to this Contract if it is valued at $100,000 or less. Subparagraphs (a), (b), (d), and (e) of paragraph 1 are not applicable to this Contract if it was solicited pursuant to a finding of an emergency. Subparagraph (c) of paragraph 1 is neither applicable to this Contract if it was solicited prior to October 18, 2012 nor if it is a renewal of a contract executed prior to October 18, 2012.

REPORTING INFORMATION TO THE NEW YORK CITY DEPARTMENT OF INVESTIGATION

If you have information of any corrupt or fraudulent activities or unethical conduct relating to a New York City funded project or contract, contact:

Department of Investigation (DOI) Complaint Bureau
212-825-5959

or by mail or in person at:

DEPARTMENT OF INVESTIGATION
80 MAIDEN LANE, 17th FLOOR
NEW YORK, NEW YORK 10038
Attention: COMPLAINT BUREAU

or file a complaint on-line at:
www.nyc.gov/doi

All communications are confidential.

THE LAW PROTECTS EMPLOYEES OF CITY CONTRACTORS WHO REPORT CORRUPTION

- Any employee of a contractor or subcontractor that has a contract with the City or a City contractor of more than $100,000 is protected under the law from retaliation by his or her employer if the employee reports wrongdoing related to the contract to the DOI.
- To be protected by this law, an employee must report information about fraud, false claims, corruption, criminality, conflict of interest, gross mismanagement, or abuse of authority relating to a City contract over $100,000 to DOI or to certain other government officials all of whom must forward the report to DOI.
- Any employee who has made such a report and who believes he or she has been dismissed, demoted, suspended, or otherwise subject to an adverse personnel action because of that report is entitled to bring a lawsuit against the contractor and recover damages.

Attachment C - Broker's Certification Form
BROKER'S CERTIFICATION

[Note to Contracting Agency: Every Certificate of Insurance must be accompanied by either the following certification by the broker setting forth the following text and required information and signatures or certified copies of all policies referenced in the Certificate of Insurance.]

CERTIFICATION BY BROKER

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

Arthur J. Gallagher & Co.
[Name of broker (typewritten)]

677 Broadway, 4th Floor., Albany, NY 12207
[Address of broker (typewritten)]

sharon_stack@ajg.com
[Email address of broker (typewritten)]

(P)518-869-3535 (F) 518-533-6894
[Phone number/Fax number of broker (typewritten)]

[Signature of authorized official of broker]

Area President
[Name and title of authorized official (typewritten)]

State of New York)
) ss.:
County of Saratoga)

Sworn to before me this 9th day of January 2014

Kathleen M Dickey

NOTARY PUBLIC FOR THE STATE OF New York

Kathleen M. Dickey
Notary Public State of New York
Qualified in Saratoga County
Commission Expires 09-29-2016
ID# 01DI6193992

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/9/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J. Gallagher Risk Management Services, Inc.
677 Broadway 4th Floor
Albany NY 12207

CONTACT NAME: Sharon Stack
PHONE (A/C, No, Ext): 518-869-3535 FAX (A/C, No): 518-869-3580
E-MAIL ADDRESS: sharon_stack@ajg.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: Continental Casualty Company	20443
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	
INSURER F:	

INSURED
AEONNEXUS1
Aeon Nexus Corp.
174 Glen St.
Glens Falls NY 12801

COVERAGES **CERTIFICATE NUMBER:** 1889578751 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY			5092241013	12/20/2013	12/20/2014	EACH OCCURRENCE	$1,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	$10,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$1,000,000
								$
A	AUTOMOBILE LIABILITY			5092241013	12/20/2013	12/20/2014	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB / OCCUR			5092241092	12/20/2013	12/20/2014	EACH OCCURRENCE	$1,000,000
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$1,000,000
	DED X RETENTION $ 10000							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A		5092241058	12/20/2013	12/20/2014	X WC STATU-TORY LIMITS / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$100,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$100,000
							E.L. DISEASE - POLICY LIMIT	$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

AI FORM: SB146932E31 (0611)
CERTIFICATE HOLDER IS NAMED AS ADDITIONAL INSURED.

CERTIFICATE HOLDER

CITY OF NEW YORK,
THE OFFICE OF MANAGEMENT AND BUDGET (OMB)
255 GREENWICH STREET
NEW YORK NY 10007

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2010 ACORD CORPORATION. All rights reserved.

The ACORD name and logo are registered marks of ACORD

Attachment A Tab 1 - Information

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

(Information, References, Pricing)

PIN # 002-14-G0002

Bid Deadline: FRIDAY December 20, 2012 at 3:00 PM EST via e-mail to: contracts@omb.nyc.gov

General Information:

1. The Office of Management and Budget (OMB) is soliciting quotes for Microsoft (MS) Dynamics CRM Online and consulting services to deploy an applications to monitor Community Development Block Grants for Disaster Recovery (CDBG-DR). See cover letter for application specifics. OMB is located at one location 255 Greenwich Street, New York, NY 10007.

Bid Specifications:

1. Bids will only be accepted utilizing the fully completed bid sheets.

2. All Bids **MUST BE SIGNED** by someone in your firm who can bind your bid proposal. Prices are irrevocable until contract award.

3. Vendors must ensure the size of the e-mail submitting this bid is less than ten megabytes.

Firm:	
Contact:	
Address:	
Email:	
Telephone:	
Fax:	
Federal ID Number:	
Remittance Address: (if different from above)	

Inquiries

Any inquiries concerning this solicitation should be directed by e-mail, under the subject line "OMB CDBG-CR MS Dynamics RFB Inquiries", to contracts@omb.nyc.gov. Inquires must be received prior to Friday, December 13, 2013 at 12:00 Noon EST.

Attachment B - Compliance with Local Law 34 of 2007

Pursuant to Local Law 34 of 2007, amending the City's Campaign Finance Law, the City is required to establish a computerized database containing the names of any "person" that has "business dealings with the City" as such terms are defined in the Local Law. In order for the City to obtain necessary information to establish the required database, **vendors responding to this solicitation MUST complete the Doing Business Data Form (see Attachment A) and return it with this proposal.** The submission of a Doing Business Data Form that is not accurate and complete may result in appropriate sanctions.

Please Note: This is a writable form, type directly into the highlighted boxes.

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

PIN # 002-14-G0002

Firm: 0

Reference 1

Company Name:	
Contact Name:	
Address:	
Telephone:	
E-mail:	

Reference 2

Company Name:	
Contact Name:	
Address:	
Telephone:	
E-mail:	

Reference 3

Company Name:	
Contact Name:	
Address:	
Telephone:	
E-mail:	

Please Note: This is a writable form, type directly into the highlighted boxes.

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

PIN # 002-14-G0002

Firm: 0

Please Note: This is a writable form, type directly into the available fields (unshaded). Totals will be automatically calculated.

Microsoft Dynamics CRM Online Consultants

Project Tasks	Hours	Resources	Total Hours	Rate	Amount
Analysis and Design	400	2	800	$ -	$ -
System Build	550	2	1100	$ -	$ -
System Testing	160	1	160	$ -	$ -
Installation & Deployment	160	1	160	$ -	$ -
Training and Documentation	120	1	120	$ -	$ -
After Launch Break Fix Support	500	1	500	$ -	$ -
Project Management	384	1	384	$ -	$ -
Total					$ -

Microsoft Dynamics CRM Online Licenses

User Subscription Licenses (USLs)			
License Type	Quantity	Unit Cost	Total Cost
Professional	100	$ -	$ -
Additonal Add-ons*			
Item	Quantity	Cost/Month	Yearly Cost
Additional Storage/GB	100	$ -	$ -
Non-Production Instance	2	$ -	$ -
Total			$ -

*** To be purchased as necessary**

Total Bid	$ -

Name: _____

Signature: _____

Date: _____

The City of New York
Office of Management and Budget
255 Greenwich St. • New York, New York 10007-2146

Attachment C

REQUEST FOR BID - FY2014 CDBG-DR MICROSOFT DYNAMICS SCOPE

Background

The City of New York's Office of Management and Budget (OMB) is charged with program oversight, compliance, monitoring and fiscal management of the Hurricane Sandy Community Development Block Grant – Disaster Recovery (CDBG-DR) provided through the US Department of Housing and Urban Development (HUD). OMB is seeking a technology solution to allow them to manage the CDBG-DR grant currently over $3.2 Billion. This Grant Management System (GMS) is desired to assist OMB in its role as grant administrator over the entire lifecycle of the CDBG-DR grant.

System Platform, Development Methodology and Documentation

To align with other NYC technology initiatives, OMB has selected the Microsoft Dynamics CRM Online solution to be the base platform for the system. The platform along with associated technologies such as Microsoft SharePoint will be the technology used for this solution. These technologies will be the base for the system's database, system logic, document management, user interface, workflow and reporting. The system will use Microsoft's SharePoint technology for document management in conjunction with the Microsoft Dynamics CRM platform.

The City will purchase software licenses through the selected vendor for Microsoft Dynamics CRM Online. The vendor will be provided by the City with the appropriate production, development, testing and staging environments on this platform. The vendor will develop the system and manage the process through the various environments. The vendor must follow Department of Information & Telecommunications (DOITT) security requirements and security accreditation process before the application can be launched into production. Please see attachment D Security Accreditation Process document for a description of the process.

The vendor shall use an "Agile" style development methodology to rapidly deploy functionality. This methodology uses multiple releases to deploy functionality. The vendor will work with OMB to determine the frequency and functionality that will be deployed in releases.

The vendor will work with OMB to define a plan for Quality Control and Quality Assurance (QC\QA). This plan will include internal testing measures employed by the vendor during development and User Acceptance Testing (UAT) performed by OMB. The vendor will only deploy functionality to the production environment with prior approval from OMB.

The vendor will develop appropriate user and training manuals and provide training as needed to OMB and other staff as requested.

The vendor will work with OMB to develop a user access control model utilizing the City's identity and cloud integration infrastructure and the vendor will implement that model into the system. Design and function of such controls will be specified in writing once determined and prior to development.

Functional Requirements

The vendor will work with the City to develop technical and business requirements to develop this centralized data management platform to support the City of New York OMB CDBG-DR Team. Technical and business requirements will be will be specified in writing once determined and prior to development.

The system will need to aggregate data from multiple external data sources. Data will need to be collected from data system managed by other partner agencies. These external data systems include other Microsoft Dynamics Systems, the City's Financial Management System, Oracle CRM System and other systems not yet determined. Data import or data exchange capabilities may need to be built to gather data from partner agencies. Data will be stored in Microsoft's Cloud Environment. Data import or exchange capabilities for each system will be specified in writing once determined and prior to development. The system will need to be able to support OMB's CDBG-DR Team managing and tracking various structured workflows. These workflows will need to include status, milestone tracking, approval tracking and email notifications.

Specified workflows shall include controls based on business requirements specified by OMB. These controls will be specified in writing once determined and prior to development.

The system will need to able to support OMB's CDBG-DR Team to manage data within HUD's Disaster Recovery Grant Reporting (DRGR) system. Information aggregated from information partner agencies will need to be reported in the DRGR system. DRGR has functionality to upload information via CSV file templates. The system will need to be able to generate these reports onto the CSV file templates, for upload into HUD's Disaster Recovery Grant Reporting (DRGR) system.

The system will need to provide reporting and dashboard functionality. The Vendor will work with OMB to define a set of standardized operating reports and dashboards to assist OMB in managing the grant. The vendor will build these reports into the system so they can be run on a regular basis. The vendor will develop a dashboard around these standardized reports. The system shall also provide functionality for OMB to develop ad hoc reports. The vendor will work with OMB to train end uses how to use both the standardized operating reports as well as the ad hoc reporting functionality. The Vendor will work with OMB to define reporting requirements prior to development and will develop these reports within the system.

The system will need to be adhere to security standards defined by the City of New York's Department of Information Technology and Telecommunications (DoITT). The system will need to pass security vulnerability scans defined by these security standards.

Professional Services

The vendor will demonstrate the capacity to provide professional services for project management, business and technical requirements documentation, software development, security, testing, system maintenance, and training. Including providing organizational charts and staff resumes for key positions.

The vendor will need to demonstrate past history and proficiency using the Microsoft Dynamics CRM Platform, SharePoint and Microsoft's 365 Cloud Environment.

The vendor will develop a project plan that details specific tasks, milestone dates and deliverables in accordance with NYC DoITT Project Management Standards.

The vendor will submit progress reports weekly and at the request of the City.

Changing program requirements is inherent to the nature of these grant programs. The vendor will respond timely and accommodate and respond to short notice requests and provide rapid solutions to system modifications due to program changes.

The term of this engagement will be not to exceed one year.

Security Accreditation Process

Scope

All externally accessible, public facing applications and internally accessible, multi-agency applications developed to support City of New York business must be built in a secure fashion. These applications must successfully complete the security accreditation process to ensure compliance with security policies, standards and best practices. Successful completion is acknowledged by the Citywide Chief Information Security Officer (CISO) and must be achieved prior to launch in production.

Accreditation Process Overview

The Accreditation process is an oversight or overlay process on top of the Software Development Life Cycle. It is designed to integrate into specific areas of the SDLC and build security into the project from the beginning, avoiding costly re-design or resolution of security issues in later stages. The role of the IT Security Engineering team in the process is to partner with the project team, enabling secure, feature rich and timely development of applications where risks are appropriately understood and addressed.

It is important to note that while projects require many meetings and discussions, the actual assessment process will use the security accreditation document as the authoritative source for information. ***Clearly written and detailed documentation is the key to ensuring an efficient and timely assessment.***

Security Accreditation Document

The artifact of the security accreditation process is the Security Accreditation Document. This is a living document that facilitates communications between the project team and the IT Security Engineering team. The document is a multi-part template. Each part gets completed by the project team and subsequently reviewed by the IT Security team at various stages of the process. At the end of the project the completed Security Accreditation Document will contain all the relevant information about the project from a security perspective. The information will range from high level business requirements all the way down to IP Addresses and class names. It is important to note that each review may take multiple iterations and/or meetings, until both the project team and IT Security team are on the same page about the relevant content and all security questions have been addressed. A successful accreditation process can be ensured by starting the process during planning stage and before requesting funding. If the process is not started in the planning stage, it may be too late and will jeopardize the project.

Security Resourcing

Just like any other part of the project, such as infrastructure, hardware, software, development time, QA etc, IT Security is an integral part of the project and should be included in project cost calculations. Each large or complex project should dedicate from 10-15% of the total project budget for IT Security.

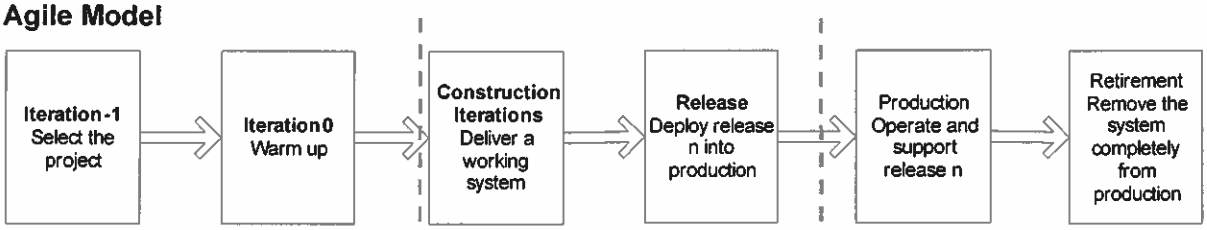
Agile and Waterfall Development Methodologies

The accreditation process is equally adaptable to both the Waterfall and Agile development methodologies. The activities depicted in the Agile Model diagram below correspond roughly to the plan, design, build, test and deploy phases of the Waterfall model. Please note that in an Agile model, these activities are intended to be shorter in duration. Also note that Agile methodology requires a resource to be an integral part of the project team at the scrum level and participate in stand-up meetings and facilitate "on-the-ground" security decisions.

Software Development Life Cycle (SDLC)

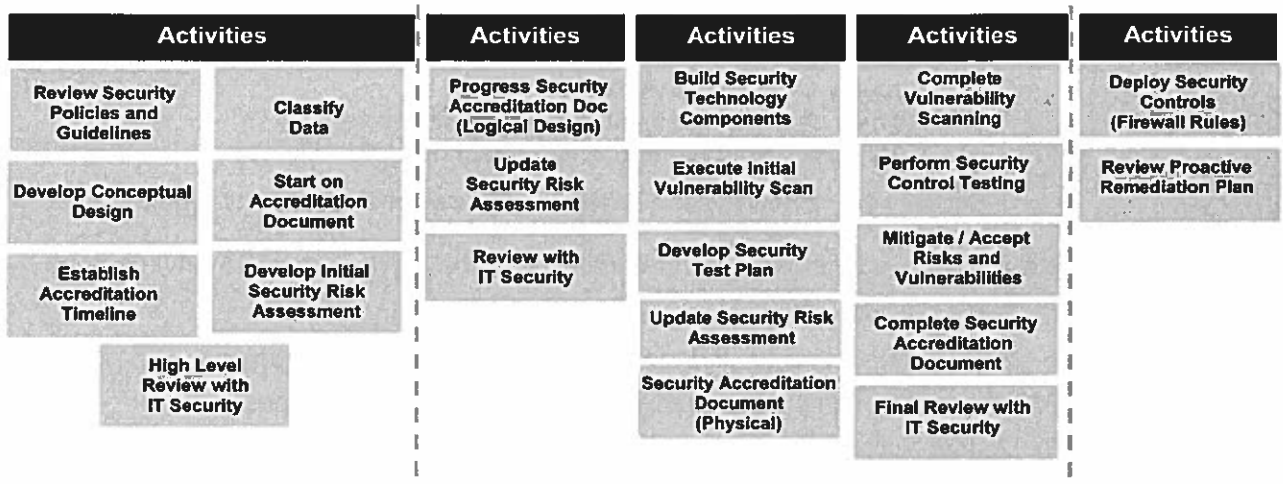
The following diagrams depict the Software Development Life Cycle and appropriate checkpoints for information security assurance. Please note that these are also available as a checklist to facilitate smooth a smooth flight through the accreditation process.

Agile Model



Waterfall Model

Mapped Accreditation Activities



Accreditation Process Details

The following steps describe the accreditation process:

1. **Planning / Analysis:** Determine the data classification and determine identify the business functions the application will address.
    - Define project objectives.
    - Complete Intake process and assign business owner/project manager (where appropriate).
    - Identify data classification types, hosting location and targeted user community.
    - Gather business requirements.
    - Determine data classification and regulation requirements and planned security controls.
    - Define security resource requirements.
    - Submit Accreditation Document to IT Security with following:
        - Business objectives
        - Business and project team members
        - Hosting and service level
        - Data classification Type
    - IT Security Engineering team to provide security control requirements and suggestions.
2. **Design:** Develop technology solution by leveraging tools, technology processes, and best practices to design the solution.
    - Complete high-level system design and application flow.
    - Define system requirements and service levels.
    - Submit Accreditation Document with the following:
        - High level design (Logical and Flow diagrams)
        - System Requirement and Hosting information
        - Security Controls (AAA information)
        - Review changes to adjust from the previous version.
        - Data View (Further information about data classification).
    - IT Security will review system design to ensure it meets security requirements.
3. **Development:** Code, build hardware, and deploy the application to QA environment.
    - Ensure all integration points meet security requirements.
    - Make sure application and systems are built according to design.
    - Inform IT Security team of any design or requirement changes.
    - Update Accreditation document with any requirement or design changes.
    - Perform Development environment App Scan and fix code as necessary.
4. **Testing:** Perform unit, system, and user acceptance test cases against the QA environment.

- Perform/request AppScan and MVM (McAfee Vulnerability Management) scan after the production code is deployed.
  - Submit AppScan request form to IT Security Engineering group. See AppScan Process for detail.
- Correct any findings (***all Medium and High vulnerabilities must be addressed***) from scans and rescan as needed.
- Provide scan detailed reports on scan findings.
- Update Accreditation Document with business and/or application risks identified.
- Finalize the Accreditation Document and make sure no changes to previous version.
- IT Security will review scan reports and provide guidance on addressing findings.
- Review Accreditation document to ensure all risks are addressed and the system is ready for final accreditation review.

5. **Implementation:** Deploy to production environment.
   - MVM scan to be completed by infrastructure team (after the production code is deployed).
   - Address all High and Medium findings.
   - Submit infrastructure vulnerability scan reports with all findings rated Medium and High resolved.
   - SOC team can provide guidance on addressing vulnerabilities found.
   - Provide a written communication from business owner stating the acceptance of any risks not addressed prior to implementation.
   - IT Security Engineering does final review of Accreditation Document for completeness.
   - Accreditation sign-off provided by Citywide CISO.

Accreditation High Level Criteria

Confirm the following requirements have been met. Please note that this is a high level check list. Detailed checklist is available on the first page of the Security Accreditation Document Template.

1) Data has been classified.
2) Data security controls match data classification levels.
3) Security Accreditation Document has been completed clearly and entirely.
4) System complies with ALL Information Citywide Security Policies, Standards and Guidelines (as they exist at project initiation), as well as generally accepted best practices as recommended by OWASP, ISO27001/2 and NIST.
5) Security Architecture complies with CityNet Security Reference Architecture.
6) System is in compliance with applicable regulatory and industry standards and applicable

laws (such as HIPAA, PCI).
7) System authentication credentials are stored in the Enterprise directory.
8) All user and application access to the system and its internal components (including web services) is properly authenticated and authorized.
9) System names comply with enterprise naming standards.
10) System utilizes proper enterprise DNS and SMTP services.
11) IBM Watchfire Application Scan (AppScan) scans are complete (All web and web service components scanned). and all medium and high severity issues have been addressed.
12) Infrastructure Vulnerability scans (McAfee MVM) of all new system components are complete and all medium and high severity issues have been addressed.
13) Results from any third Party assessments be reviewed and their remediation verified (if applicable).

Re-Accreditation

Application is subject to re-accreditation when any code, design, or data requirement is changed. Under normal conditions, an update to the existing accreditation document to reflect the changes would suffice, along with App Scan infrastructure vulnerability scan (if additional hardware is added to the design). This is also the case with Agile Development methodology. Every iteration requires necessary updates to the accreditation document and an appscan.

If an application is subject to major release, substantial functionality or architecture change, it will be subject to a new accreditation process. Review the changes with IT Security Engineering team to determine the requirements.

Exceptions

When consensus cannot be reached between the Business Owner and the Citywide CISO over the risks associated with an accreditation process finding, an exception can be requested. In recognition of the risk management approach in which policy exceptions are applied, an exception from a policy provision may be requested and granted due to unusual and/or exceptional circumstances. The approval process for exception requests shall be as follows:

1) The requestor or business owner desiring an exception to a policy provision shall complete a thorough analysis to determine if the unusual and/or exceptional circumstances will have any potential impact on the security of Citynet, any other City of New York agency, or any customer or partner.

2) Exceptions will only be granted based upon lack of a suitable technological control or on a time limited basis with the suitable compensating controls and defined resolution date.

3) The agency desiring an exception to a policy provision will also complete an analysis to determine if approval of an exception for the extraordinary circumstances would adversely affect compliance with any legal or regulatory requirements.

4) If the Agency determines that there will be no adverse impact or if there is a minimal adverse impact on another party, that agency's commissioner sends their request to the DoITT Commissioner.

5) The exception request will be reviewed by the Citywide CISO to confirm the impact is acceptable.

6) Risks must be accepted by the executive level business owner.

7) If there is non-concurrence, the final decision to approve the exception rests with the DoITT Commissioner and the Citywide CISO.

8) If an exception request is disapproved, it is the responsibility of the requesting City agency to remediate the circumstances that required the exception request.

Appendix A – Determining the Need For A Third Party Security Assessment

The goal of a third party security assessment is the preemptive discovery of application security vulnerabilities. When determining the need for an assessment, the most important considerations must be the volume and classification of the data and the transactional complexity of the application. The more complex the application, the more potential opportunities exist for a determined adversary to circumvent the application security controls. The value of the data should also be considered. Using this information for context, the Business Owner should consult his agency security lead as well as the DoITT CISO to determine if a third party security assessment is right for their application. The Open Web Application Security Project (http://www.owasp.org) can provide more background information on application security assessments.

Appendix B

Security Accreditation Process Service Level Objectives(SLO):

Stage	Initial Review – Days By complexity	Follow-up Review – Days By complexity	Ave # of iterations
Planning / Analysis	Low 1 Medium 2 High 2	Low 1 Medium 1 High 2	2
Design	Low 2 Medium 5 High 8	Low 1 Medium 2 High 4	5
Build	Low 1 Medium 3 High 5	Low 1 Medium 1 High 3	3
Test	Low 1 Medium 2 High 3	Low 1 Medium 2 High 3	3
Deploy	Low 1 Medium 2 High 3	Low 1 Medium 2 High 3	2

* This SLO only applies when accreditation starts before the planning and analysis phase. Unaddressed issues will lengthen the process. Also note that these SLO only apply to Waterfall model.

Document Revision History

Date	Version	Description
January 3, 2012	Version 2.0	Major update of entire document
March 26, 2012	Version 2.01	Fixed several minor typographical errors.

The City of New York
Office of Management and Budget
255 Greenwich St. • New York, New York 10007-2146

December 2, 2013

REQUEST FOR BID - FY2014 CDBG-DR MICROSOFT DYNAMICS APPLICATION
PIN # 002-14-G0002

The Office of Management and Budget ("OMB") is soliciting bids for consulting services to design and implement a Microsoft Dynamics CRM Online system to track Community Development Block Grant–Disaster Recovery (CDBG-DR). In addition, we are interested in a price to purchase a set number of licenses for Microsoft Dynamics CRM Online and the possibility of some additional options if required.

Attachment A - is an excel spreadsheet with three (3) tabs. **Tab 1** is for your firm's information, **Tab 2** is for your firm's references and **Tabs 3** is the bid request form. We are asking for a specific number of hours and resources across a broad set of project tasks. A firm will be selected based on total cost. The vendor will enter in a Billing Rate for the project tasks, unit costs for the required licensing and monthly costs for additional costs including additional storage and non-production instances.

Attachment B - Compliance with Local Law 34 of 2007 - Pursuant to Local Law 34 of 2007, amending the City's Campaign Finance Law, the City is required to establish a computerized database containing the names of any "person" that has "business dealings with the City" as such terms are defined in the Local Law. In order for the City to obtain necessary information to establish the required database, vendors responding to this solicitation will complete the Doing Business Data Form and return it with this proposal. **ALL vendors responding to this solicitation must complete the Doing Business Data Form (see Attachment B) and return it with this proposal.** The submission of a Doing Business Data Form that is not accurate and complete may result in appropriate sanctions.

Attachment C - is a description of the application requirements and scope.

Attachment D - is a Security Accreditation Process document for the Department of Information Technology and Telecommunications (DOITT).

Return your quote by **FRIDAY, DECEMBER 20, 2013, 3:00 PM** New York City time via e-mail to: contracts@omb.nyc.gov using the attached MS Excel format spreadsheets (Attachment A). OMB will only accept quotes that fully complete all three (3) tabs. **Your bid must be signed on the pricing tab of Attachment A. Prices are irrevocable until contract award.** Please ensure that the size of the e-mail submitting this quote is less than ten (10) megabytes.

Any inquiries concerning this solicitation should be directed via e-mail, under the subject line "OMB CDBG-CR MS Dynamics RFB Inquiries", to contracts@omb.nyc.gov . All questions must be submitted no later than Friday December 13, 2013, at noon New York City time.

If you have difficulty opening these attachments please e-mail me at the above e-mail address or call (212) 788-5821.

Regards,

Michelle Rolon

AEON NEXUS
Requirements to results.

GSA U.S. General Services Administration

AUTHORIZED FEDERAL SUPPLY SERVICE
INFORMATION TECHNOLOGY SCHEDULE PRICELIST
GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT, SOFTWARE AND SERVICES

Special Item No. 132-51 Information Technology Professional Services
Special Item No. 132-32 Term Software License
Special Item No. 132-33 Perpetual Software License

Note: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Aeon Nexus Corporation
174 Glen Street
Glens Falls, NY 12801
Tel (518) 338-1551 Fax (866) 252-1251
http://www.aeonnexus.com

Contract Number:

GS-35F-0238M

Period Covered by Contract

1/30/2002 – 1/29/2017

Solicitation FCIS-JB 980001-B-REFRESH #31

General Services Administration
Federal Supply Service

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! System. Agencies can browse GSA Advantage! by accessing the Federal Supply Service's Home Page via the Internet at http://www.fss.gsa.gov/

Pricelist current through Modification No. PO-0036, dated May 29, 2013.

SIN 132-51 - INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES

FPDS Code D301	IT Facility Operation and Maintenance
FPDS Code D302	IT Systems Development Services
FPDS Code D306	IT Systems Analysis Services
FPDS Code D307	Automated Information Systems Design and Integration Services
FPDS Code D308	Programming Services
FPDS Code D310	IT Backup and Security Services
FPDS Code D311	IT Data Conversion Services
FPDS Code D313	Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) Services
FPDS Code D316	IT Network Management Services
FPDS Code D317	Creation/Retrieval of IT Related Automated News Services, Data Services, or Other Information Services (All other information services belong under Schedule 76)
FPDS Code D399	Other Information Technology Services, Not Elsewhere Classified

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 – Information Technology Schedule is not to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote sensing, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performance by the publisher or manufacturer or one of their authorized agents.

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INFORMATION FOR ORDERING ACTIVITIES
APPLICABLE TO ALL SPECIAL ITEM NUMBERS

SPECIAL NOTICE TO AGENCIES: Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micropurchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ on-line shopping service (www.fss.gsa.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Supply Service Home Page (www.fss.gsa.gov) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micropurchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1. GEOGRAPHIC SCOPE OF CONTRACT:

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

[X] The Geographic Scope of Contract will be domestic and overseas delivery.
[ ] The Geographic Scope of Contract will be overseas delivery only.
[ ] The Geographic Scope of Contract will be domestic delivery only.

For Special Item Number 132-53 Wireless Services ONLY, if awarded, list the limited geographic coverage area:

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2. CONTRACTOR'S ORDERING ADDRESS AND PAYMENT INFORMATION:

Aeon Nexus Corporation

174 Glen Street

Glens Falls, NY 12801

Contractors are required to accept credit cards for payments equal to or less than the micro-purchase threshold for oral or written delivery orders. Credit cards will be acceptable for payment above the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number(s) can be used by ordering activities to obtain technical and/or ordering assistance:

(518) 338-1551

3. LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. STATICAL DATA FOR GOVERNMENT ORDERING OFFICE COMPLETION OF STANDARD FORM 279:

Block 9: G. Order/Modification Under Federal Schedule
Block 16: Data Universal Numbering System (DUNS) Number: **109396627**
Block 30: Type of Contractor – A

- A. Small Disadvantaged Business
- B. Other Small Business
- C. Large Business
- G. Other Nonprofit Organization
- L. Foreign Contractor

Block 31: Woman-Owned Small Business - No
Block 36: Contractor's Taxpayer Identification Number (TIN): 54-1983534

4a. CAGE Code: **1SVT0**
4b. Contractor has registered with the Central Contractor Registration Database.

5. FOB DESTINATION

6. DELIVERY SCHEDULE

a. TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (Days ARO)
132-51	As negotiated through Aeon Nexus and ordering office

b. URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7. DISCOUNTS: Prices shown are NET Prices; Basic Discounts have been deducted.

- a. Prompt Payment: 1% - 15 days from receipt of invoice or date of acceptance, whichever is later.
- b. Quantity
- c. Dollar Volume
- d. Government Educational Institutions
- e. Other

8. TRADE AGREEMENTS ACT OF 1979, as amended:

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9. STATEMENT CONCERNING AVAILABILITY OF EXPORT PACKING:

10. Small Requirements: The minimum dollar value of orders to be issued is $1000.00.

11. MAXIMUM ORDER (All dollar amounts are exclusive of any discount for prompt payment.)

a. The Maximum Order value for the following Special Item Numbers (SINs) is $500,000:

Special Item Number 132-3 - Leasing of Product
Special Item Number 132-4 – Daily / Short Term Rental
Special Item Number 132-8 - Purchase of Equipment
Special Item Number 132-12 – Maintenance of Equipment, Repair Service, and Repair Parts/Spare Parts
Special Item Number 132-32 - Term Software Licenses
Special Item Number 132-33 - Perpetual Software Licenses
Special Item Number 132-34 – Maintenance of Software
Special Item Number 132-51 - Information Technology (IT) Professional Services
Special Item Number 132-52 - Electronic Commerce (EC) Services
Special Item Number 132-53 – Wireless Services

b. The Maximum Order value for the following Special Item Numbers (SINs) is $25,000:

Special Item Number 132-50 - Training Courses

c. The Maximum Order value for the following Special Item Numbers (SINs) is $1,000,000:

Special Item Number 132-60 – Access Certificates for Electronic Services (ACES) Program
Special Item Number 132-61 – Public Key Infrastructure (PKI) Shared Service Provider (SSP) Program
Special Item Number 132-62 – HSPD-12 Product and Service Components

12. ORDERING PROCEEDURES FOR FEDERAL SUPPLY SCHEDULE CONTRACTS

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

a. FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

b. FAR 8.405-2 Ordering procedures for services requiring a statement of work.

13. FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS: ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1 FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS): Information Technology products under this Schedule that do not conform to Federal Information Processing

Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2 FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS): Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Supply Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14. CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2001)

(a) Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

(b) Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. The Industrial Funding Fee does NOT apply to travel and per diem charges.

NOTE: Refer to FAR Part 31.205-46 Travel Costs, for allowable costs that pertain to official company business travel in regards to this contract.

(c) Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

(d) Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

(e) Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

(f) Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

(g) Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

(h) Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

(i) Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

(j) Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

15. CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES: Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See C.1.)

16. GSA ADVANTAGE!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

(1) Manufacturer;
(2) Manufacturer's Part Number; and
(3) Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is http://www.fss.gsa.gov/.

17. PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, noncontract items, non-Schedule items, and items not on a Federal Supply Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, **only if-**

(1) All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

(2) The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

(3) The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

(4) All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18. CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a. For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

(1) Time of delivery/installation quotations for individual orders;

(2) Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

(3) Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b. The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19. OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20. BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

21. CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74, Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22. INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act applies.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8.

23. SECTION 508 COMPLIANCE.

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following:

http://www.aeonnexus.com

The EIT standard can be found at: www.Section508.gov/.

24. PRIME CONTRACTOR ORDERING FROM FEDERAL SUPPLY SCHEDULES.

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

(a) A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Supply Schedule contractor); and

(b) The following statement:

This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

25. INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997)(FAR 52.228-5)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

(1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26. SOFTWARE INTEROPERABILITY.

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at http://www.core.gov.

27. ADVANCE PAYMENTS

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

TERMS AND CONDITIONS APPLICABLE TO INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES (SPECIAL ITEM NUMBER 132-51) AND ELECTRONIC COMMERCE (EC) SERVICES (SPECIAL ITEM NUMBER 132-52)

1. SCOPE

a. The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services and Special Item Number 132-52 Electronic Commerce Services apply exclusively to IT/EC Services within the scope of this Information Technology Schedule.

b. The Contractor shall provide services at the Contractor's facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

2. PERFORMANCE INCENTIVES

a. Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract in accordance with this clause.

b. The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.

c. Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity's mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

3. ORDER

a. Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.

b. All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

4. PERFORMANCE OF SERVICES

a. The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.

b. The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.

c. The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.

d. Any Contractor travel required in the performance of IT/EC Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established

Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

5. STOP-WORK ORDER (FAR 52.242-15) (AUG 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

6. INSPECTION OF SERVICES

The Inspection of Services–Fixed Price (AUG 1996) (Deviation – May 2003) clause at FAR 52.246-4 applies to firm-fixed price orders placed under this contract. The Inspection–Time-and-Materials and Labor-Hour (JAN 1986) (Deviation – May 2003) clause at FAR 52.246-6 applies to time-and-materials and labor-hour orders placed under this contract.

7. RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Deviation – May 2003) Rights in Data – General, may apply.

8. RESPONSIBILITIES OF THE ORDERING ACTIVITY

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT/EC Services.

9. INDEPENDENT CONTRACTOR

All IT/EC Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

10. ORGANIZATIONAL CONFLICTS OF INTEREST

a. Definitions.

"Contractor" means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.

"Contractor and its affiliates" and "Contractor or its affiliates" refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An "Organizational conflict of interest" exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on ordering activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor's or its affiliates' objectivity in performing contract work.

b. To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

11. INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for IT/EC services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

12. PAYMENTS

For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.232-7 (DEC 2002), (Alternate II – Feb 2002) (Deviation – May 2003) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.232-7 (DEC 2002), (Alternate II – Feb 2002) (Deviation – May 2003)) applies to labor-hour orders placed under this contract.

13. RESUMES

Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

14. INCIDENTAL SUPPORT COSTS

Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.

15. APPROVAL OF SUBCONTRACTS

The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

16. **DESCRIPTION OF IT/EC SERVICES AND PRICING**

SERVICES PRICELIST

AEON NEXUS

Requirements to results.

Aeon Nexus Corporation

GSA Pricelist

TITLE: DATA ENTRY OPERATOR I

Labor Rate: $21.24/hour

SUMMARY:
Under close supervision, operates a data entry terminal to transcribe routine information into well-defined form suitable for computer processing.

DUTIES AND RESPONSIBILITIES:
*Keys input data into a computer terminal using appropriate codes and predefined formats.
*Verifies entries are correct by reviewing source material or computer reports and makes necessary adjustments.
*Operates other equipment as directed (computer workstations, word processors, CRT, Xerox, etc.)
*Maintains related records and logs.

MINIMUM QUALIFICATIONS:
Associate Degree in an associated discipline with related experience or an equivalent combination of education and training that provides the required knowledge, skills, and abilities. Ability to program in client/server applications and knowledge of database concepts and data security.

TITLE: DATABASE SPECIALIST III

Labor Rate: $98.03/hour

SUMMARY:
Under minimum supervision, responsible for all activities related to the administration, planning and development of computerized databases. Responsibilities include data modeling and design of client server and n-tier architecture systems, data base performance tuning, configuration management, telecommunication requirements, analysis and implementation of commercial RDBMS packages and application servers, implementation of policies and procedures pertaining to database management, security maintenance and utilization. Exercises independent judgment, consults with and advises database users relative to procedures, technical problems, priorities and methodologies.

DUTIES AND RESPONSIBILITIES:

*Establishes procedures for operations of the database and database management system and ensures compliance with ADP security policies of the company as well as the clients.
*Supervises the collection of data elements and prepares database specifications. Develops, maintains, and controls the data dictionary.
*Supervises data migration and conversion.
*Responsible for the logical and physical database design and configuration management.
*Develops and maintains control programs for accessing databases, data base security and user access.
*Maintains, refines/enhances the database and modifies logical relationships, as necessary.
*Develops standards and implements procedures for testing the back-up and recovery procedures of automated systems and security and privacy of automated systems.
*Monitors database performance statistics and provide performance tuning.
*Monitors systems.. Performs HW/SW upgrade as applicable.
*Provide telecommunication requirements and analysis and evaluation of telecommunications and RDBMS.

MINIMUM QUALIFICATIONS:
Bachelors Degree in an associated discipline and a minimum of five (5) years of related experience or an equivalent combination of education and training that provides the required knowledge, skills, and abilities. Minimum four (4) years of experience in client server or two (2) years of distributed architecture environment in the area of MIS or web-based applications development.

TITLE: PRINCIPAL ENGINEER III

Labor Rate: $96.93/hour

SUMMARY
Under limited supervision, exercises independent judgment and creativity on a regular basis in solving highly complex major technical problems, and in providing guidance and recommendations. May provide technical direction to one or more professional and/or technical persons on an assigned project. Normally works closely with clients and project manager.

DUTIES AND RESPONSIBILITIES.
*Analyzes problems such as user requirements, input data and form, output data and form, available computer configuration, processing and turnaround time requirements.
*Develops analytical and computational techniques for solving problems.
*Plans, conducts and directs systems projects of major importance and difficulty, necessitating the application of advanced computer systems knowledge.
*Leads corporate-wide initiatives to improve the software development process. Chairs meetings addressing software process improvement. Develops policies, procedures and standards governing the software development process.
*Coordinates quality assurance activities at the corporate level. Provides support for quality assurance activities at the individual project level.
*Develops configuration management procedures tailored to individual software development projects.
*Observe and implement corporate approach and guideline to systems analysis, particularly in the area of CMM and SEI.
*Research into systems analysis methodology and repository of such information in electronic format for re-use
*Evaluation, testing, configuration management and other software tools that support the software development process.
*Maintains comprehensive knowledge in the development of client/server and internet applications that utilize a n-tier architecture and graphical user interface.

MINIMUM QUALIFICATIONS:

Bachelors Degree in Computer Science/MIS and a minimum of six (6) years of related experience or an equivalent combination of education and training that provides the required knowledge, skills, and abilities. Knowledge of design methodology, case and analysis tool, ER diagram, data flow analysis, relational database design, documentation standards is required to provide object-oriented analysis, design and programming. Minimum five (5) year of experience in client server or three (3) years of distributed architecture environment in the area of MIS or web-based applications development.

TITLE: PROJECT DIRECTOR

Labor Rate: $120.13

SUMMARY

Under limited supervision, directs and manages the operation of several programs/ projects. Responsible for planning, developing, implementing and evaluating overall program policies and directing subordinate managers/staff. Administration/ management/ monitoring responsibilities include, but may not be limited to: establishment of goals, objectives, performance requirements, standards, and accountability; administration of program costs, budget, and management and operation of programs.

DUTIES AND RESPONSIBILITIES

*Implements company operating procedures, standards and guidelines to ensure product quality.
*Responsible for financial/technical success of programs/projects.
*Ensures that the operational planning and capabilities are continuously attuned to customer trends, market fluctuations and changes in technology.
*Establishes, maintains and enforces high standards of professional excellence
*Serves as advisor to project management in matters involving company policies, programs and services.
*Analyzes extremely complex technical/financial problems. Develops/renders solutions.
*Approves documentation standards, system specifications, feasibility and justification reports, policy recommendations and major changes to production systems.
*Oversees the analysis, design and development of new systems and system enhancements.
*Advises project management on technical concepts and functional capabilities.
*Approves procedures and methodologies for the system review/ development/implementation processes and policy development.
*Interact with other directors if necessary to ensure best utilization of resources within the corporate

MIMIMUM QUALIFICATIONS

Bachelor Degree in an associated field, and a minimum of 10 years related experience or an equivalent combination of experience and training that provides the required knowledge, skills, and abilities. Two years of ADP project management experience required.

TITLE: PROJECT MANAGER

Labor Rate: $96.49

SUMMARY:
Under broad supervision, provides management and technical direction to one or multiple projects. Regularly exercises independent judgment, as well as a high level of analytical skill, in solving complex and unusual technical, administrative and managerial problems. Provides overall direction of program activities.

DUTIES AND RESPONSIBILITIES:

*Implement project policies and procedures in accordance with contract/project requirements.
*Responsible for all aspects of project performance (i.e., technical, contractual, administrative, financial)
*Responsible for preparation of annual operating budget input for performance of requirements and other support/service operations.
*Responsible for the analysis, design and development of assigned projects.
*Creates and maintains technical and financial reports in order to demonstrate progress.
*Organizes and assigns duties/responsibilities to subordinates and oversees the successful completion of assigned tasks.
*Assumes the initiative and provides support to marketing personnel in identifying and acquiring potential business.
*Participate in technical presentation, and bid and proposal responses
*Ensures the development, maintenance, and implementation of a program management plan (MS project): a document which guides the performance of all functional activities performed.
*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.
*Consults with clients to ensure conformity with contractual obligations, to include provision of reporting as required.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 8 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities. Must possess two (2) years of task leader experience managing a group of engineers and the full ADP life cycle in software engineering.

TITLE: ARIBA CONSULTANT

Labor Rate: $215.00/hour

SUMMARY:
Under minimum supervision, responsible for all activities related to the administration, planning and development of activities pertaining to the implementation of Ariba software applications. Additional responsibilities include data modeling and design of client server and n-tier architecture systems, data base performance tuning, configuration management, analysis and implementation of Ariba software and application servers, implementation of policies and procedures pertaining to database management and training. Exercises independent judgment, consults with and advises software users relative to procedures, technical problems, priorities and methodologies.

DUTIES AND RESPONSIBILITIES:

*Researches client environment and suggests configuration based upon best-practices
*Installs and configures applications
*Works with client staff to implement software and load data
*Provides documentation and training to client staff

MINIMUM QUALIFICATIONS:
Associate Degree in an associated discipline with related experience or an equivalent combination of education and training that provides the required knowledge, skills, and abilities. Ability to program in client/server applications and knowledge of database concepts and data security.

TITLE: EXECUTIVE PROJECT DIRECTOR

Labor Rate: $315.00

SUMMARY:
Directs and controls consultants and client team to manage full lifecycle projects. Regularly provides executive-level leadership and insight, including managing multiple projects and providing analytical approach.

DUTIES AND RESPONSIBILITIES:

*Direct project policies and procedures in accordance with contract/project requirements.

*Plan, direct and manage project goals with client to ensure milestones are being achieved.

*May be responsible for design and implementation of complex projects, including but not limited to gathering functional/technical requirements, defining business rules, defining and setting system parameters and creating preliminary test scripts.

*May be responsible for configuration, upgrade and building of projects, including but not limited to creating systems based on previous design documents, upgrading existing implementations or existing legacy systems, performing unit/user testing.

*May be responsible for deploying and supporting projects, including but not limited to end-user training development/delivery, creating and executing deployment plans, designing and implementing knowledge transfer and ongoing support

*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.

*Manages project and client team to ensure success, as well as adherence to project timelines and budget.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 10 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities.

TITLE: CONSULTANT – PROJECT MANAGER

Labor Rate: $280.00

SUMMARY:
Supervises consultants and provides management and technical instruction to one or multiple Microsoft/Oracle/SAP-related projects. Regularly exercises independent judgment, including interacting with the client to provide project direction and recommendations, as well as a high level of analytical skill, in solving complex and unusual technical, administrative and managerial problems.

DUTIES AND RESPONSIBILITIES:

*Implement project policies and procedures in accordance with contract/project requirements.

*Plan and manage project goals with client to ensure milestones are being achieved.

*May be responsible for design and implementation of Microsoft/Oracle/SAP projects, including but not limited to gathering functional/technical requirements, defining business rules, defining and setting system parameters and creating preliminary test scripts.

*May be responsible for configuration, upgrade and building of Microsoft/Oracle/SAP projects, including but not limited to creating systems based on previous design documents, upgrading existing Microsoft/Oracle/SAP implementations or existing legacy systems, performing unit/user testing.

*May be responsible for deploying and supporting Microsoft/Oracle/SAP projects, including but not limited to end-user training development/delivery, creating and executing deployment plans, designing and implementing knowledge transfer and ongoing support

*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.

*Manages project and client team to ensure success, as well as adherence to project timelines and budget.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 8 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities.

TITLE: CONSULTANT - SENIOR

Labor Rate: $225.00

SUMMARY:
Under broad supervision, provides management and technical direction to one or multiple Microsoft/Oracle/SAP-related projects. Regularly exercises independent judgment, as well as a high level of analytical skill, in solving complex and unusual technical, administrative and managerial problems.

DUTIES AND RESPONSIBILITIES:

*Implement project policies and procedures in accordance with contract/project requirements.

*Plan and manage project goals, scope of work and resource planning/scheduling.

*May be responsible for design and implementation of Microsoft/Oracle/SAP projects, including but not limited to gathering functional/technical requirements, defining business rules, defining and setting system parameters and creating preliminary test scripts

*May be responsible for configuration, upgrade and building of Microsoft/Oracle/SAP projects, including but not limited to creating systems based on previous design documents, upgrading existing Microsoft/Oracle/SAP implementations or existing legacy systems, performing unit/user testing.

*May be responsible for deploying and supporting Microsoft/Oracle/SAP projects, including but not limited to end-user training development/delivery, creating and executing deployment plans, designing and implementing knowledge transfer and ongoing support

*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.

*Consults with clients to ensure conformity with contractual obligations, to include provision of reporting as required.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 8 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities.

TITLE: CONSULTANT - MIDLEVEL

Labor Rate: $167.00

SUMMARY:
Under broad supervision, provides management/functional and technical direction to one or multiple Microsoft/Oracle/SAP-related projects. Regularly exercises independent judgment, as well as a high level of analytical skill, in solving complex and unusual technical, administrative and managerial problems.

DUTIES AND RESPONSIBILITIES:

*Implement project policies and procedures in accordance with contract/project requirements.

*Plan and manage project goals, scope of work and resource planning/scheduling.

*May be responsible for design and implementation of Microsoft/Oracle/SAP projects, including but not limited to gathering functional/technical requirements, defining business rules, defining and setting system parameters and creating preliminary test scripts

*May be responsible for configuration, upgrade and building of Microsoft/Oracle/SAP projects, including but not limited to creating systems based on previous design documents, upgrading existing Microsoft/Oracle/SAP implementations or existing legacy systems, performing unit/user testing.

*May be responsible for deploying and supporting Microsoft/Oracle/SAP projects, including but not limited to end-user training development/delivery, creating and executing deployment plans, designing and implementing knowledge transfer and ongoing support

*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.

*Consults with clients to ensure conformity with contractual obligations, to include provision of reporting as required.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 4 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities.

TITLE: CONSULTANT - JUNIOR

Labor Rate: $126.00

SUMMARY:
Under supervision, provides functional and technical direction to one or multiple Microsoft/Oracle/SAP-related projects. Regularly exercises independent judgment, as well as a high level of analytical skill, in solving complex and unusual technical, administrative and managerial problems.

DUTIES AND RESPONSIBILITIES:

*Implement project policies and procedures in accordance with contract/project requirements.

*May be responsible for design and implementation of Microsoft/Oracle/SAP projects, including but not limited to gathering functional/technical requirements, defining business rules, defining and setting system parameters and creating preliminary test scripts

*May be responsible for configuration, upgrade and building of Microsoft/Oracle/SAP projects, including but not limited to creating systems based on previous design documents, upgrading existing Microsoft/Oracle/SAP implementations or existing legacy systems, performing unit/user testing.

*May be responsible for deploying and supporting Microsoft/Oracle/SAP projects, including but not limited to end-user training development/delivery, creating and executing deployment plans, designing and implementing knowledge transfer and ongoing support

*Ensures the maximum service is obtained from all operations through efficient use of personnel, equipment, quality assurance and configuration management.

*Consults with clients to ensure conformity with contractual obligations, to include provision of reporting as required.

MINIMUM QUALIFICATIONS:
Bachelor Degree in an associated discipline and a minimum of 2 years or related experience or any equivalent combination of education and training that provides the required knowledge, skills, and abilities.

TERMS AND CONDITIONS APPLICABLE TO TERM SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-32), PERPETUAL SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-33) AND MAINTENANCE AS A SERVICE (SPECIAL ITEM NUMBER 132-34) OF GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY SOFTWARE)

1. INSPECTION/ACCEPTANCE The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The ordering activity reserves the right to inspect or test any software that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming software at no increase in contract price. The ordering activity must exercise its postacceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the software, unless the change is due to the defect in the software.

2. END USER LICENSE AGREEMENTS (EULA) / TERMS OF SERVICE (TOS) AGREEMENT REQUIREMENTS The Contractor shall provide all Enterprise User License Agreements in an editable format.

3. GUARANTEE/WARRANTY a. Unless specified otherwise in this contract, the Contractor's standard commercial guarantee/warranty as stated in the contract's commercial pricelist will apply to this contract. **Contractor is to insert commercial guarantee/warranty clauses.** b. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract. c. Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted items.

4. TECHNICAL SERVICES The Contractor, without additional charge to the ordering activity, shall provide a hot line technical support number at the time of order for the purpose of providing user assistance and guidance in the implementation of the software. The technical support number availability will be provided upon order.

5. SOFTWARE MAINTENANCE a. Software maintenance as it is defined: (select software maintenance type) :

___X___ 1. Software Maintenance as a Product (SIN 132-32 or SIN 132-33)

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that are included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on- line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does NOT include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

Software Maintenance as a product is billed at the time of purchase.

_____ 2. Software Maintenance as a Service (SIN 132-34)

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

Software maintenance as a service is billed in arrears in accordance with 31 U.S.C. 3324.

b. Invoices for maintenance service shall be submitted by the Contractor on a quarterly or monthly basis, after the completion of such period. Maintenance charges must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

6. PERIODS OF TERM LICENSES (SIN 132-32) AND MAINTENANCE (SIN 132-34) a. The Contractor shall honor orders for periods for the duration of the contract period or a lessor period of time. b. Term licenses and/or maintenance may be discontinued by the ordering activity on thirty (30) calendar days written notice to the Contractor. c. Annual Funding. When annually appropriated funds are cited on an order for term licenses and/or maintenance, the period of the term licenses and/or maintenance shall automatically expire on September 30 of the contract period, or at the end of the contract period, whichever occurs first. Renewal of the term licenses and/or maintenance orders citing the new appropriation shall be required, if the term licenses and/or maintenance is to be continued during any remainder of the contract period. d. Cross-Year Funding Within Contract Period. Where an ordering activity's specific appropriation authority provides for funds in excess of a 12 month (fiscal year) period, the ordering activity may place an order under this schedule contract for a period up to the expiration of the contract period, notwithstanding the intervening fiscal years. e. Ordering activities should notify the Contractor in writing thirty (30) calendar days prior to the expiration of an order, if the term licenses and/or maintenance is to be terminated at that time. Orders for the continuation of term licenses and/or maintenance will be required if the term licenses and/or maintenance is to be continued during the subsequent period.

7. CONVERSION FROM TERM LICENSE TO PERPETUAL LICENSE

Offeror does not support conversion from a term license to perpetual license.

8. TERM LICENSE CESSATION

Offeror does not support term license cessation.

9. UTILIZATION LIMITATIONS - (SIN 132-32, SIN 132-33, AND SIN 132-34) a. Software acquisition is limited to commercial computer software defined in FAR Part 2.101. b. When acquired by the ordering activity, commercial computer software and related documentation so legend shall be subject to the following: (1) Title to and ownership of the software and documentation shall remain with the Contractor, unless otherwise specified. (2) Software licenses are by site and by ordering activity. An ordering activity is defined as a cabinet level or independent ordering activity. The software may be used by any subdivision of the ordering activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one ordering activity's site. This would allow other agencies access to one ordering activity's database. For ordering activity public domain databases, user agencies and third parties may use the computer program to enter, retrieve, analyze and present data. The user ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect the Contractor's proprietary property with any third parties that are permitted access to the computer programs and documentation in connection with the user ordering activity's permitted use of the computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the user ordering activity. (3) Except as is provided in paragraph 8.b(2) above, the ordering activity shall not provide or otherwise make available the software or documentation, or any portion thereof, in any form, to any third party without the prior written approval of the Contractor. Third parties do not include prime Contractors, subcontractors and agents of the ordering activity who have the ordering activity's permission to use the licensed software and documentation at the facility, and who have agreed to use the licensed software and documentation only in accordance with these restrictions. This provision does not limit the right of the ordering activity to use software, documentation, or information therein, which the ordering activity may already have or obtains without restrictions. (4) The ordering activity shall have the right to use the computer software and documentation with the computer for which it is acquired at any other facility to which that computer may be transferred, or in cases of Disaster Recovery, the ordering activity has the right to transfer the software to another site if the ordering activity site for which it is acquired is deemed to be unsafe for ordering activity personnel; to use the computer software and documentation with a backup computer when the primary computer is inoperative; to copy computer programs for safekeeping (archives) or backup purposes; to transfer a copy of the software to another site for purposes of benchmarking new hardware and/or software; and to modify the software and documentation or combine it with other software, provided that the unmodified portions shall remain subject to these restrictions. (5) "Commercial Computer Software" may be marked with the Contractor's standard commercial restricted rights legend, but the schedule contract and schedule pricelist, including this clause, "Utilization Limitations" are the only governing

terms and conditions, and shall take precedence and supersede any different or additional terms and conditions included in the standard commercial legend.

10. SOFTWARE CONVERSIONS - (SIN 132-32 AND SIN 132-33) Full monetary credit will be allowed to the ordering activity when conversion from one version of the software to another is made as the result of a change in operating system , or from one computer system to another. Under a perpetual license (132-33), the purchase price of the new software shall be reduced by the amount that was paid to purchase the earlier version. Under a term license (132-32), conversion credits which accrued while the earlier version was under a term license shall carry forward and remain available as conversion credits which may be applied towards the perpetual license price of the new version.

11. DESCRIPTIONS AND EQUIPMENT COMPATIBILITY The Contractor shall include, in the schedule pricelist, a complete description of each software product and a list of equipment on which the software can be used. Also, included shall be a brief, introductory explanation of the modules and documentation which are offered.

12. RIGHT-TO-COPY PRICING

The offeror does not support the right-to-copy.

17. DESCRIPTION OF PRODUCTS AND PRICING

PRODUCT PRICELIST

SIN	Mfr Name	Part Number	Description	Manufacturer's List Price	GSA Price with IFF	Warranty	Country of Origin
132-33	Adxstudio Inc.		Adxstudio Portals: Standard Edition	$4,995.00	$4,495.84	90 days	CANADA
132-33	Adxstudio Inc.		Adxstudio Portals: Professional Edition	$9,995.00	$8,996.17	90 days	CANADA
132-33	Adxstudio Inc.		Adxstudio Portals: Enterprise Edition	$19,995.00	$17,996.85	90 days	CANADA
132-32	Adxstudio Inc.		Annual Software Maintenance for Adxstudio Portals Standard Edition	$899.00	$809.16	90 days	CANADA
132-32	Adxstudio Inc.		Annual Software Maintenance for Adxstudio Portals Professional Edition	$1,799.00	$1,619.22	90 days	CANADA
132-32	Adxstudio Inc.		Annual Software Maintenance for Adxstudio Portals Enterprise Edition	$3,599.00	$3,239.34	90 days	CANADA
132-33	Adxstudio Inc.		Adxstudio ALM Toolkit: Developer Seat License	$500.00	$450.03	90 days	CANADA
132-33	Adxstudio Inc.		Adxstudio ALM Toolkit: Site License	$2,000.00	$1,800.14	90 days	CANADA
132-32	Adxstudio Inc.		Annual Software Maintenance for Adxstudio ALM Toolkit Developer Seat License	$90.00	$81.01	90 days	CANADA
132-32	Adxstudio Inc.		Annual Software Maintenance for Adxstudio ALM Toolkit Site License	$360.00	$324.02	90 days	CANADA

USA COMMITMENT TO PROMOTE SMALL BUSINESS PARTICIPATION PROCUREMENT PROGRAMS

PREAMBLE

(Name of Company) provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

To develop and promote company policy initiatives that demonstrate our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in ordering activity contracts. To accelerate potential opportunities please contact Meghan A. Barkley,Tel: (703) 257-0432, meghanbarkley@aeonnexus.com, Fax (703) 330-4460.

BEST VALUE
BLANKET PURCHASE AGREEMENT
FEDERAL SUPPLY SCHEDULE

(Insert Customer Name)

In the spirit of the Federal Acquisition Streamlining Act (ordering activity) and (Contractor) enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Supply Schedule Contract(s) _____.

Federal Supply Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Teaming Arrangements are permitted with Federal Supply Schedule Contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

This BPA will further decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the ordering activity that works better and costs less.

Signatures

_____		_____	
Ordering Activity	Date	Contractor	Date

BPA NUMBER_____

(CUSTOMER NAME)
BLANKET PURCHASE AGREEMENT

Pursuant to GSA Federal Supply Schedule Contract Number(s)_____, Blanket Purchase Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA) EXCLUSIVELY WITH (ordering activity):

(1) The following contract items can be ordered under this BPA. All orders placed against this BPA are subject to the terms and conditions of the contract, except as noted below:

MODEL NUMBER/PART NUMBER	*SPECIAL BPA DISCOUNT/PRICE

(2) Delivery:

DESTINATION	DELIVERY SCHEDULES / DATES

(3) The ordering activity estimates, but does not guarantee, that the volume of purchases through this agreement will be _____.

(4) This BPA does not obligate any funds.

(5) This BPA expires on _____ or at the end of the contract period, whichever is earlier.

(6) The following office(s) is hereby authorized to place orders under this BPA:

OFFICE	POINT OF CONTACT

(7) Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.

(8) Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery tickets or sales slips that must contain the following information as a minimum:

(a) Name of Contractor;

(b) Contract Number;

(c) BPA Number;

(d) Model Number or National Stock Number (NSN);

(e) Purchase Order Number;

(f) Date of Purchase;

(g) Quantity, Unit Price, and Extension of Each Item (unit prices and extensions need not be shown when incompatible with the use of automated systems; provided, that the invoice is itemized to show the information); and

(h) Date of Shipment.

(9) The requirements of a proper invoice are specified in the Federal Supply Schedule contract. Invoices will be submitted to the address specified within the purchase order transmission issued against this BPA.

(10) The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the event of an inconsistency between the provisions of this BPA and the Contractor's invoice, the provisions of this BPA will take precedence.

****

BASIC GUIDELINES FOR USING
"CONTRACTOR TEAM ARRANGEMENTS"

Federal Supply Schedule Contractors may use "Contractor Team Arrangements" (see FAR 9.6) to provide solutions when responding to a ordering activity requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Supply Schedule contracts.

Orders under a Team Arrangement are subject to terms and conditions or the Federal Supply Schedule Contract.

Participation in a Team Arrangement is limited to Federal Supply Schedule Contractors.

Customers should refer to FAR 9.6 for specific details on Team Arrangements.

Here is a general outline on how it works:

- The customer identifies their requirements.
- Federal Supply Schedule Contractors may individually meet the customers needs, or -
- Federal Supply Schedule Contractors may individually submit a Schedules "Team Solution" to meet the customer's requirement.
- Customers make a best value selection.

AEON NEXUS

Requirements to results.

NEW YORK CITY - OFFICE OF MANAGEMENT AND BUDGET

Microsoft Dynamics Application

PIN # 002-14-G0002

Submitted to:
NYC Office of Management and Budget
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Submitted by: December 20, 2013 3:00 PM EST

Submitted by:
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NYS Certified Minority Business Enterprise
U.S. SBA Small Disadvantage Business
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Volume I: Technical Quotation

Section I: Executive Summary

Aeon Nexus Corporation is a certified minority-owned, small disadvantaged business, experienced in providing public and private sector clients with superior software solutions. Our expertise in IT consulting and customer service has made Aeon Nexus a valuable asset to our clients in the commercial and federal sectors since 1997. Originally headquartered in Washington, D.C., Aeon Nexus Corporation relocated its headquarters to Glens Falls, NY, an approved Empire Zone location, in early 2010. With the revitalization of an 8,000 square foot facility, we are proud to call the Empire State our home.

As a premiere integrator of IT solutions, we pride ourselves on being able to solve our clients' most challenging problems, regardless of the specific platform. Our in-depth understanding of multiple applications and technologies uniquely positions us to deliver exceptional results, specifically in circumstances where the deployed solution requires integration with multiple IT systems, databases, and infrastructure (e.g. on premise or cloud). Our goal is to identify and deliver the solution that best meets our clients' needs. Our extensive experience with both the private and public sectors provides us with a unique perspective for translating best practices (regardless of their origin) so that they can be incorporated and successful under the realities, opportunities, and constraints of the government environment. Having successfully delivered on assignments at all levels of government including international, federal, state, and local, we have the ability to scale and drive success for public sector clients of all sizes.

Aeon Nexus is formally part of Microsoft's Partner Program under its National Solutions Integrator (NSI) business segment. As a managed partner, Microsoft commits management resources, training, and capital in support of our partnership. Additionally, we are part of Microsoft's Supplier Diversity Program. Aeon Nexus is currently a MS Silver Partner and we are actively working towards achieving our Gold Competencies in CRM, Mid-Market Solutions, and Portals & Collaboration. Our most recent Microsoft projects have focused on Microsoft Dynamics CRM and SharePoint.

By combining our technical knowledge, consulting experience and partner network Aeon Nexus easily differentiates our solutions from competitors. Our team's best-in-class resources and leading customer service enables us to deliver above and beyond our customers' expectations for less.

Section II: Technical Approach

Aeon Nexus highly recommends Microsoft Dynamics CRM Online application to meet the Office of Management and Budget's need for an optimal grants management solution. We are confident that Microsoft Dynamics CRM Online will effectively and efficiently manage and track cases, as well as output needed reports and have the ability to generate reports with partner agencies. This solution is the ideal modern integrated application that will meet and exceed the requirements of OMB. Our proposed grant management tracking solution will aid OMB in its role as grant administrator over the entire lifecycle of the Community Development Block Grant-Disaster Recovery (CDBG-DR) grant.

2.1 System Overview

Microsoft Dynamics CRM Online

Microsoft Dynamics CRM Online is a full-service, COTS (commercial-off-the-shelf) customer relationship management (CRM) application that provides a complete suite of powerful customer service

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capabilities, all with a familiar user interface based on Microsoft Outlook. Microsoft Dynamics CRM Online runs natively within Outlook or within Windows Internet Explorer as a web application. Microsoft Dynamics CRM Online is an exceptional application because of its wide range of benefits, including point-and-click configurability, enterprise scalability, and easy interoperability to existing applications and databases. It delivers the "Power of Productivity" for users focusing on the following:

- Out of the box functionality for customer relationship management; including managing contacts, leads, cases, opportunities, activities, calendars, and providing call center support.
- Flexible architecture that allows new features and capabilities to be very quickly implemented through configuration rather than customization.
- Familiar experiences through a next-generation native Microsoft Outlook client, browser-based and mobile access, role-tailored design, and advanced user personalization, improving user adoption and giving users easy access to the information they need to be successful.
- Intelligent experiences through guided process dialogs, inline business intelligence for performance and goal management, and real-time dashboards and analytics, providing the most up-to-date information critical to enabling OMB staff to do their jobs effectively.
- Connected experiences through flexible cloud development, Windows Azure interoperability, contextual Microsoft SharePoint capabilities, and the new Microsoft Dynamics Marketplace, making it easy for customers and partners to configure and customize Microsoft Dynamics CRM Online to meet specific business needs.

Additionally, Microsoft Dynamics CRM Online delivers exceptional flexibility and business fit, combined with familiar user experiences through its deep stack alignment with the Microsoft Office productivity suite, namely Microsoft Outlook, Microsoft Excel, and Microsoft Word. It also works well with other Microsoft technologies such as Microsoft SQL Server® database software, Microsoft Communications Server, Microsoft BizTalk® Server, Microsoft Exchange Server, and Microsoft SharePoint® Server for a complete Microsoft solution.

2.2 Case (Grant) Management Functionality

Microsoft Dynamics CRM Online allows users to create, assign, and manage cases across multiple channels, including phone, email, web, in person, and emerging channels. Out of the box case management capabilities of Microsoft Dynamics CRM Online include:

- Tracking of all case-related information, including email messages, appointments, and tasks
- Ability to create unlimited connections between cases and other entities in Microsoft Dynamics CRM Online
- Ability to search, list, and filter cases on a variety of criteria
- Ability to limit access to cases based on user permissions
- Create and manage queues and assign cases to queues
- Use workflow to automate case management processes, including assigning a status to case, routing it based on a variety of criteria, escalation, and raising alerts if a case is not resolved in a timely fashion

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Ability to attach files to a case

Notes and attachments, including documents, images, and other files, may be attached to any Microsoft Dynamics CRM Online entity, including cases, contacts, and accounts.

Ability to capture, edit, and view the history of a case

Microsoft Dynamics CRM Online provides out of the box integration with Microsoft Outlook and Microsoft Exchange. This allows email communication and other activities (such as calendar appointments, tasks, and phone calls), automated or manual, to be tracked in the system and associated with all related parties. Email and self-service notes from prior contacts can be automatically populated into an activities record attached to an account, contact, or case.

Microsoft Dynamics CRM Online records a history of all activities. This information is exposed throughout the service process and can reside in a case, account, or contact record. Information captured includes: Interaction history, Call history, Issues and attempted solutions, Products and service purchased, Social networking information, and Email messages.

Once an activity is completed, it moves to the history of all related parties. Users can easily view and search history associated with every customer and case. Once a case has been resolved it is not deleted, but is kept as history. All of the related information will remain with the case even after it is resolved. Users will still be able to search and view cases after they have been resolved.

In addition, the Customer Portal for Microsoft Dynamics CRM Online solution, which provides self-service capabilities for Microsoft Dynamics CRM Online, provides organizations with a complete self-service history showing all trouble tickets submitted, knowledge base articles viewed, and any service appointments scheduled.

Audit trail for cases

Out of the box, Microsoft Dynamics CRM Online maintains an audit trail for cases. Auditing can capture any change within a case, who changed it, what the previous value was, and when they changed it. The audit log can be viewed from within a case in order of the data of the activity.

Association of cases with contact information

Contacts can be linked to cases in a one-to-many or many-to-one structure. A role can be assigned to describe the nature of the connection. In addition, the Connections feature in Microsoft Dynamics CRM Online can be used to map out complex relationships between entities. A date range may also be assigned to the connection. For example, multiple contacts may be linked with a case, or multiple cases could be linked to the same job.

Case escalation capabilities of the product

Cases can be automatically escalated to a specific person or team, or put in a queue based on priority or some other configured condition by using a workflow. Workflows can be used to automate case management tasks, such as tracking follow-up activities on a case or escalating overdue issues. Managers can define, automate, and enforce specific business rules, policies, and procedures through workflows. These workflows can be configured to trigger based on last modified time, as well as to stop when the case is modified.

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Case routing capabilities

Cases can be easily assigned to an individual or a group in Microsoft Dynamics CRM Online. Workflows can be used to automatically route or assign a case to an agent, team, or queue based on pre-defined criteria. This is done through a point-and-click interface, and can be adapted as your routing rules change. As user email messages regarding a particular case are received, they are automatically added to the case for historical tracking. Email attachments are also tracked.

Service queuing capabilities

Cases can be queued or assigned to individuals. They can be related to a specific contact, and the communication between the user and the contact regarding the case is recorded on the case and the contact. Microsoft Dynamics CRM Online allows email to be filtered into support queues that can be seen by queue members, who can assign support email messages and issues to themselves or other customer service agents. Managers can administrate queues based on their privileges. For example, a manager could have the ability to create a queue while restricting staff members.

Ticketing capabilities

Microsoft Dynamics CRM Online allows for the creation and management of support or incident cases (or tickets). The system can handle the ticket throughout its life cycle, including the opening of the ticket, the assigning of the ticket, and the resolution of the ticket. Details such as the incoming time stamp, severity, topic, type of ticket, contact name, and other attributes can be tracked within the case record.

Capture cases from a website

In Microsoft Dynamics CRM Online, cases can be created through standard touch points, including phone call, in-person, email, web, or mobile.

Create cases from email messages

Through the native Microsoft Outlook interface for Microsoft Dynamics CRM Online, users can instantly create a case from an email message with just a few clicks.

Manage and display case status

Microsoft Dynamics CRM Online workflow can be used to automatically assign attributes to a case based on pre-defined criteria, including case status and priority. Users are able to configure many aspects of the business rules and set the priority of each rule.

Advance a case through its life cycle based on business rules

Customer service agents or managers can define, automate, and enforce specific business rules, policies, and procedures through workflows. Workflows can be triggered manually, or configured to trigger automatically based on various criteria. For example, workflow rules can be used to automate the following actions: escalate overdue cases, automatically cancel a case based on defined criteria, escalate a case to a specific person, team, and/or queue based on priority or other condition, automatically route or assign a case based on defined criteria, dispatch cases to a queue, and close a case and archive it based on defined criteria.

Assigning service personnel to a case manually or automatically

Cases can be assigned manually or automatically. Cases can be automatically escalated to a specific person, team, or queue based on priority, or other configured condition, by creating a workflow.

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Automated alerts (case timing, changes to a case, and other attributes)

Microsoft Dynamics CRM Online can automatically notify relevant parties regarding case status based on multiple criteria, such as when a case has been idle for a period of time, has been updated, completed, or cancelled.

Reporting

Microsoft Dynamics CRM Online provides a robust and comprehensive reporting solution Out-of-the-Box (OOB). Our proposed solution comes with several standard reports already created, with the option to create new reports using the Report Wizard. The Report Wizard walks users through report layout step-by-step with a graphical user interface and enables users to query the database using FetchXML, a language purpose-built by Microsoft. When combined with the "Pre-Filtering" option, which sends only the data needed for the report to the reporting engine, the Dynamics CRM Online Solution becomes even more capable and efficient.

2.3 Our Approach

Aeon Nexus will follow the four-phased approach below in order to execute this engagement:

Proposed Engagement Approach

Phase 1 – Discovery

Aeon Nexus will work closely with OMB to elicit, identify, and document business requirements and functional requirements for this solution. During this phase, our team will meet with key OMB stakeholders to ensure the resulting solution meets the needs of OMB. In addition to the specific requirements, our team will seek to understand and document the workflows that must be in place to ensure successful execution, both within the software solution and also at the point where OMB staff or their designees take over to execute their part of the process.

The Discovery Phase will result in two primary deliverables. The first deliverable will be the Business Requirements Document (BRD), which memorializes *what* business processes must be executed by the solution and how the new, technology-enabled workflows will be performed. The second deliverable will be the Functional Requirements Document (FRD), which memorializes *how* the business requirements will be met in the solution.

Phase 2 – Development

Leveraging the deliverables from the prior phase, Aeon Nexus will design a development plan for the solution and perform the necessary customizations and configurations to the COTS solutions in order to ensure that the necessary business and functional requirements are successfully met. During this process, the engagement's project plan will be more clearly defined, based upon a better understanding of the specific requirements. Specific milestones and implementation timelines will also be clarified.

The Development Phase results in two key deliverables. The first deliverable is a refined development plan that articulates what and how development will occur over the course of this specific phase. The

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second deliverable is the application itself, in a *development environment*, with the requisite customizations and configurations in place.

Phase 3 – Implementation
Leveraging the deliverables from the prior phase, Aeon Nexus will work with OMB to implement the solution and ensure that it is functioning appropriately in a *production environment*. Aeon Nexus will work with OMB to help ensure appropriate communication is provided to the users of the new solution. Additionally, the engagement leader will work with OMB in support of how they will communicate with staff about this new solution.

The Implementation Phase will have two key deliverables. The first deliverable will be the solution delivered in a production environment. The second deliverable will be as needed communications and change management consulting in support of the OMB's new solution.

Phase 4 – Testing & Training
In support of the successful implementation of the solution, Aeon Nexus will work with OMB to develop an Overall Testing Plan detailing the testing approach and related procedures such as issue tracking and resolution. The Overall Testing plan will cover the following areas: Migrated Data Testing, Integration Testing, Unit Testing, Functional Testing, UAT, Performance Testing, and Security Testing.

Aeon Nexus will work with OMB to develop and execute a Training Plan and will provide training and knowledge transfer to ensure that OMB Administrators understand how to administer, maintain, and support the application. This phase will result in user documentation to include a system user manual, and a user quick-start guide. System administration documentation will include: database dictionary, system administration and maintenance guide, troubleshooting guide, disaster recovery plan, and a system test plan.

Reporting
The Aeon Nexus team will develop a system that will facilitate the processing of information needed for all reports needed by OMB to include information aggregated from information partner agencies in the HUD's Disaster Recovery Grant Reporting (DRGR) System. Our team will train OMB staff and key stakeholders on how to develop and run reports utilizing the new grant management system.

2.4 Microsoft Dynamics CRM Online Licensing, Hosting, and Storage

Professional Licensing Capabilities
Microsoft Dynamics CRM Online Professional licenses provide full access to all of the functionality and can be used by any of the roles that are supported in the MS Dynamics CRM System.

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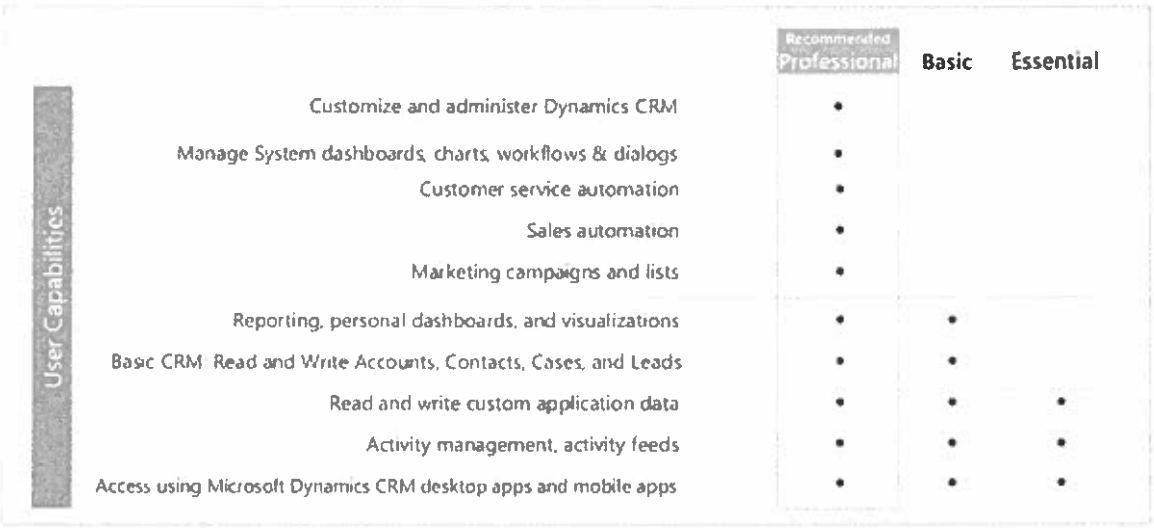
User Subscription Licenses (USLs)



		Recommended Professional	Basic	Essential
User Capabilities	Customize and administer Dynamics CRM	•		
	Manage System dashboards, charts, workflows & dialogs	•		
	Customer service automation	•		
	Sales automation	•		
	Marketing campaigns and lists	•		
	Reporting, personal dashboards, and visualizations	•	•	
	Basic CRM: Read and Write Accounts, Contacts, Cases, and Leads	•	•	
	Read and write custom application data	•	•	•
	Activity management, activity feeds	•	•	•
	Access using Microsoft Dynamics CRM desktop apps and mobile apps	•	•	•

IT Server Architecture/Hosting

Microsoft Dynamics CRM Online is remotely hosted and maintained by Microsoft thus leaving OMB's IT staff and engineers available for other tasks within the organization. Our proposed solution is entirely cloud based and does not require any hardware thus ensuring less up-front IT investment, secure platform, and low maintenance. All of the applications support and maintenance will be included with purchase of licenses. OMB will have access to the most up-to-date software version allowing for ultimate speed, performance, and productivity.

Service Management

Microsoft Dynamics CRM Online has a well-defined change control process to provide applicable patches and/or upgrades. This includes deployment and verification of patches in a pre-production environment, scheduled maintenance windows for production deployment, and defined notification processes to help minimize interruption of the service. Microsoft Dynamics CRM Online is patched monthly with the latest security fixes and platform updates, and antivirus signatures are updated three times each day. Change management procedures also take into account the ability to roll systems back to a previously operational state and plans to test modifications to verify system stability and security. Microsoft Dynamics CRM Online will notify OMB (administrators and in some cases users) through various methods including the website, application, and email of scheduled or unscheduled updates and changes to the service. For planned service interrupting events (such as service maintenance), OMB will be notified five days in advance.

Availability

Microsoft provides a financially backed service level agreement (SLA) governing the application's availability for the term of the subscription. The SLA provides for a monthly uptime of 99.9 percent.

On-Premise Hosting

At Aeon Nexus, we understand that some customers are fairly new to cloud deployed solutions. The

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Microsoft Dynamics CRM products offer the "power of choice". This allows customers to choose from hosting on-premise, online, or partner-hosted. Aeon Nexus is highly recommending OMB deploy using the online software version and is confident that this will be the best option for many years to come. However, should OMB decide to switch to an on-premise solution at a later date, the transition is extremely simple. The move can be completed in a couple days and there is no cancellation fee when migrating to another Dynamics CRM platform. Please note that on-premise hosting will require additional hardware and on-premise IT staff to maintain the system.

Storage

A Dynamics CRM Online subscription entitles users to 5GB of storage. Additional storage may be purchased using several different methods. One method is purchasing additional GB's of storage through your CRM Online subscription. If using Office 365 to manage your subscription, this can be done directly from your subscription management page.

2.5 NYC OMB Technical Requirements

The vendor shall use an "Agile" style development methodology to rapidly deploy functionality. This methodology uses multiple releases to deploy functionality. The vendor will work with OMB to determine the frequency and functionality that will be deployed in releases.

The Aeon Nexus team has specifically created for OMB an iterative, agile SSDLC designed to properly expedite projects through the major phases of development. Figure 1 below represents the process used to reduce project risks, identify barriers to success, and track and manage the entire team's development progress. By incorporating short bursts of development with continuous stakeholder involvement, the solution is guided with proper feedback and direction down the path to success. Because this custom SSDLC is highly flexible and readily customized, out team will work with OMB during the project initiation and discovery phase to further refine the agreed upon process and determine the frequency and content of releases. A full version of the SSDLC is available in Appendix B.

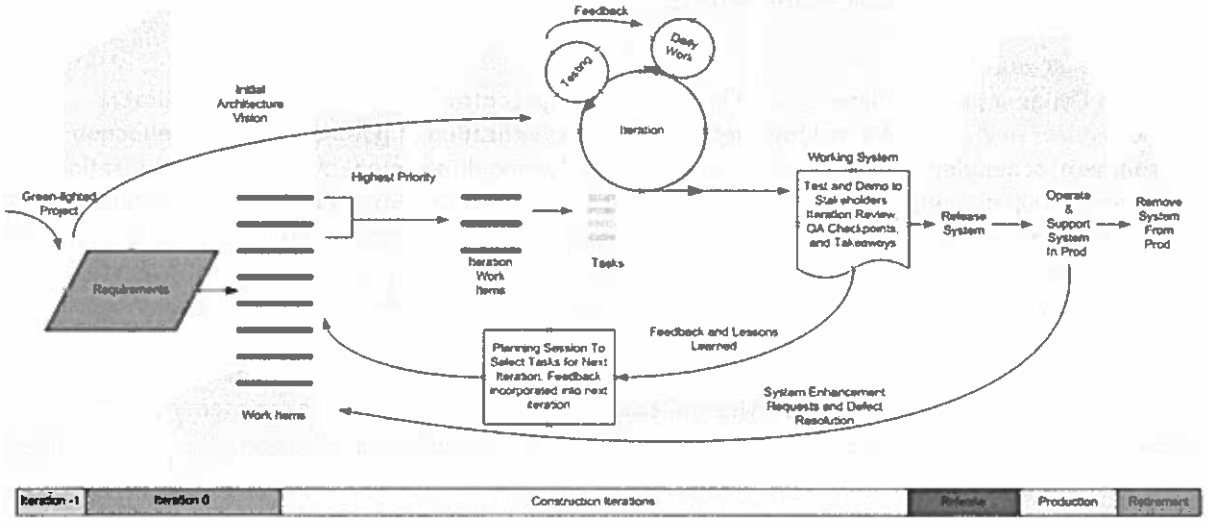

Figure 1

The vendor will work with OMB to define a plan for Quality Control and Quality Assurance (QC\QA). This plan will include internal testing measures employed by the vendor during development and User

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Acceptance Testing (UAT) performed by OMB. The vendor will only deploy functionality to the production environment with prior approval from OMB.

The SSDLC our team has customized for this Dynamics CRM engagement fully incorporates a robust quality assurance framework designed to incorporate quality control early on in the development process. Experience has proven that successful outcomes are characterized by development processes that engage QA/QC teams earlier and incorporate quality management in all phases of the development cycle.
By utilizing a Secure SDLC, our team recognizes that security and quality go hand in hand, and will leverage the proper checkpoint processes and process artifacts to manage the full effort. User acceptance testing will regularly be employed to verify incremental deployments, and all stages of deployments will be strictly governed to ensure that all approvals have been received from the appropriate stakeholders.

The vendor will develop appropriate user and training manuals and provide training as needed to OMB and other staff as requested.

Aeon Nexus will generate a series of task-based reference manuals and lab focused training documentation to ensure that all staff and system users have access to the appropriate level of electronic help and support. Our processes and training procedures, employed by seasoned training staff will ensure that initial system rollout will be supported by a well trained staff will full competence in their area of system utilization. Our procedures and documentation will also ensure that future knowledge transfer considerations are addressed and that key staff have been identified as key system experts for future training and support needs.

Aeon Nexus will provide 120 hours of training and documentation. Training will consist of 5 days of on-site training with an additional 5 days of online training for additional support.

The vendor will work with OMB to develop a user access control model utilizing the City's identity and cloud integration infrastructure and the vendor will implement that model into the system. Design and function of such controls will be specified in writing once determined and prior to development.

Aeon Nexus has previously worked with New York State agencies, the federal government, and private industries each having implemented a unique single sign-on user authentication model for their Internet and Intranet facing applications. Authentication frameworks such as CA's SiteMinder provide user access control models that govern all user permissions and site authorizations. Our team of Dynamics CRM experts has worked with CRM online to incorporate these systems into the user access control of customized solutions. Our team will work with OMB to integrate their model into the system after a thorough analysis period whereby our staff will work with OMB to document the agreed upon function of such controls.

2.6 NYC OMB Functional Requirements

The vendor will work with the City to develop technical and business requirements to develop this centralized data management platform to support the City of New York OMB CDBG-DR Team. Technical and business requirements will be will be specified in writing once determined and prior to development.

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As described in the accompanying SSDLC (Appendix B), the Requirement & Analysis phase represents a vital time period that our team of developers and analysts will work with key stakeholders and OMB staff to identify, analyze, and develop the first iteration of technical and business requirements. Unlike a waterfall method of development, our team will not look to finalize all requirements prior to the beginning of development. Instead, an agile approach will be taken to gather "good enough" documentation and requirements to begin working on each additional phase of development. Just like the software, the requirements will be iteratively honed into the final agreed upon list of system deliverables. However, no development iterations will begin until a written list of agreed upon requirements have achieved all proper gated authorizations.

The system will need to aggregate data from multiple external data sources. Data will need to be collected from data system managed by other partner agencies. These external data systems include other Microsoft Dynamics Systems, the City's Financial Management System, Oracle CRM System and other systems not yet determined. Data import or data exchange capabilities may need to be built to gather data from partner agencies. Data will be stored in Microsoft's Cloud Environment. Data import or exchange capabilities for each system will be specified in writing once determined and prior to development. The system will need to be able to support OMB's CDBG-DR Team managing and tracking various structured workflows. These workflows will need to include status, milestone tracking, approval tracking and email notifications.

Dynamics CRM Online provides for convenient and easy data exports and imports through the use of recognized file formats. Our team will design all data exchanges through the use of universally recognized comma separated values (csv) files. Our Dynamics database experts will produce detailed data maps designed to model all supported data transformations between the external data source, and the internal entity structures. Data from other Dynamics platforms, the City's FMS system, Oracle systems, and other external sources will be formatted to match csv formats that are readily digestible through standard Dynamics CRM data utilities and interfaces.
Additionally, our team will work to design, develop, and implement a multitude of structured workflows identified through the Analysis and Design phase and needed to support the CDBG-DR team's system requirements. The workflows will be tracking type workflows including status, milestones, approvals, and email notifications. Our team has worked extensively with the robust Dynamics CRM Outlook integration capabilities for identifying and tracking important related emails threads between system users and contacts.

Specified workflows shall include controls based on business requirements specified by OMB. These controls will be specified in writing once determined and prior to development.

Aeon Nexus understands this requirement and it will be the responsibility of the team to work with OMB during the Research and Analysis phase to identify the business requirements and controls necessary to produce the proper system workflows needed to support OMB staff activities.

The system will need to able to support OMB's CDBG-DR Team to manage data within HUD's Disaster Recovery Grant Reporting (DRGR) system. Information aggregated from information partner agencies will need to be reported in the DRGR system. DRGR has functionality to upload information via CSV file templates. The system will need to be able to generate these reports onto the CSV file templates, for upload into HUD's Disaster Recovery Grant Reporting (DRGR) system.

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The development team will identify all data export needs, including field names, values, and file formats required to support the CDBG-DR team's management of system data within HUD's Disaster Recovery Grant Reporting (DRGR) system. Aggregated information will be exported to CSV files per system requirements.

The system will need to provide reporting and dashboard functionality. The Vendor will work with OMB to define a set of standardized operating reports and dashboards to assist OMB in managing the grant. The vendor will build these reports into the system so they can be run on a regular basis. The vendor will develop a dashboard around these standardized reports. The system shall also provide functionality for OMB to develop ad hoc reports. The vendor will work with OMB to train end uses how to use both the standardized operating reports as well as the ad hoc reporting functionality. The Vendor will work with OMB to define reporting requirements prior to development and will develop these reports within the system.

The Aeon Nexus team of Dynamics CRM experts will work through the Research and Analysis phase to identify and analyze all reporting and dashboard needs. Our team is highly versed in "Advanced Find" queries capable of building and generating important system reports, SQL Server Reporting Services (SSRS) a potent report generation tool utilizing Visual Studio with advanced capabilities for creating complex multi-faceted reports and visual components, and Dynamics CRM's intrinsic chart and graphing capabilities convenient for building intuitive dashboards with an interactive interface.
Our team of trainers will also work with OMB staff to train them on the ad hoc reporting capabilities of Dynamics CRM. All reporting requirements will be contingent upon the initial Requirements and Analysis phase of the engagement.

The system will need to be adhering to security standards defined by the City of New York's Department of Information Technology and Telecommunications (DoITT). The system will need to pass security vulnerability scans defined by these security standards.

As is evidenced by our desire to implement a Secure SDLC that incorporates secure coding and development practices into all phases of development, our team is sensitive to security requirements for enterprise applications. By incorporating best practices into our development effort, our team will work to minimize risk and maximize security. Our teams have worked closely in the past with independent security analysts from Fortify, and have utilized a number of toolsets for identifying code security concerns and server hardening issues. We are confident our team will develop a solution that will readily adhere to all security standards.

Section III: Management Plan

3.1 Project Schedule & Tasks

Aeon Nexus will work with OMB's project team on a detailed project schedule, which outlines start and completion dates, and sequencing for tasks and milestones. The plan will be developed with considerations of risks and staff availability. Upon finalization, the project team will execute this schedule.

Based on requirements addressed in the statement of work, Aeon Nexus Corporation is estimating a one-year project period. Nine months will be allocated to the initial launching of the system with an

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additional three months for an after launch break fix support period. This takes into consideration the number of federal holidays during the engagement period. The following table displays the anticipated schedule timelines for this service agreement. A better determination of dates, tasks, and milestones will be made during the Analysis and Design Phase. Aeon Nexus is flexible and work within the needs of OMB.

Tasks	Start Date	Description
Kick-Off Meeting	January 2, 2014	During this kick-off meeting, OMB and Aeon Nexus team members will meet to: Provide team member introductions Establish key service point-of-contacts, and processes Comprehensive review of the Statement of Work and development of a project plan/schedule
Analysis and Design	January 6, 2014	The Aeon Nexus team will gather functional and technical requirements and design and build the solution.
System Build	March 17, 2014	The Aeon Nexus team will configure and build the system to meet OMB's requirements as outlined in the SOW.
System Testing	June 23, 2014	OMB will develop and execute a User Acceptance Test plan with OMB testers.
Installation and Deployment	July 21, 2014	The Aeon Nexus team will execute the development work and begin implementing the systems workflows, database integrations, in import of data. Unit and functional testing will also be executed.
Additional Testing, Technical Training, & Documentation	August 18, 2014	Aeon Nexus will provide technical training for OMB IT staff and key stakeholders for OMB to use, maintain, and support the solutions after go-live.
After Launch Break Fix Support	September 8, 2014	Additional support after initial launch of system. Solution configuration completed, tested, fully implemented and operational.

3.2 Resource Plan

Our team is composed of some of the best consultants and IT professionals in the industry. Our vast and diverse experience in consulting and IT services sets us apart from the competition. With experience in both the public and private sectors, our team is able to develop the right business requirements and project scope to drive the most value. All of our consultants are able to legally work in the United States. Additionally, we are able to accommodate on-site and off-site work as determined by specific tasks.

For this engagement we are proposing three resources, a MS CRM Consultant, MS CRM Developer, and project manager working full-time and part-time hours as determined by specific tasks. Additionally, Aeon Nexus will invest two additional resources to ensure the overall health of the project. These resources will include a business analyst and a subject matter expert. Our proposed project manger for this engagement has extensive experience in the local government and federal housing space utilizing Microsoft products and thus will make an excellent leader for this project. Prior experience includes developing a Federal Eviction Prevention System for NYS Office of Temporary and Disability Assistance, a Homeless Information Management System for HUD and the Bureau of Housing and Shelter Services, a

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Bureau of Hosing Services Contract Management Application, and a Welfare To Work Caseload Management System.

We have estimated the number of hours per role based on requirements provided in the statement of work. A more accurate determination of hours will be determined during Phase 1 – Discovery.

Project hours by Roles and Phases

Role	Phase I Discovery 10 weeks	Phase II Development 18 weeks	Phase III Implementation 4 weeks	Phase IV Testing & Training 3 weeks
MS CRM Consultant	400	550	0	120
MS CRM Developer	400	710	160	0
Project Manager	110	198	44	32
Business Analyst	80	11	0	0
Total hours:	990	1469	204	152

Additional break fix support will accommodate 500 hours and be utilized by various roles after Phase IV.

Key Staff & Resources

The following list is a sampling of roles, and their respective responsibilities, that will be available for the length of this contract:

Project Manager

The project manager is responsible for overall project health, timelines, and communication between project team members and the customer. Project Managers communicate all risks, milestones, and status on a weekly basis using a formal status report and weekly status meetings with client and team members. Additionally, our proposed project manager is well versed in all Microsoft products, MS CRM, SharePoint, SQL, and data migration.

MS CRM Consultant

The Principal CRM Consultant brings to the team a background in enterprise system development drawing on a wealth of experience from numerous sectors and technology platforms. Their focus will be the creation of the technical strategy and system design required to support the functional and technical requirements developed. Additionally, this resource has experience in setting up similar SharePoint Infrastructures. This person will be responsible for reviewing the SharePoint Infrastructure and provide recommendations on best practices. The SharePoint Consultant will also play a large role in training administrators and users.

MS CRM Developer

The Developer for this engagement will have significant experience and knowledge of the CRM and/or SharePoint platform. The Developer assigned to the project is responsible for the implementation of the functional requirements and setting up the sites and artifacts needed to deliver those requirements. The consultant is also able to develop custom web parts, workflows, themes/branding, and customization of the SharePoint environment. Additionally, the Developer is

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well versed in all Microsoft Products, SQL, and Data Migration. The programmer will be responsible for testing and providing successful system functionality.

Business Analyst

The business analyst is responsible for gathering all system requirements and creating all necessary artifacts used throughout the implemented SDLC (software development lifecycle) for all members of the team. The business analyst will document all workflows, use cases, and stakeholder interests.

Certifications

Our team members and resources hold the following certifications:

Dynamics CRM

- **Dynamics CRM 2011 Customization and Configuration**
- **Dynamics CRM 2011 Installation and Deployment**
- **Dynamics CRM 2011 Applications**
- **Dynamics CRM 4.0**

SharePoint

- **SharePoint 2010 Configuration**
- **SharePoint 2010 Application Development**
- **SharePoint Developer 2010**
- **SharePoint Administrator 2010**

Additional MS Certifications

- **Microsoft .NET Framework 2.0 – Application Development Foundation**
- **SQL Server 2005 – Implementation and Maintenance**
- **Microsoft Data Management Solutions, SOA and Business Process, Business Intelligence Platform, and Business Intelligence.**

Key Resources

The following describes top members of our team. The names of the individuals provided here are those we currently expect to staff this project. However, by the time of project execution, business or other considerations may make one or more individuals unavailable. In the event of this unlikely situation, we will substitute another person with equal knowledge and experience.

Brian Duncan

Project Manager

Brian Duncan has spent the last twelve years earning recognition as a leading IT expert specializing in state and federal human services programs. Having led the early development of Microsoft technologies in the NYS Office for Temporary and Disability Assistance, Brian directed the development of five of the agencies largest internet IT solutions. From the success of these efforts, Brian moved on to fill an advisory role to IT management as an expert in web application architecture, software evaluation and POC. Working with a select group of consultants and state administrators, Brian authored the agency's SSDLC and was invited to be guest speaker at the New York State Forum for project management.

Kiran Kothamachu

CRM Consultant

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Kiran has more than 6 years of programming experience in analysis, design, development, and testing of various client-server and web-based applications. Additionally, he has extensive experience in Microsoft Dynamics CRM 4.0/CRM 2011 and hands-on experience in Microsoft .NET technology including: .NET Framework v1.0 through v4.0, Classic ASP, ASP.NET, ADO.NET, ASP.NET MVC, C#, VB.NET, XML, LINQ, and Entity Framework 4.1. Kiran has deep conceptual understanding and experience in object oriented programming (OOP) and agile/spiral methodologies. He is proficient in visualizing the system design using the UML Diagrams, UML modeling, and data flow Diagrams. Kiran has an exceptional aptitude for gathering customer requirements, functional requirements, and service oriented architecture (SOA). Kiran holds certifications in MS Dynamics CRM.

Jamie Miley

MVP CRM Developer

Jamie is a highly motivated Microsoft Dynamics CRM MVP with over seven years of experience with the Microsoft .NET platform (C# and VB.NET) with four years of experience with the Microsoft Dynamics CRM platform (versions 3 through 2011) and has been awarded Microsoft Dynamics CRM MVP for 2012. Jamie created a successful blog highlighting many aspects of CRM development and has demonstrated the ability to critically analyze, optimize and automate systems to streamline business processes in a way that enhances market share and revenue through the use of Microsoft Dynamics CRM and the Microsoft .NET platform in either C# or VB.NET.

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AEON NEXUS
Requirements to results.

Microsoft Certified Professional
Solution Developer

Brian Duncan

EDUCATION

State University Of New York At Albany, *Albany, New York*
B.S., May 1996 *Major:* Physics *Minor:* Mathematics

TECHNICAL SKILLS

Languages	Visual Basic 5,6, .Net, C#, Oracle 8/8i,9i,10g,11 PL/SQL, T-SQL, ASP, ASP.Net, Silverlight, VBScript, Java, Javascript, XAML, HTML, XML/XSL, MS Access, C++, DOS, Basic, Pascal, Perl, Assembly, LDAP, ADO, DAO, Unisys Open/TI, LINQ
Software	Windows 95/98,XP,Vista,7,8,Windows NT/2000/2003/2008, Excel, Crystal Reports, Visio, Visual InterDev, Erwin, MS Transaction Server/COM+, MS Exchange, MS SQL Server 6.5 - 2000, IIS, MS Project, Sheridan Controls, Videosoft Controls, MS Frontpage, MS Visual Studio, Netegrity Siteminder web security software, Visual Studio .NET through 2010, Visual Source Safe, Team Foundation Server, PVCS, Unisys Open/TI, OPEN/TI, Fortify SCA
Hardware	Windows NT, 2000, 2003, 2008, XP and Novell Networks, DEC-Alpha, IBM PCs, VAX/VMS,
Certifications	Microsoft Certified Solution Developer, MCSD Exams include: *Visual Basic Desktop & Distributed, Analyzing Requirements and Defining Solution Architectures, SQL Server Designing and Developing Database Solutions.* .NET Certification – *Developing and Implementing Web Applications with Visual Basic and Visual Studio .NET* Oracle PL\SQL certification.
Courses Attended	*Installing and Configuring SQL Server,* *Installing and Configuring MS Exchange Server,* *Sun Online Java Course WJB-250: Java Programming Language Bundle* *Fortify Secure At the Source – Secure Software Development Lifecycle*

PROFESSIONAL EXPERIENCE

Project Manager, ***Newjen Systems, Inc.*** *Albany*

March' 01 – Present

OTDA System Architect – Office of Temporary and Disability Assistance application architect and IT consultant.

- Advisory role to IT management as an expert in Web application architecture, and for software evaluation and POC
- System architect for the BRIA, HAMS, WTWCMS, Enterprise FTP, IAF, and OpenTI applications.
- Developed ASP.net MVC proof of concept for the E-Foodstamps/MyWorkbook application.
- Provided support and services for the evaluation, POC, and implementation of the I3 application monitoring suite of tools in coordination with Symantec, OTDA and OFT
- Provided support and services for the evaluation, POC, and implementation of the Fortify Secure Code Analysis suite of tools in coordination with the CSO, Fortify, and OTDA.
- Coordinated and attended the Fortify SCA developer training sessions and provide Fortify administrative support to OTDA.
- Attended the Secure Software Development Lifecycle, software security training course under the supervision of OTDA, and the CSO.

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- Advisory role for application security including the mentoring of OTDA development staff.
- Responsibilities include mentoring developers in areas such as system architecture, design patterns, common system utilities, and secure web application coding.
- Architect and analyst responsibilities included working directly with non-technical staff to develop system specifications for government assistance programs.
- Implement object oriented concepts to design complex business objects for maintaining user-configurable contracts, government program eligibility rules, and vouchers.

March' 01 – Present

BRIA Project– Bureau of Refugee and Immigrant Assistance Information Network (BIN). A large mission-critical web application designed, developed and deployed using Microsoft's 3-tier architecture using a Client/Server implementation. BRIA is an Intra/Internet web application that supports State and Federally Regulated Refugee and Immigration Programs through a complex set of programmed business rules. Data is stored on an Oracle 8i/9i/10g database and accessed using Oracle PL\SQL stored procedures. The BIN application provides complete contract management services to BRIA spanning from the initiation of program eligibility rules, to contract creation, application processing, and standardized voucher submission. Its success has led the BIN application to become the template for the new contract management application being developed to support the Bureau of Housing Services.

- Designed and developed BRIA using 4th generation language development tools including Visual Studio, VB 6, Visual Interdev, Visual Studio .Net, ASP, ASP.Net, COM+, DCOM, HTML, and JavaScript.
- Developed complex systems and data structures using Oracle 8i/9i/10g, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting State and Federal refugee program policy.
- Designed, developed, and maintained the BRIA BIN contract management system.
- Designed, developed, and deployed BRIA COM (Component Object Model) Components in an MTS (Microsoft Transaction Server)/COM+ environment to encapsulate business rules and allow for transmission of communications through the New York State firewall between the IIS web servers and the MTS/COM+ application servers.
- Designed, developed, and deployed BRIA COM wrapper component capable of wrapping multiple component calls into a single communication through DMZ firewalls between IIS web servers and MTS/COM+ application servers. This wrapper was necessary to streamline deployment of the BRIA application and greatly the reduce response time of each page.
- Managed and performed the installation, deployment and migration of all BRIA COM components, HTML and ASP Pages to IIS web and APP servers.
- Designed, developed, and deployed BRIA's web application security protocols and techniques to secure the program. By leveraging SSL, New York State's DMZ firewall policies, New York State's LDAP directory of user information and Netegrity's Siteminder Software, the sensitive data maintained by the BRIA system is secure from external and internal threats and security breaches.
- Managed a four person development team in the 3 tier design, development, and deployment of BRIA using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Designed, developed, and deployed the .Net web application, BRIA Health Screening, the latest module added to the BRIA system designed using Microsoft's Visual Studio .Net and utilizing web services technology to encapsulate business rules and communicate with State and Federal Refugee and Immigration policy data structures.
- Designed, developed, and deployed the .Net web application modules for the BRIA Quarantine and BRIA Reports applications. These modules were designed using Microsoft's Visual Studio .Net and utilized .Net web services to encapsulate business rules and communicate with State and Federal Refugee and Immigration policy data structures.
- Planned and implemented a conversion of the BRIA COM+/ASP application to the .Net platform. This included converting all COM+/ASP code to .Net technologies, including Webforms and web services. The newly converted .Net application still capitalizes on Oracle8i/9i/10g and PL\SQL stored procedures to maintain State and Federal Refugee and Immigration Program rules.
- Architected the BRIA .Net application using a robust object oriented architecture.
- Created the processes and structures necessary to perform version control management tasks utilizing Visual Sourcesafe and PVCS software. Strict version control management

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was implemented to successfully manage a RAD/JAD development approach for a four-person development team.

- Responsible for mentoring development team members in the State and Federally Mandated Refugee and Immigration Program Policy rules and technologies relied upon by the BRIA application. Specifically transferred knowledge of system architectures, technologies, procedures, methods and rules to State staff and prepared for transition of systems to new team members. In order to prepare for planned, as well as unforeseen staff changes, mentoring and knowledge transfer is an integral part of the BRIA project.
- Gained in-depth knowledge of State and Federal Refugee Immigration Program Policy through five years of close application development efforts and JAD meetings with BRIA personnel, Refugee and Immigration Program Policy makers, contractors, and project staff.

March '01- Present

FEPS Project– Federal Eviction Prevention System. A large mission-critical web application designed, developed and deployed using Microsoft's n-tier architecture using a Client/Server implementation. FEPS is an Intra/Internet web application that supports State and Federal eviction prevention policy through a complex set of programmed business rules. Data is stored on an Oracle 11i database and accessed using Oracle PL\SQL stored procedures. The FEPS application allows NY city case workers to complete eviction prevention applications and submit backup documentation to OTDA for approval. FEPS has expedited a previously manual system and reduced application approval times from weeks to one day.

- Designed and developed FEPS using 4th generation language development tools including Visual Studio .Net, VB.Net, ASP.Net, HTML, .Net web services, and JavaScript.
- Developed complex systems and data structures using Oracle 11i, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting State and Federal eviction prevention policy.
- Designed, developed, and maintained the FEPS Application management system.
- Managed and performed the installation, deployment and migration of all FEPS components, HTML and ASP Pages to IIS web and APP servers.
- Designed, developed, and deployed FEPS' web application security protocols and techniques to secure the program. By leveraging SSL, New York State's DMZ firewall policies, New York State's LDAP directory of user information and Netegrity's Siteminder Software, the sensitive data maintained by the FEPS system is secure from external and internal threats and security breaches.
- Managed a two person development team in the n tier design, development, and deployment of FEPS using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Architected the FEPS .Net application using a robust object oriented architecture.
- Gained in-depth knowledge of State and Federal Homeless Program Policy through close application development efforts and JAD meetings with FEPS personnel, Homeless Program Policy makers, contractors, and project staff.

March '12 - Present

HMIS Data Warehouse Project– HUD and Bureau of Housing and Shelter Services - Homeless Information Management System Data Warehouse (HMIS) A large mission-critical data warehouse and application designed, developed and deployed using Microsoft's n-tier architecture using an ASP.net and Web Services implementation. The HMIS application is a large centralized database warehouse responsible for the de-duplication and consolidation of NY State's HMIS data. Using Oracle 11i, the application leverages a .Net web application and .Net Web Services for processing secure file transmissions and processing incoming data.

- Designed and developed HMIS using 4th generation language development tools including Visual Studio .Net 2010, ASP.Net, WCF Web Services.
- Developed complex systems and data structures using Oracle 11i, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting HMIS policy.
- Designed, developed, and maintained the HMIS system.
- Designed, developed, and deployed the HMIS application using Microsoft .Net and Web Services technology.
- Designed, developed, and deployed HMIS' web application security protocols and techniques to secure the program. By leveraging SSL, New York State's DMZ firewall policies, New York State's LDAP directory of user information and Netegrity's Siteminder Software, the sensitive data maintained by the HMIS system is secure from external and internal threats and security breaches.

March' 01 – Present

Housing Project– Bureau of Housing Services Contract Management Application (HAMS). A large mission-critical web application designed, developed and deployed using Microsoft's 3-tier architecture using an ASP.net and Web Services implementation. The Housing application is an Intra/Internet web application that supports State Regulated Housing Assistance Programs through a complex set of programmed business rules. Data is stored on an Oracle 8i/9i/10g database and accessed using Oracle PL\SQL stored procedures. The Housing application provides complete contract management services to BHS spanning from the initiation of program eligibility rules, to contract creation, application processing, and standardized voucher submission.

- Designed and developed HMA using 4th generation language development tools including Visual Studio .Net 2003 and 2005, ASP.Net, ASP.Net Web Services, HTML, and JavaScript.
- Developed complex systems and data structures using Oracle 8i/9i/10g, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting State Housing Assistance policy.
- Designed, developed, and maintained the Housing HMA contract management system.
- Designed, developed, and deployed the Housing HMA application using Microsoft .Net and Web Services technology.
- Managed and performed the installation, deployment and migration of all HMS components, ASP.Net Pages, and Web Services to IIS web and APP servers.
- Designed, developed, and deployed HMS's web application security protocols and techniques to secure the program. By leveraging SSL, New York State's DMZ firewall policies, New York State's LDAP directory of user information and Netegrity's Siteminder Software, the sensitive data maintained by the HMS system is secure from external and internal threats and security breaches.
- Managed a four person development team in the 3 tier design, development, and deployment of BRIA using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Created the processes and structures necessary to perform version control management tasks utilizing Visual Sourcesafe.

March' 01 – Present

WTWCMS Project– Welfare To Work Caseload Management System (WTWCMS). A large mission-critical web application, WTWCMS is currently being re-written to replace an aging ASP/COM+ architecture. The new system will be a Silverlight 4.0 browser based application, utilizing RIA Services and the Entity Framework 4.0 to access an Oracle 11g database. The WTWCMS application supports the tracking of employment related activities for clients cased on the Welfare Reform Act of 1996.

- Designed and developed RIA Services and Domain Objects using 4th generation language development tools including Visual Studio .Net 2010, Silverlight, WCF Services, LINQ, Entity Framework 4.0 and RIA Services.
- Developed complex systems and data structures using Oracle 11g, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting WTWCMS and Federal Policy.
- Designed, developed, and deployed the WTWCMS application using Microsoft .Net and WCF Web Services technology.
- Managed and performed the installation, deployment and migration of all WTWCMS components, Silverlight objects, and WCF Web Services to IIS web and application servers.
- Designed, developed, and deployed OTDA's web application security protocols to secure the program. By leveraging SSL, New York State's DMZ firewall policies, New York State's LDAP directory of user information and Netegrity's Siteminder Software, the sensitive data maintained by the WTWCMS system is secure from external and internal threats and security breaches.
- Mentored members of the WTWCMS development team in the object oriented design concepts, and RIA Services employed on the project.
- Created the processes and structures necessary to perform version control management tasks utilizing Team Foundation Server.

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March' 01 – Present

CBIC Project – The Common Benefit Identification Card system, CBICs, is the vehicle through which eligible clients access Food Stamps, cash, and Medicaid benefits as is allotted through various state and federal benefit programs. The CBIC system relies upon a communications backbone of Open\TI components, Open\TI server definition files, and .Net web services developed using 4th generation language development tools to process data across multiple platforms and domains. Without this communication backbone, third party vendors and state agencies would find it impossible to share CBIC data on a real-time basis.

- Designed, developed, and deployed Unisys OPEN\TI server definition components using OPEN\TI Builder and Microsoft .Net technology. This component allowed mainframe views to call an OPEN\TI Server Definition Component, and then to call on external functionality within a .Net component.
- Designed, developed, and deployed custom CBIC web services in Visual Studio .Net responsible for providing third party vendors access to state controlled CBIC business rules and data.
- Responsible for mentoring other state staff and transferring knowledge of the steps necessary to create Unisys OPEN\TI server definition components.
- Responsible for transitioning CBIC system component and source code to state staff for continued development and support.

Developed version control management environment to maintain code history using Visual Sourcesafe and PVCS version control software.

March' 01 – Present

TRACS Project – The TANF Reporting and Control System, an Intra/Inter net web application, was originally developed using Oracle Designer, ASP and COM components that in its original state, was found to be incapable of successfully communicating through New York State's DMZ firewall. Prior to converting TRACS to a .Net web application leveraging web services, the original project required a complex component wrapper to successfully transmit data through the firewall. The TRACS application is responsible for managing TANF funds for needy families throughout New York State. TRACS data is stored on an Oracle8i\9i\10g database and uses in line SQL statements as well as PL\SQL stored procedures for data access.

- Designed, developed, and deployed the TRACS component wrapper using 4th generation language development tools such as VB 6, ASP, and Visual Interdev. This wrapper encapsulated all TRACS communication in a COM+ component, and allowed TRACS to leverage LDAP and Netegrity's Siteminder software to enforce web security protocols while successfully transmitting data through the firewall between the IIS web servers and MTS (Microsoft Transaction Server) APP servers.
- Developed and deployed Oracle 8i\9i PL\SQL Stored Procedures to handle database transactions, data storage, and retrieval tasks.

March' 01 – Present

PTS Project – The Project Tracking System, PTS, manages the project development tasks, workflow, and deployment of mainframe based applications. By levering several 4th generation language development tools, including Unisys OPEN\TI and Microsoft .Net component architecture, PTS is capable of reaching out beyond the mainframe to call upon external applications and databases.

- Designed, developed, and deployed the first ever New York State Unisys OPEN\TI server definition component using OPEN\TI Builder and Microsoft .Net technology. This component allowed mainframe views to call an OPEN\TI Server Definition Component, to then call on external functionality within a .Net component.
- Responsible for mentoring other state staff and transferring knowledge of the steps necessary to create Unisys OPEN\TI server definition components.
- Responsible for transitioning PTS system component and source code to state staff for continued development and support.
- Developed version control management environment to maintain code history using Visual Sourcesafe and PVCS version control software.

March' 01 – Present

IAF Project – The Intelligent Auto-Forms application is a mission critical Intra\Inter net web application that provides users with convenient auto fill online forms. By entering small pieces of data onto intelligent forms, IAF's 3-tier Client Server architecture automatically calls upon Unisys OPEN\TI components to retrieve stored information and complete the user's forms with minimal manual data entry. IAF relies upon Filenet, a third party application, as well as custom built tiers of business logic using ASP, ASP.Net, HTML, and Netegrity's Siteminder to complete the

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architecture. Each layer utilizes IIS web servers and MTS application servers to host component logic and the intelligent auto forms.

- Developed, deployed and maintained ASP pages calling upon Unisys\OPENTI server components to manipulate data on mainframe and Oracle8i/9i/10g databases.
- Designed, developed, and deployed Medicaid logging system, a Microsoft .Net web application hosted on IIS web and APP servers to record individual access to sensitive data.
- Converted COM+/ASP based middle tier application to Microsoft .Net utilizing web services technology to communicate with SQL Server database and Unisys OPENTI to communicate with mainframe systems.
- Designed, developed, and implemented web security protocols and techniques using New York State's LDAP directory of user information and Netegrity Siteminder software. Siteminder is used to communicate with LDAP directory and determine user authentication and authorization of each section of IAF.

Client Server Development Manager/Software Engineer, ***Systems1, Inc****. Saratoga, New York.*

May 00 – March 01

Outerforce Project – The Outerforce Project, a mission critical 3-tier ASP/COM web application, provided complex online workflow management services to newspapers and editorials throughout the country. (New York Times, USA Today, iVillage etc.). Outerforce was designed using 4-th generation development tools such Microsoft's Visual Studio tool set and Oracle PL\SQL stored procedures to maintain workflow management data structures on an Oracle 8i database.

- Designed and developed Outerforce using 4th generation language development tools including Visual Studio, VB 6, Visual Interdev, ASP, COM+, DCOM, HTML, and JavaScript.
- Developed complex systems and data structures using Oracle 8i, and PL\SQL Stored Procedures to maintain a complex set of business rules supporting online workflow management processes.
- Designed, developed, and deployed Outerforce COM (Component Object Model) Components in an MTS (Microsoft Transaction Server) environment to encapsulate business rules and allow for transmission of communication through a Cisco firewall between the IIS web servers and the MTS application servers.
- Designed, developed, and deployed Outerforce COM wrapper component capable of wrapping multiple component calls into a single communication and eliminating the need for the re-exportation of proxies when updating component. This wrapper was necessary to streamline deployment of the Outerforce application due to the immense size of the application and the number of component updates necessary to maintain the system.
- Managed and performed the installation, deployment and migration of all Outerforce COM components, HTML and ASP Pages to IIS web and APP servers.
- Designed, developed, and deployed Outerforce's web application security protocols and techniques to secure the program. Leveraged SSL, the client maintained LDAP directory of Windows NT User account information and Netegrity's Siteminder Software to develop secure single logon system authentication and authorization. Due to this being our first venture with Netegrity products, a significant development effort was necessary to ensure compatibility.
- Managed an eight person development team in the 3 tier design, development, and deployment of Outerforce using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Created the processes and structures necessary to perform version control management tasks utilizing Visual Sourcesafe and PVCS software to implement a RAD/JAD development approach for an eight-person development team.
- As a dual role developer/project manager, was directly responsible for the mentoring of project team members, as well as the transfer of knowledge of system rules and architecture. The development team changed faces four times during development making this task critical for continued development momentum and the final transition of systems.
- Designed, developed, and implemented a complex XML based forms control system allowing users to develop custom web forms through a diverse set of Intra\Inter net web interfaces.

May 00 – March 01

Transworld Entertainment Project – TWEC.com is a large media sales and distribution web site for the entertainment giant TransWorld. TWEC.com was deigned utilizing the Visual Studio tool-set and incorporates an ASP front end operating on an IIS web server farm with Visual Basic 6.0

components operating on an MTS application server.

- Designed and developed TWEC.com using 4th generation language development tools including Visual Studio, VB 6, Visual Interdev, ASP, COM+, DCOM, HTML, and JavaScript.
- Developed complex systems and data structures using SQL Server 7, and T-SQL Stored Procedures to maintain a complex set of business rules supporting online product catalogs and e-commerce transactions.
- Designed, developed, and deployed TWEC.com COM (Component Object Model) Components in an MTS (Microsoft Transaction Server) environment to encapsulate business rules and allow for transmission of communication between the IIS web servers and the MTS application servers.
- Managed and performed the installation, deployment and migration of all TWEC.com COM components, HTML and ASP Pages to IIS web and APP servers.
- Designed, developed, and deployed TWEC.com's web application security protocols and techniques to secure the program. Leveraged SSL, LDAP header based security, and custom authentication components to secure two distinct areas of the application. A third party header based security application linked to the client's LDAP user directory was used to protect internal administrative interfaces accessible only by authorized Transworld employees, while custom authentication was developed for the online public.
- Implemented and migrated ASP, HTML, and COM+ components to IIS web servers and MTS (Microsoft Application Server) App servers.
- Worked as a member of a ten person development team in the 3 tier design, development, and deployment of TWEC.com using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Utilized Visual Sourcesafe for source control management.
- Responsible for the transfer of knowledge of system rules and architecture to other team members in order to provide backup knowledge of each team member's tasks and responsibilities.

May 00 – March 01

RCA Electronics Project – The RCA Electronics, a.k.a. Thompson Consumer Electronics, Project was Systems I's first large scale, mission critical .Net web application built on the foundation of XML and web services. The RCA system provides cell phones, smart-books, PDAs, and other handheld devices with data capable of transmitting web sites, email, or file data to all of these devices in a native XML format in order to properly display this information in a manner acceptable for each device. By leveraging .Net and other 4th generation language tools, a vast system of web services was developed in a client/server implementation to provide device specific data for many of RCA's commercially available products.

- Designed and developed the RCA Project using 4th generation language development tools including Visual Studio .Net (BETA), web services, PL\SQL Stored Procedures, HTML, and JavaScript
- Designed, developed, and deployed the RCA .Net web application, using Microsoft's Visual Studio .Net utilizing web services technology to encapsulate business rules and communicate with an Oracle 8i database through PL\SQL Stored Procedures.
- Utilized Visual Sourcesafe for source control management in a RAD/JAD development atmosphere.
- Managed a five person development team in the 3 tier design, development, and deployment of the RCA Project using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Developed company wide .Net application deployment techniques and strategies while managing the deployment of the RCA project.
- Mentored project team members to ensure the transfer of knowledge of system rules and architecture.
- Designed, developed, and maintained Oracle 8i Database structures and PL\SQL stored procedures capable of supporting XML data required for over 1000 portable devices.
- Converted ASP/COM+ components previously developed to provide XML data transformations on other projects, to .Net technology specifically for use within .Net web services.
- Developed and maintained separate SQL Server database specifically used to interfacing with data formats received from vendors other than RCA, but compatible with RCA electronics.

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May 00 – March 01

Media Bids Project - Mediabids.com is an online JAVA 2 Enterprise Edition media auction site employing CMP and BMP entity beans, stateful and stateless session beans, JSP, and servlets.

- Provided JAVA coding support and knowledge to a team of 5 developers.
- Oversaw the deployment of Mediabids application.
- Mentored 2 new-hire developers in the JAVA development process and was directly responsible for the transfer of business logic knowledge for the new team members during the transition of the system from one team to the next in preparation for moving on to manage the RCA application mentioned above.

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Client Server Developer/Manager , *James McGuinness & Associates*, *Schenectady, New York.*

March '98 – May'00

Preschool Project – The Preschool application is a mission critical VB6-SQL 7.0 n-tier state government application responsible for synchronizing state and county Preschool education records through electronic file transfer by utilizing Client/Server technology. Preschool was built as a client-server, n-tier application leveraging VB 6.0 COM components operating within Microsoft Transaction Server, and a SQL Server 7.0\Access back end.

- Designed and developed the Preschool Project using 4th generation language development tools including Visual Basic 6.0, COM+, T-SQL Stored Procedures, Sheridan Controls, Erwin and Crystal Reports.
- Designed, developed, and deployed the Preschool Client\Server desktop application, using Microsoft's Visual Basic 5.0 and 6.0 utilizing COM+ technology and MTS (Microsoft Application Server) to encapsulate business rules and communicate with SQL Server 7.0 and Access 97 databases through T-SQL Stored Procedures, Queries, and in line SQL statements.
- Utilized Visual Sourcesafe for source control management in a RAD/JAD development atmosphere.
- Managed a 3 person development team in the 3 tier design, development, and deployment of the Preschool Project using RAD/JAD methodologies to carry the project from development mode to production in a time saving and cost efficient manner.
- Deployed the application successfully in 11 of New York's county offices including the installation on 15 servers and over 200 individual desktops.
- Mentored project team members to ensure the transfer of knowledge of system rules and architecture.
- Managed and led McGuinness and Associates in the transition of source control tasks from Visual Sourcesafe to PVCS version control system.

March '98 – May'00

Wecare Project – Wecare is a VB5 – SQL 6.5 transportation management application providing call-center, dispatching, billing, and accounts receivable tools for a medical transportation company. Wecare leverages Visual Basic 5.0, DAO, and Oracle PL\SQL stored procedures to provide a complex dispatching control application for Wecare Transportation Inc. based in Buffalo New York. Wecare is built on Client\Server n-tier technology to provide robust desktop application performance with the ease of deployment and upgrade implementation characteristic of this architecture.

- Developed the Wecare Project using 4th generation language development tools including Visual Basic 5.0, DCOM, T-SQL Stored Procedures, Sheridan Controls, Erwin and Crystal Reports.
- Developed, and deployed the Wecare Client\Server desktop application, using Microsoft's Visual Basic 5.0 utilizing DCOM technology and MTS (Microsoft Application Server) to encapsulate business rules and communicate with a SQL Server 6.5 databases through T-SQL Stored Procedures and in line SQL statements.
- Utilized Visual Sourcesafe for source control management in a RAD/JAD development atmosphere.
- Member of a 6 person development team working in the 3 tier design, development, and deployment of the Wecare Project and using RAD/JAD methodologies and third party geo-coding software to quickly convert a poorly-functioning VB 3.0 application to the latest VB 5.0 technologies complete with geo-coding functionality capable of providing global coordinates of vehicles, their destinations, and travel time estimates.
- Deployed the application successfully in Wecare Transportation's home office in Buffalo

on their network servers and over 50 individual desktops.

- Designed, developed, and implemented a VB component wrapper used to allow access to all business rules through a single application wide interface. The component wrapper allowed for new versions of the application to be released on the over 50 client machines, without the need for re-exporting MTS component proxies.
- Converted portions of the previously existing application from VB 3.0 and VB 4.0 to the latest (at the time) VB 5.0 and DAO technologies.
- Designed application to utilize Wecare Transportation Inc.'s LDAP user directories for incorporating strict user access security.

March '98 – May'00

Bug Reporting System – The McGuinness Bug Reporting Application was built using 4th generation development tools such as Visual Interdev and the Visual Studio Tool set to provide an on-line system for clients and users of McGuinness applications to report system faults, bugs and errors. Visual Basic 6.0 components were utilized to provide the business rules, and PL\SQL and T-SQL stored procedure provided the database interactions with a separate Oracle and SQL Server 7.0 database. The Bug Reporting system utilized ASP, COM, HTML, MTS, and IIS to provide its functionality on IIS web and MTS application servers.

- Developed the Bug Reporting System using 4th generation language development tools including Visual Basic 6.0, COM+, T-SQL Stored Procedures, PL\SQL Stored Procedures, ASP, HTML and Javascript.
- Developed, and deployed the Bug Reporting System n-tier web application, using VB 6.0 components calling Oracle and SQL Server data structures on Microsoft's IIS web server and MTS (Microsoft Application Server) App servers.
- Utilized Visual Sourcesafe for source control management.
- Later, designed and developed a JAVA 2 Enterprise Edition administration console built utilizing CMP and BMP entity beans, state-full and stateless session beans, JSP, and servlets, as the McGuinness Teams first venture in to the JAVA application arena as well as my first venture into the management of a JAVA development project.
- Implemented and migrated COM+ components to IIS web servers and MTS (Microsoft Application Server) App servers while developing protocols for maintaining this system on a set schedule.

Data Specialist, ***Albany Capital Datasearch****, Clifton Park, New York.*

June '93 - March '97

ACD Project – The ACD Project was a custom piece of proprietary paralegal software designed to maintain the daily activities of the company including UCC search request processing, and Corporate document processing request management. The ACD application was originally designed using Microsoft Access and Approach, however later it was adapted into a full-fledged web application allowing customer interaction and office tasks to be handled in one location. In its final release, ACD was an ASP web application utilizing VBScript and Javascript to provide validation tasks and business rules, while an Access database maintained data storage and retrieval tasks.

- Designed, developed, and implemented ACD application using Approach.
- Converted ACD application from Approach into an ASP web application using Microsoft's Visual Studio Tool Set, hosted on an IIS web server and accessing data stored on a Microsoft Access Database.
- Responsibilities included the development of strong company-clientele relationships and working with clients for the development of a strong web strategy

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Kiran Kothamachu

Skill Set Summary

Microsoft Technologies
Microsoft.NET Framework version 1.0/2.0/3.0/3.5/4.0, ASP.NET, ASP.NET MVC, C#.NET, VB.NET, ADO.NET, Web Services, Enterprise Library, Microsoft AJAX
Databases
Microsoft SQL Server 2000/2005/2008, Oracle 9i/10g, MS-Access
Web Technologies
HTML, DHTML, Classic ASP, JavaScript, Jscript, JQuery, VBScript, XML, XSL, XSLT, XHTML, CSS, AJAX, SOAP, WSDL, UDDI
Tools/IDE
Microsoft Visual Studio 2005/2008/2010, Microsoft Team Foundation Server, Microsoft Office SharePoint Server 2007/2011, SQL Enterprise Manager, Microsoft Visio, Edit-Plus, Microsoft Dynamics CRM Developer Kit, AJAX Control Toolkit, Visual Source Safe, CVS
Programming Languages
C#, VB.NET, Java, SQL, PL-SQL, COM
Operating Systems
Windows 2000/XP/7, NT Server, UNIX, Linux
Web/Application Servers
IIS 5.0, 6.0, 7.0 Windows Server 2008/2003/2000
Reporting Services
SQL Server Reporting Services (SSRS), Crystal Reports 10/11
Design Methodologies
OOD, OOA, OOD&A, Design Patterns, UML

SUMMARY OF EXPERIENCE

- More than seven years of programming experience in analysis, design, development and testing of various client-server and web-based applications
- Exceptional experience in Microsoft Dynamics CRM 4.0/CRM 2011.
- Hands-on experience in Microsoft .NET technology including .NET Framework v1.0 through v4.0, Classic ASP, ASP.NET, ADO.NET, ASP.NET MVC, C#, VB.NET, XML, LINQ, Entity framework 4.1
- Deep conceptual understanding and experience in object oriented programming (OOP) and agile/spiral methodologies
- Proficient in visualizing the system design using the UML Diagrams, UML modeling, data flow diagrams and ER diagrams with experience in gathering customer requirements, functional requirements and good understanding of service oriented architecture (SOA)
- Expert in SOAP and REST based web service programming
- Developed web applications using .NET, HTML, Enterprise library 4.1, Silverlight, AJAX, JavaScript, JQuery, ASP, CSS, DevExpress, Telerik, XHTML, XML, XSL and XSLT
- He has extensively used SQL Server 2000/2005/2008 and Oracle databases
- Involved in SQL Server data modeling involving creating objects like databases, schemas, tables, transact-SQL queries, stored procedures, triggers and views in RDBMS with Microsoft SQL Server
- Design and Deliver highly customized reports via SQL Server Reporting Services (SSRS).

EDUCATION AND ACHIEVEMENTS

Certifications

- Microsoft Certified Technology Specialist (MCTS) - **Microsoft Dynamics CRM 2011 Customization** and Configuration
- Microsoft Certified Technology Specialist (MCTS) – **Microsoft .NET Framework 2.0 - Application** Development Foundation.
- Microsoft Certified Technology Specialist (MCTS) – **SQL Server 2005 – Implementation and Maintenance.**

PROJECT HISTORY

Aeon Nexus Corporation **June '12 - Present**
Albany, NY
Role: Microsoft Dynamics CRM/.NET Senior Consultant
Responsibilities:

- Customized Microsoft Dynamics CRM 2011 application based on the business requirement.
- Automated business process by creating plug-ins and custom workflows using CRM SDK plug-in/workflow assembly.
- Implemented business logic such as automatically populating fields in custom entities by creating various functions using JavaScript, JSON, JQuery.
- Extensively used CRM 2011 SDK and retrieved data from CRM using REST Endpoint with JavaScript and JQuery.
- Customized Site-Map and modified the Navigation structure, Navigation areas on entity forms.
- Created custom attributes and modified form views on entity forms.
- Created Security roles based on the requirements.
- Worked on creating complex CRM reports using SQL Server Reporting Service.
- Integrated MS CRM with external applications using custom workflow assemblies.

Risk Management Agency (United States Department of Agriculture) **May'11 – May '12**
Kansas City, MO
Role: Microsoft Dynamics CRM/.NET Consultant.
Responsibilities:

- Configure and Implement Microsoft Dynamics CRM 2011 system, SharePoint 2010 and SQL Server 2008 R2 to support Regional office exception (ROE) application.
- Involved in the Microsoft CRM 4.0 upgrade to MS CRM 2011.
- Involved in creating design document artifacts based on use cases to effectively implement defined requirements.
- Import and migrate domain data from source system into Microsoft Dynamics CRM using Data Migration manager and Scribe data maps.
- Involved in creation of new organization, customized entities, web resources, views, dashboards, checklists (queues and task activities), email alerts and document management.
- Extensively used CRM 2011 SDK and retrieved data from CRM using REST Endpoint with JavaScript and JQuery.
- Involved in complex and effective security design of ROE Application based on customized security roles and role tailored forms.
- Used Microsoft Dynamics CRM 2011 Developer Toolkit to create, view and update CRM custom entities and deploy CRM Plug-in's/Workflows.
- Automated business process by creating custom workflows using CRM SDK workflow assembly.
- Involved in creation of SQL dynamic queries, views and stored procedures in SQL Server 2008 R2.
- Customize CRM reports to specific business requirements need by using SQL Server Reporting Services (SSRS).
- Microsoft Team foundation Server (TFS) is used for collaboration and version control.

Vance Publishing, Inc. **Aug' 10 - May'11**
Lincolnshire, IL
Role: Application Developer/ Microsoft Dynamics CRM 4.0
Responsibilities:

- Design and develop application based on Microsoft Dynamics CRM 4.0 solution, SharePoint and SQL Server 2008.
- Involved in configuring and customizing Microsoft Dynamics CRM 4.0.
- Involved in design and development of Greenbook and Redbook interfaces using Microsoft Dynamic CRM, Microsoft SQL Server, SharePoint 2007, JScript, CSS and HTML.
- Involved in Dynamics CRM data capture, integration, customization, auditing, data mapping, importing data and creation of interfaces.
- Involved in creation of new organization, customized entities, sitemaps, ISV and modified the Navigation structure, Navigation areas on entity forms.

- Created interfaces for data conversion and integration processes with systems including XML files using various data integration methods like CRM Import wizard and SQL Server Integration Services (SSIS).
- Integrated Custom WCF Service with other applications.
- Created business units, Security roles and queues based on the requirements.
- Microsoft Dynamics CRM 4.0 database configuration and management, email router configuration, Workflows and Plug-in development.
- Developed reports using Microsoft reporting services (SSRS) for greenbook applications.
- Used Visual Source Safe for version control.

Vance Publishing, Inc. **May'09 - Aug' 10**
Lincolnshire, IL
Role: Application Developer
Responsibilities:

- Involved in the development and production support of various applications in Information technology department. Applications include Greenbook, Redbook, e-media, and accounting.
- Involved in design of a user-friendly GUI in Classic ASP, C#, ASP.NET, ADO, ADO.NET, Visual Studio 2005/2008, SQL Server 2005, DHTML, JavaScript, JQuery, CSS and HTML.
- Involved in the complete migration of website from Classic ASP to ASP.NET.
- Involved in optimization and tuning of SQL Queries for increased performance.
- Involved with data model design team, pioneered the design and had also written several PL/SQL dynamic queries, cursors, views, triggers and stored procedures in SQL Server 2005.
- Used web accessibility tools like WAVE, WAT, FAE, FANG and JAWS for migration of application.
- Developed reports using Microsoft reporting services (SSRS), also involved in development of complex Reports using C#.
- Implemented stored procedures, triggers and transaction SQL features to maintain data Integrity & avoid data redundancy.
- Used SQL profiler to diagnose the problem related to transact SQL statements.
- Used Visual Source Safe for version control.

Vance Publishing, Inc. (Environmental Protection Agency) **Jan'09 - May'09**
Lincolnshire, IL
Role: Application Developer
Responsibilities:

- Designed and developed web application for Environmental Protection Agency in team environment. It was also responsible for fetching, viewing and updating data in the database.
- The application was developed as using .NET Framework 2.0/3.5, developed series of AJAX oriented modules using ASP.NET, ASP, Ajax, C#, Visual Studio 2008 Team system, Microsoft SQL Server
- 2005, JavaScript, HTML, UML and ADO.NET, with extensive implementation of object oriented concepts in application architecture development.
- Integration of various business systems using Service Oriented Architecture (SOA) and Windows Communication Foundation (WCF).
- Implemented Windows Communication Foundation (WCF) and ASP.NET/XML Web Services (ASMX) to enable platform and application communication.
- Involved in implementation and modifying custom data access component to give existing .NET data providers a common factory and base class.
- Extensively used T-SQL stored procedures to protect data integrity through permissions and table abstraction while increasing application speed and ADO.NET technology for data retrieving, querying, storage and manipulation.
- Implemented state management for application including client side and server side state management techniques like session management, cookies, and application state and http context.
- All the user interface layers, web pages are created and integrated to maintain the performance of data flow and data integrity using ASP.NET user controls, web server controls and ADO.NET.
- Prepared technical design document, use cases, test cases and user manuals involved in bug fixing, code reviews and unit, integration and system testing.
- Used SQL Server Reporting Service (SSRS) for developing reports.

- Extensively used JavaScript for front end validations and for browsers compatibility, Ajax, ASP and cascading style sheets (CSS) were used for consistent look of the site.
- Used Visual Source Safe for version control and source code management.

Vance Publishing, Inc. **Aug'08 - Jan' 09**
Lincolnshire, IL
Role: Application Developer
Responsibilities:

- Designed and developed components for enterprise-level windows forms built with extensive use of Object Oriented concepts in application architecture.
- The application was developed using .NET Framework 2.0/3.0, VB.NET, WPF and ADO.NET.
- Participated in gathering, documenting user requirements and developed UML diagrams simulating the interaction between objects.
- Download manager makes use of background worker processes, event handlers and threads for allowing users to pause, stop or resume the download anytime during the downloading process.
- Used ClickOnce Deployment to publish Software CD application to one of the Greenbook Web Server for simplified installation.
- Involved in creating the software installation files using bootstrapper packages.
- Developed unit test cases and implemented unit test cases with NUNIT.
- Enabled communication between application tiers through interfaces using SOAP facilitates the asynchronous communication.
- Architected and implemented Windows Communication Foundation (WCF) and XML Web Services (ASMX) to enable platform and application communication.
- Developed reports using Crystal report engine 9.0, and integrated with Application.
- Used visual source safe for version control

University of Nebraska (Department of Arts & Sciences) **Dec'05 - Aug' 08**
Lincoln, Nebraska
Role: Graduate Assistant/.NET Programmer

- Designed and developed web applications for various Arts & Sciences departments using .NET framework 2.0/3.0, ASP.NET and ADO.NET.
- Worked on User interface design using HTML, CSS, Master Page and code behind using C#.
- Involved in the design of the database and developed stored procedures using SQL for all the interaction with the database and tuning of queries for optimal performance.
- Interacted with core team and gathered software requirements. Prepared technical design documents and proposed cost- effective solutions.
- Involved in debugging and testing using various testing methods.
- Used concurrent version systems for version control.

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Requirements to results.

Jamie Miley

SUMMARY:

- Highly motivated Microsoft Dynamics CRM MVP with over seven years of experience with the Microsoft .NET platform (C# and VB.NET)
- Four years of experience with the Microsoft Dynamics CRM platform (versions 3 through 2011) and awarded Microsoft Dynamics CRM MVP for 2012
- Successful blog highlighting many aspects of CRM development - http://mileyja.blogspot.com
- Demonstrated ability to critically analyze, optimize and automate systems to streamline business processes in a way that enhances market share and revenue through the use of Microsoft Dynamics CRM and the Microsoft .NET platform in either C# or VB.NET

TECHNICAL PROFICIENCIES:

Languages:	C#, VB.NET, ASP.NET, SQL, Jscript, XAML/Silverlight
DBMS:	MS SQL Server, MySQL, Oracle, Access, SQLite
IDE:	Microsoft Visual Studio, Dreamweaver, Flash, Oracle Forms & Reports, Crystal Reports, BIDS
Servers:	Linux, Windows Server, Novell Netware
Apps:	MS Dynamics CRM (MVP) ,Visio, MS Project, MS Office automation, Adobe Photoshop, VMware, BCC Mail Manager, Visual Paradigm, and many others
Other:	Network Security, Computer Networking, Business Process Re-engineering, XML, Soap

PROFESSIONAL EXPERIENCE:

Sogeti USA, LLC **Dec. 2010 - Present**

Managing Consultant / CRM Architect / .NET Developer

- Currently lead CRM team for Minneapolis and Des Moines
- Was promoted from Senior Consultant to Managing Consultant in only six months with company
- Currently helping drive sales pursuits apart from working on client engagements
- Consistent performance on client engagements with 2 of 3 client evaluations being perfect 5.0's and other being above national and regional average at 4.7/5.0 (documentation can be provided upon request)

Polaris Industries *May 2011 – Present*

Dynamics CRM Architect / Developer

- Architecting and developing enhancements to existing Dynamics CRM 2011 system to better fit business.
- Upgraded Existing Dynamics 4.0 System to Dynamics CRM 2011
- Second time at client, developed original Dynamics CRM 4.0 system for company back in 2008

Home Instead Senior Care *Jan 2011 – May 2011*

Dynamics CRM Architect / Developer *Client Eval: 5.0/5.0*

- Architected and developed franchise management system for client based on Dynamics CRM 2011

Thomson Reuters *December 2010 – December 2011*

Application Development Consultant *Client Eval: 4.7/5.0*

- Developed several new internal applications for company along with enhancements to existing applications
- Championed new technologies that have led to methodology changes within Thomson development team
- Technologies Used: WCF, Silverlight, C#, Entity Framework 4, Oracle 11, SQL Server

Charles Schwab – Proof Of Technology *April 2011 – June 2011*

CRM Solution Architect / Development Lead *Client Eval: 5.0/5.0*

- Lead CRM development team in creating a solution integrating Microsoft Dynamics CRM 2011 Online with Azure and Silverlight. The solution provides secure access to account information to third parties through CRM Online in an exposed, embedded Silverlight application.

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- Was able to envision and architect new security model quickly that met Schwab's needs when standard methods of CRM cloud-based security were deemed to be inadequate for Schwab's use.
- Technologies Used: Microsoft Dynamics CRM 2011 Online, WCF, Silverlight, C#, Azure Storage and Hosted Services.

Meritide, Inc. **Oct. 2010 – Dec. 2010**

Senior Developer/Consultant – CRM Practice

- Developed custom integrations between CRM and other systems using the Microsoft Dynamics CRM Connector for Microsoft Dynamics GP, ASP.NET, and web services
- Created complex jscript functions for performing web service calls and client-side manipulation of CRM web forms.
- Created custom SQL Server Reporting Services reports that integrate with Excel to meet business requirements
- Revamped classic ASP web applications using ASP.NET with MVC
- Became a Scribe Certified Consultant for Microsoft Dynamics CRM

Lender Processing Services - Mendota Heights, MN **May 2010 – Oct 2010**

Team Leader / Senior Software Developer

- Lead a team of eight developers in development projects for the company's core product
- Acted as assistant vice president while my supervisor is out on maternity leave

Data Recognition Corporation - Maple Grove, MN **Oct. 2008 – May 2010**

Software Developer

- Developed mission critical solutions for large financial institutions and various government entities
    - Development and automation of system for check and statement processing for the largest bank in Canada that processes millions of dollars in checks every day
    - Development and automation of system to create all 1099 tax forms for US military vendors and also 1099 tax statements for military savings accounts
- Automated many types of data processing and workflow activities to include FTP, SFTP, Email, Secure Email with X.509 certificates, and many more to allow data to be pulled from client FTP and SFTP sites automatically when it is dropped and allows the data to be processed and print files to be produced with no human interaction. This was accomplished using VB.NET, ASP.NET, Web Services, MSMQ and WCF endpoints to create an application framework. This framework allows new projects to be easily created for new clients due to code reuse and the use of assembly reflection and interfaces to only require the creation of new plug-in assemblies that contain the business logic portion of the program for the new client.
- Passed public trust level security background check to be able to work on sensitive government projects
- Converted several legacy systems from COBOL to .NET 3.5 in VB.NET
- Earned certification: Microsoft Certified Technology Specialist (MCTS): ASP.NET 3.5
- Earned certification: Microsoft Certified Technology Specialist (MCTS): Windows Forms .NET 3.5

Inetium, LLC. - Bloomington, MN **Jan. 2008 – Oct. 2008**

CRM Developer

- Developed solutions for the Microsoft Dynamics CRM platform (Versions 3 and 4) using various technologies (C#, VB.NET, SQL Server, SQL Reporting Services, ASP.NET, XML, SOAP, etc.)
    - Created custom windows assemblies in VB.NET and C# that plugged into the object model within CRM to extend its functionality to allow anything that is possible using the .NET framework.
    - Plugged JavaScript code into the client-side event model within CRM to manipulate CRM's client-side behavior and used AJAX to make web service calls from JavaScript to allow the client to asynchronously work with web services from the CRM web forms while adhering to the SDK guidelines for supported CRM implementations.
    - Created custom ASP.NET web applications that were exposed to CRM users through the use of I-frames that were embedded into the CRM GUI as custom fields.
- Earned certification: Microsoft Certified Business Management Solutions Specialist: CRM Customizations and Configuration

PESI, LLC - Eau Claire, WI **Aug. 2007 – Dec. 2007**

Software Developer

- Brought in short term to revamp processes in place within the mail/marketing department, making what used to take hours possible in minutes using VB.NET, ASP.NET and Microsoft SQL Server to automate mail data preparation using BCC Software's Mail Manager 2010 software package

- Analyzed, optimized, and automated mailing processes that manage over $9 million in postage a year, saving the company thousands of dollars per day
- Implemented automated NCOA and drop shipping to bulk mail centers
- Wrote custom scripting engine in VB.NET to interface with Mail Manager 2010 to automate mail preparation and insertion into the mail-stream

Parco Manufacturing, Inc. - Eau Claire, WI **May 2005 – Jul. 2007**

IT Manager

- Managed all IT aspects of company including network, server infrastructure, application development, and user support
- Replaced outdated Novell Netware based network infrastructure with new Linux-based SMB domain controlled system using Samba and replaced outsourced web servers with internal Windows Server 2003 systems.
- Created current sales, manufacturing, inventory, and human resource management systems using VB.NET, MySQL, ASP.NET, Crystal Reports, and Microsoft Office automation.
  - Replaced old legacy systems based on Access, Excel, and dBase III with single integrated system that managed all areas of business
- Developed new web presence for the company in just over a week
- Researched and implemented many other new technology and IT solutions for the company
- Performed server designs, implementations, and setups using Windows Server 2003 and Linux (Samba, MySQL, Apache, OpenVPN)

Intern

Information Systems Design and Implementation

- Created, and implemented an inventory management system which I later expanded into a window costing system
- Researched and implemented new backup solutions for servers and other mission critical data
- Exhibited superior programming knowledge in learning new languages on the fly as needed
- Implemented and managed network infrastructure encompassing new systems

Muldoon's Inc. - Eau Claire, WI **June 2002 – May 2005**

Sales Associate

- Researched technology solutions (POS, E-Commerce) and consulted owner on them
- Have assisted in decision making in all functional areas of business

Army National Guard - Eau Claire, WI **May 1999 – May 2008**

Team Leader / Combat Engineer / 724th ENGR BN / Veteran

- Served 13 months in Iraq in support of Operation Iraqi Freedom
- Has enhanced my sense of duty and responsibility
- Gained valuable leadership skills through service as a team leader

EDUCATION:

MBA - University of Wisconsin – Eau Claire, WI **May 2007 – July 2010**

Master of Business Administration

- Graduating GPA: 3.912
- AACSB Accredited Institution
- Learned about the entrepreneurial aspects of business
- Gained valuable leadership skills

BBS - University of Wisconsin – Eau Claire, WI **Jan. 2000 – Dec. 2005**

Management Information Systems / Business Telecommunications

- Graduated Cum Laude, Date: Dec. 2005
- Overall GPA: 3.34
- Achieved academic distinction most semesters

MILITARY HONORS

- Army Reserve Component Achievement Medal, Iraq Campaign Medal, National Defense Service Medal, Global War on Terrorism Expeditionary Medal, Global War on Terrorism Service Medal, Armed Forces Service Medal w/ M (Mobilization) Device, Army Service Medal, Write Medal

CERTIFICATIONS

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Dynamics Assessments Passed

Certification/Version	Dynamics CRM Presales Assessment	**Achievement Date:**	August 2011
Certification/Version	Dynamics CRM Sales Assessment	**Achievement Date:**	August 2011

Scribe Software

Certification/Version	Scribe Certified Consultant - Dynamics CRM	**Achievement Date:**	December 2010

Microsoft® Certified Professional Developer (MCPD)

Certification Number	D431-2474	**Achievement Date:**	07/29/2011
Certification/Version	Enterprise Application Developer 3.5		

Microsoft® Certified Technology Specialist (MCTS)

Certification Number	D407-2024	**Achievement Date:**	06/21/2011
Certification/Version	.NET Framework 3.5, Windows® Communication Foundation Applications		
Certification Number	B660-7484	**Achievement Date:**	01/31/2011
Certification/Version	.NET Framework 3.5, ADO.NET Applications		
Certification Number	B660-7485	**Achievement Date:**	03/31/2010
Certification/Version	.NET Framework 3.5, ASP.NET Applications		
Certification Number	B660-7486	**Achievement Date:**	01/06/2010
Certification/Version	.NET Framework 3.5, Windows® Forms Applications		

Microsoft Certified Technology Specialist -Dynamics

Certification Number	D454-9231	**Achievement Date:**	08/24/2011
Certification/Version	Managing Microsoft Dynamics® Implementations		
Certification Number	B660-7487	**Achievement Date:**	08/20/2008
Certification/Version	Microsoft Dynamics® CRM 4.0 Customization and Configuration		

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3.4 Organizational Chart

At Aeon Nexus Corporation, every project is lead by a team of key account professionals. For this project, we have enlisted key team members who specialize in the Microsoft Dynamics CRM tool and it's Case Management functionality.

Omar Usmani, Executive Partner- Aeon Nexus Corporation
Mr. Usmani has over 15 years of solutions delivery experience in the public and private sectors. He is a seasoned professional who has worked with Fortune 100 corporations and leading government organizations including the United States and Allied Governments, as well as varied international military organizations. As Executive Partner for Aeon Nexus, Mr. Usmani is responsible for the overall success of all projects with oversight into client requirements and the solutions Aeon Nexus delivers for its clients. Mr. Usmani was a graduate of George Mason University and volunteers extensive time assisting various boards and committees within our region to include: Capital Region Economic Development Council Executive Committee (Appointed by Governor Cuomo), Albany Medical College Board of Directors, and the Tech Valley School Foundation Board. Mr. Usmani would act as Engagement Manager for the length of this engagement.

Brian Duncan, Managing Director, Solutions- Aeon Nexus Corporation
Brian Duncan has spent the last twelve years earning recognition as a leading IT expert specializing in state and federal human services programs. Having led the early development of Microsoft technologies in the NYS Office for Temporary and Disability Assistance, Brian directed the development of five of the agencies largest internet IT solutions. From the success of these efforts, Brian moved on to fill an advisory role to IT management as an expert in web application architecture, software evaluation and POC. Working with a select group of consultants and state administrators, Brian authored the agency's SSDLC and was invited to be guest speaker at the New York State Forum for project management. Mr. Duncan is a graduate of the State University of New York and currently holds multiple Microsoft Certifications. Mr. Duncan would be acting as Project Manager on the County's engagement.

Kiley Wittig, Engagement Manager- Aeon Nexus Corporation
With extensive experience in technology and account management, Ms. Wittig excels at analyzing complex issues, creating successful client and partner relationships, and developing and motivating teams and individuals all with an overarching goal of delivering value-add business solutions. Ms. Wittig's recent emphasis is on helping organizations design and implement solutions utilizing the Microsoft product line. Ms. Wittig is a graduate of the State University of New York and is currently pursuing certifications in Microsoft Dynamics CRM. Ms. Wittig would act as Account Manager for this engagement and has held a similar role on all Microsoft Dynamic CRM engagements at Aeon Nexus.

The following chart represents our project organization as it pertains to roles and resources for this engagement.

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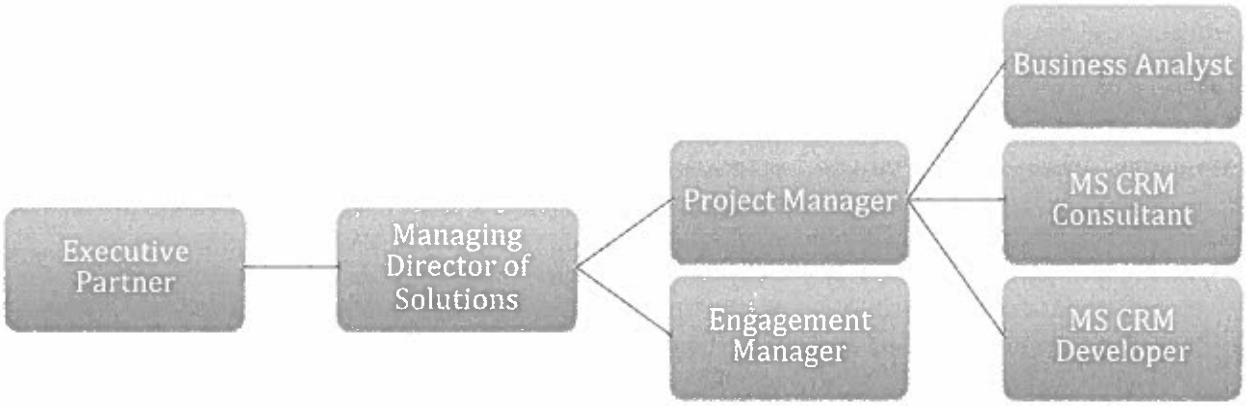
Organizational Chart – FY2014 CDBG-DR Microsoft Dynamics Application



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Section IV: Experience & Past Performance

Aeon Nexus Corporation is excited to showcase our skill-set in today's competitive market and is rapidly completing the necessary requirements for multiple competencies and certifications. During this process, we have distinguished ourselves as talented Microsoft solution providers, developers, and integrators. We have implemented Microsoft products at several New York State public sector clients including NYSERDA, New York State Office of Children and Family Services and New York State Office of General Services and Albany County. Beyond New York State, we have provided Microsoft services to the private and public sector including several federal government clients such as the Department of Treasury and the Internal Revenue Service.

Most recently, Aeon Nexus, along with our partner are currently engaged with the Mayor's Office of Housing Recover Operations (HRO) in NYC. Our team is building a case management system to support end-to-end case management for homeowners applying for the Community Block Development Grant (CBDG) to rebuild and restore their homes in the wake of Hurricane Sandy. Microsoft Dynamics CRM 2011 is the primary platform for this case management system, which is hosted in the Microsoft Azure cloud. Microsoft SharePoint 2013 provides document management capabilities for the system. The system has a public-facing portal, as well as an interface with the City's back-end systems. This solution manages the registration and intake of applications through the City's 311 system, reviews the eligibility of the applications, assists in the damage assessment and work order workflows, provides information for the environmental and historic review processes and assists in the referral and preliminary repair information for Phase II.

Aeon Nexus designed, developed, and delivered a Microsoft CRM emergency management portal and 311 System for Albany County, NY. This application leveraged existing on-site LDAP directories to quickly integrate existing user account management models into the CRM solution and quickly get the users working in the system. Aeon Nexus utilizes ADXStudio portals to provide visible access to county constituents through Internet facing portals allowing the public to access emergency information, report 311 incidents, and receive important preparedness and recovery information. The system implements a series of internal workflows to properly triage 311 complaints and emergency event information, and disseminate the proper information to all appropriate channels. Twitter feeds and email tracking help provide additional avenues of communication management and deep integration with BING maps allows county staff to properly identify and tad important emergency mange sites, including shelters and road closings.

Aeon Nexus recently delivered a SharePoint and MS CRM solution at New York State Office of General Services (OGS) where we designed and implemented an innovative web portal for their Hourly-Based IT Services contract. This contact was awarded to twenty-five vendors and all Executive Agencies in NYS are required to use these vendors for HBITS work. OGS required a system and solution that could facilitate the bidding and awarding process. Our solution utilized their existing SharePoint 2010 environment and licenses, including Office 365 accounts and profiles. Our full cycle solution included business and technical requirements documents, wireframes describing the applications functionality, composites illustrating the applications look and feel, custom SharePoint 2010 Solution, deployment to Test the Production environment, solution documentation, training, and post-production support. Our custom SharePoint 2010 solution included allowing access by user roles (Administrator, OGS, Contactors, Executive Agency Users, and Non-Executive Agency Users), allows users to create Task Orders, built in workflow to manage Task Order lifecycle, allows contractors to submit Candidate Response Forms in response to Task Orders, manages Contractor Candidate availability, and allows

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Task Order Creator to submit preliminary technical feedback and interview feedback forms evaluating Candidate Responses. Our resources have worked efficiently and effectively to keep this project on-time and on-budget. With the success of completing our first Phase with NYS OGS we will be continuing with Phase II to include Dynamics CRM. NYS OGS was extremely happy with our commitment and support that they purchased an extended support contract to supplement their own staff.

Aeon Nexus was first engaged with the NYS Office of Children and Family Services (OCFS) in 2012. Aeon Nexus recently completed an OCFS project that involved the development of the Incident Reporting Information System (IRIS). IRIS was written in Dynamics CRM and utilizes a combination of supported customizations and code, including SharePoint customizations, to provide functionality consistent with IRIS' requirements. The Phase 1 implementation consisted of implementing the basic information to track Investigations, disciplinary actions, grievances and improper actions. Through this solution, the Special Investigations Unit and Labor Relations Unit have the ability to create, update and report on their cases. Also enabled by this solution, the Division of Juvenile Justice and Opportunities for Youth (DJJOY) Operations resources have the ability to update limited information in the system. Additionally, DJJOY Facilities will also the ability to view specific information pertaining to investigations and Labor Relations Cases involving their own facilities. In leading the development of this solution, Aeon Nexus resources performed a review and analysis of requirements to provide guidance on the development of a project schedule for delivery, as well as, managing the development and testing of customizations required to support IRIS. Aeon Nexus worked very closely with the OCFS team to ensure that this project was a success.

Aeon Nexus provided MS CRM expertise to New York State Energy Research and Development Authority (NYSERDA). NYSERDA identified a need for a Customer Relationship Management (CRM) system to better organize and analyze its customer data. Aeon Nexus helped implement a MS CRM Online pilot for approximately 50 NYSERDA staff. Additionally we installed the Outlook desktop client allowing users to work from within Outlook. The major functions that we implemented within MS CRM included core functionality, marketing, sales, customer service, and additional features. Our implementation was divided into five phases to include: Define, Design, Build & Test, Deploy, and Ongoing Project Management. Progress was detailed in a monthly status report detailing project activity, accomplishments, and schedules.

Aeon Nexus Corporation also has extensive Microsoft experience in the Federal space. One of our largest projects to date was a 10-year contract with the U.S. Department of Treasury. Our team implemented the solution for the Cash Management Improvement Act System of 1990 (deployed in 1997 and maintained through 2011). The CMIA System (CMIAS) was designed to automate the administrative and reporting functions of the CMIA Program. The home-grown system is built on Microsoft Technology leveraging SQL Server as the back end database, Microsoft IIS as the web server, visual basic script, asp.net, JavaScript and is completely maintained in visual studio. Our experience, as demonstrated from the CMIAS work, enables our team to successfully extract, share, and utilize data from disparate source systems, whether from Oracle, PeopleSoft, Microsoft or other legacy systems.

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Section V: Appendix

5.1 Appendix A- Bid Forms
Firm Information, Firm References, Firm Bid Form, Doing Business Data Form
5.2 Appendix B- Aeon Nexus Corporation SSDLC

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Attachment A

Tab 1 - Information

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

(Information, References, Pricing)

PIN # 002-14-G0002

Bid Deadline: FRIDAY December 20, 2012 at 3:00 PM EST via e-mail to: contracts@omb.nyc.gov

General Information:

1. The Office of Management and Budget (OMB) is soliciting quotes for Microsoft (MS) Dynamics CRM Online and consulting services to deploy an applications to monitor Community Development Block Grants for Disaster Recovery (CDBG-DR). See cover letter for application specifics. OMB is located at one location 255 Greenwich Street, New York, NY 10007.

Bid Specifications:

1. Bids will only be accepted utilizing the fully completed bid sheets.

2. All Bids **MUST BE SIGNED** by someone in your firm who can bind your bid proposal. Prices are irrevocable until contract award.

3. Vendors must ensure the size of the e-mail submitting this bid is less than ten megabytes.

Firm:	***Aeon Nexus Corporation***
Contact:	***Meghan Barkley, Operations Director, Contractual Entity***
Address:	***174 Glen Street, Glens Falls, NY 12801***
Email:	meghanbarkley@aeonnexus.com
Telephone:	***518-338-1551***
Fax:	***866-252-1251***
Federal ID Number:	***54-1983534***
Remittance Address: (if different from above)	

Inquiries

Any inquiries concerning this solicitation should be directed by e-mail, under the subject line "OMB CDBG-CR MS Dynamics RFB Inquiries", to contracts@omb.nyc.gov. Inquires must be received prior to Friday, December 13, 2013 at 12:00 Noon EST.

Attachment B - Compliance with Local Law 34 of 2007

Pursuant to Local Law 34 of 2007, amending the City's Campaign Finance Law, the City is required to establish a computerized database containing the names of any "person" that has "business dealings with the City" as such terms are defined in the Local Law. In order for the City to obtain necessary information to establish the required database, **vendors responding to this solicitation MUST complete the Doing Business Data Form (see Attachment A) and return it with this proposal.** The submission of a Doing Business Data Form that is not accurate and complete may result in appropriate sanctions.

Please Note: This is a writable form, type directly into the highlighted boxes.

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

PIN # 002-14-G0002

Firm: **Aeon Nexus Corporation**

Reference 1

Company Name:	***New York State - Albany County***
Contact Name:	***Perry Blanchard***
Address:	***112 State Street, Room 500, Albany, NY 12207***
Telephone:	***518-447-4962***
E-mail:	pblanchard@albanycounty.com

Reference 2

Company Name:	***New York State Office of General Services***
Contact Name:	***Susan Filburn***
Address:	***37th Floor, Corning Tower, Empire State Plaza, Albany, NY 12242***
Telephone:	***518-473-5291***
E-mail:	susan.filburn@ogs.ny.gov

Reference 3

Company Name:	***New York State Office of Children and Family Services***
Contact Name:	***George Warner***
Address:	***52 Washington Street***
Telephone:	***518-894-0006***
E-mail:	***George.Warner@its.ny.gov***

Please Note: This is a writable form, type directly into the highlighted boxes.

RFB - FY2014 CDBG-DR Microsoft Dynamics Application

PIN # 002-14-G0002

Firm: **Aeon Nexus Corporation**

Please Note: This is a writable form, type directly into the available fields (unshaded). Totals will be automatically calculated.

Microsoft Dynamics CRM Online Consultants

Project Tasks	Hours	Resources	Total Hours	Rate	Amount
Analysis and Design	400	2	800	$ 150	$ 120,000
System Build	550	2	1100	$ 150	$ 165,000
System Testing	160	1	160	$ 150	$ 24,000
Installation & Deployment	160	1	160	$ 150	$ 24,000
Training and Documentation	120	1	120	$ 150	$ 18,000
After Launch Break Fix Support	500	1	500	$ 150	$ 75,000
Project Management	384	1	384	$ 175	$ 67,200
Total					$ 493,200

Microsoft Dynamics CRM Online Licenses

User Subscription Licenses (USLs)			
License Type	**Quantity**	**Unit Cost**	**Total Cost**
Professional	100	$ 700.32	$ 70,032.00
Additonal Add-ons*			
Item	**Quantity**	**Cost/Month**	**Yearly Cost**
Additional Storage/GB	100	$ 8.97	$ 10,764.00
Non-Production Instance	2	$ 134.68	$ 3,232.32
Total			$ 84,028.32

*** To be purchased as necessary**

Total Bid	**$ 577,228.32**

Name: Meghan Barkley

Signature: _____

Date: 12/19/13

The City of New York
Mayor's Office of Contract Services
Doing Business Accountability Project

Doing Business Data Form

To be completed by the City agency prior to distribution			
Agency: OMB	Transaction ID: 00214G0002001		
Check One:	Transaction Type (check one):		
☒ Proposal	☐ Concession	☐ Contract	☐ Economic Development Agreement
☐ Award	☐ Franchise	☐ Grant	☐ Pension Investment Contract

Any entity receiving, applying for or proposing on an award or agreement must complete a Doing Business Data Form (see Q&A sheet for more information). Please either type responses directly into this fillable form or print answers by hand in black ink, and be sure to fill out the certification box on the last page. **Submission of a complete and accurate form is required for a proposal to be considered responsive or for any entity to receive an award or enter into an agreement.**

This Data Form requires information to be provided on principal officers, owners and senior managers. The name, employer and title of each person identified on the Data Form will be included in a public database of people who do business with the City of New York; no other information reported on this form will be disclosed to the public. **This Data Form is not related to the City's VENDEX requirements.**

Please return the completed Data Form to the City office that supplied it. Please contact the Doing Business Accountability Project at DoingBusiness@cityhall.nyc.gov or 212-788-8104 with any questions regarding this Data Form. Thank you for your cooperation.

Section 1: Entity Information

Entity Name: Aeon Nexus Corporation

Entity EIN/TIN: 54-1983534

Entity Filing Status (select one):

☐ Entity has never completed a Doing Business Data Form. *Fill out the entire form.*

☐ Change from previous Data Form dated _____. *Fill out only those sections that have changed, and indicate the name of the persons who no longer hold positions with the entity.*

☒ No Change from previous Data Form dated 07/01/2013. *Skip to the bottom of the last page.*

Entity is a Non-Profit: ☐ Yes ☐ No

Entity Type: ☐ Corporation (any type) ☐ Joint Venture ☐ LLC ☐ Partnership (any type)
☐ Sole Proprietor ☐ Other (specify): _____

Address: _____

City: _____ State: _____ Zip: _____

Phone : _____ Fax : _____

E-mail: _____

Provide your e-mail address and/or fax number in order to receive notices regarding this form by e-mail or fax.

Section 2: Principal Officers

Please fill in the required identification information for each officer listed below. If the entity has no such officer or its equivalent, please check "This position does not exist." If the entity is filing a Change Form and the person listed is replacing someone who was previously disclosed, please check "This person replaced..." and fill in the name of the person being replaced so his/her name can be removed from the *Doing Business Database*, and indicate the date that the change became effective.

Chief Executive Officer (CEO) or equivalent officer

☐ This position does not exist

The highest ranking officer or manager, such as the President, Executive Director, Sole Proprietor or Chairperson of the Board.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CEO: _____ on date: _____

Chief Financial Officer (CFO) or equivalent officer

☐ This position does not exist

The highest ranking financial officer, such as the Treasurer, Comptroller, Financial Director or VP for Finance.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CFO: _____ on date: _____

Chief Operating Officer (COO) or equivalent officer

☐ This position does not exist

The highest ranking operational officer, such as the Chief Planning Officer, Director of Operations or VP for Operations.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former COO: _____ on date: _____

Section 3: Principal Owners

Please fill in the required identification information for all individuals who, through stock shares, partnership agreements or other means, **own or control 10% or more of the entity**. If no individual owners exist, please check the appropriate box to indicate why and skip to the next page. If the entity is owned by other companies, those companies do **not** need to be listed. If an owner was identified on the previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list any individuals who are no longer owners at the bottom of this page. If more space is needed, attach additional pages labeled "Additional Owners."

There are no owners listed because (select one):

☐ The entity is not-for-profit ☐ There are no individual owners ☐ No individual owner holds 10% or more shares in the entity

☐ Other (explain): _____

Principal Owners (who own or control 10% or more of the entity):

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Principal Owners:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Section 4: Senior Managers

Please fill in the required identification information for all senior managers who oversee any of the entity's relevant transactions with the City (e.g., contract managers if this form is for a contract award/proposal, grant managers if for a grant, etc.). Senior managers include anyone who, either by title or duties, has substantial discretion and high-level oversight regarding the solicitation, letting or administration of any transaction with the City. **At least one senior manager must be listed, or the Data Form will be considered incomplete.** If a senior manager has been identified on a previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list individuals who are no longer senior managers at the bottom of this section. If more space is needed, attach additional pages labeled "Additional Senior Managers."

Senior Managers:

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Senior Managers:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Certification

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SSDLC Handbook

Secure System Development Life Cycle (SDLC)

CITY OF NEW YORK

Prepared for
City of New York
255 Greenwich St.
New York, NY 10007-2146

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SDLC Handbook

1. Introduction

Developing and managing software systems requires the coordinated efforts of a broad range of resources. The SSDLC (Secure Software Development Life Cycle) refers to the repeatable processes and methods adopted to coordinate these efforts and communicate progress and objectives.

This handbook defines the SSDLC best suited to fit the unique environment that exists at CITY OF NEW YORK. It is based upon an iterative software engineering process that outlines a dependable and efficient methodology for managing who does what, when and how during a software development project. It has been custom fit to meet the agency framework and vision in terms of phases, work products, and metrics. The ultimate goal of the SSDLC implementation is the production of secure, high-quality, well documented software.

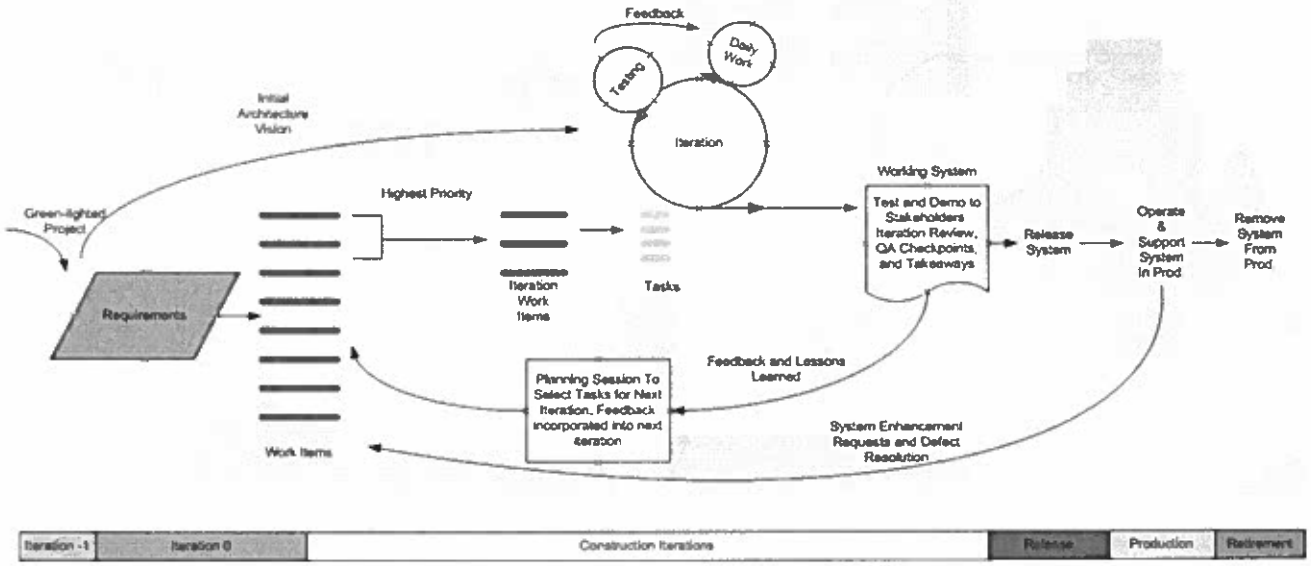
2. Overview

The CITY OF NEW YORK SSDLC clearly defines the software development process from the separate but related viewpoints of project management and development. It is an iterative process inheriting elements from AUP (Agile Unified Process), RUP (Rational Unified Process), XP (Extreme Programming), and other methodologies. The details and decisions maintained within the SSDLC are reflections of the guiding principles identified within the agency. These principles determined the 7 key characteristics of the SSDLC.

2.1 CITY OF NEW YORK SSDLC 7 Key Characteristics

- Iterative – The pitfalls of the waterfall method are avoided through shorter focused iterations culminating in a working release.
- Agile – Agile processes promote creative solutions and modern development philosophies that facilitate rapid changes in the course and direction of a project, allowing for adjustments to unforeseen project demands.
- Lightweight – Documentation and reporting responsibilities are appropriately distributed for maximum accuracy and minimum evasiveness. Work Products are short, pointed documents appropriately focused for the intended audience.
- People-centric – Encourages the production of useful output that facilitates personnel transitioning, training, maintenance, and support. Guiding principles should encourage productivity and creativity; recommendations should allow alternatives.
- Secure – By adopting industry guidelines (OWASP etc) for developing secure applications, security is part of the development process, resulting in higher quality, secure applications with fewer bugs.
- Measurable – Offers concrete and obvious signs of project distress and success.
- Repeatable – Provide a clear and consistent path to success such that future projects can reproduce similar output and similar results.

2.2 CITY OF NEW YORK Iteration Cycles



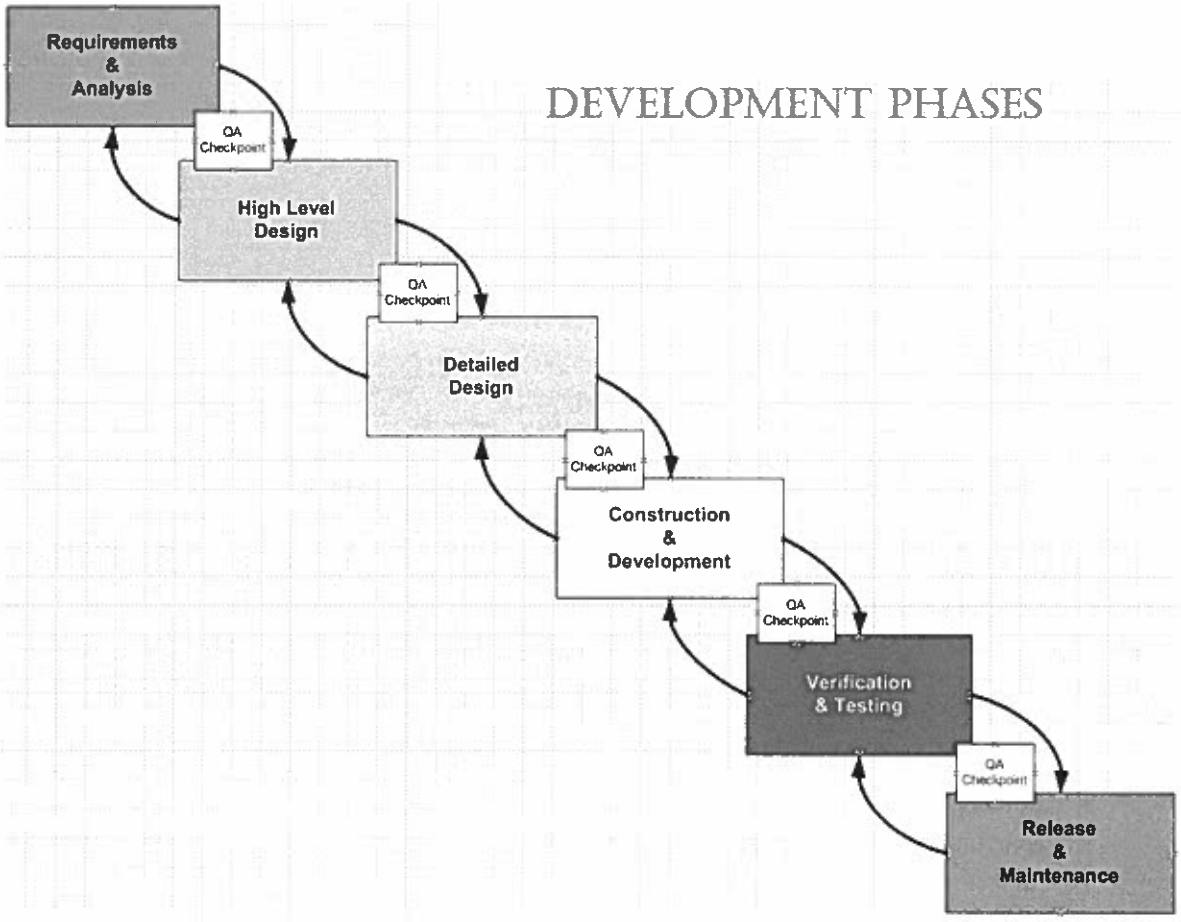
The image above depicts the iterative nature of an agile SSDLC. Reading from left to right, early iterations focus on requirements gathering and prioritization of the work items. Representing the work performed by the governance board prior to green-lighting a project is "Iteration -1". While equally important to the software development process, the CITY OF NEW YORK SSDLC focuses primarily upon the activities occurring after this iteration. "Iteration 0" represents the Requirements & Analysis phase of the SSDLC and it is here that we begin.

Once the work items have been identified, smaller subsections of work are chosen for each of the subsequent construction iterations. The "Mickey Mouse" shaped graphic at the top of the image illustrates the root of all iterations during any phase of development, and includes the daily testing and feedback that influences the direction of the daily work. Although not depicted in this image, daily "stand-up" meetings should be incorporated into the daily work schedule for all phases of development.

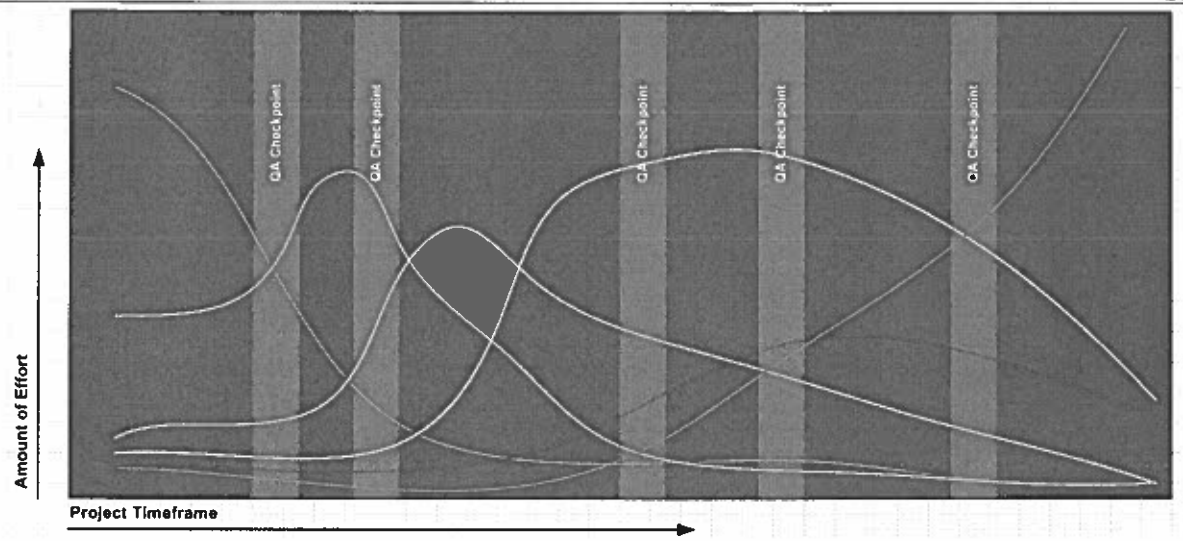
Each of the construction iterations produce a working system that is tested and demonstrated to the stakeholders. Feedback is piped back into planning sessions where the next iteration's tasks and priorities are selected.

Finally, the system is released and the maintenance phase begins. Enhancements and defects are reported back to the team which are incorporated into the next iteration, or may initiate a whole new iteration of their own. The SSDLC phases are explained in further detail below.

2.3 CITY OF NEW YORK SSDLC Phases



The image above represents the phases of development represented in the CITY OF NEW YORK SSDLC. Each phase is defined by the unique tasks and work products travelling in and out of the phase. A transition to the next phase occurs upon meeting critical mass, or the "Now we know enough" state. At this point "QA Checkpoints" located between phases represent the stage at which all associated Work Products have become suitable for review.



The chart above demonstrates how the level of effort associated with each phase changes throughout the timeframe of a project. While Requirements & Analysis sets its peak very early in the project, Verification and Testing, along with Release and Maintenance rise toward the end of the timeframe. More importantly it should be recognized that no phase of development works separate and independently of the others. Instead, the SSDLC requires that the phases overlap, creating intersections, or "Checkpoints" where effort levels shift focus but continue in all phases.

2.4 Roles

As previously stated, the SSDLC helps coordinate the efforts of a broad range of resources. The individuals and groups impacting a development effort have different interests that affect a project in different ways. The SSDLC provides the project playbook for each member, and each role on the team. For the CITY OF NEW YORK SSDLC, the important roles that have been identified are:

- **Business Analyst (BA)** – The business analyst is responsible for identifying and documenting the business process, requirements, and use cases for the project.
- **Systems Analyst (SA)** – The business analyst representative of the tech team. Responsible for working with BA and creating technical versions of the business documentation.
- **Subject Matter Expert (SME)** – A role provided by experts in the business process. BA and SA roles work to extract requirements and business rules from the SME.
- **Enterprise Architecture Group (EA)** – Involved early in the Origination and Initiation phases of a project and are responsible for architectural guidance, governance, and portfolio management.
- **Outcome Management Office (OMO)** – Responsible for tracking project process and status through touch-points identified in the SSDLC.
- **Quality Management Control (QMC)** – Responsible for implementing and enforcing best practices and improving the overall product quality before launch through structured testing strategies.
- **Quality Assurance (QA)** – Responsible for enforcing SSDLC checkpoints and work product conformity.
- **Application Architect (AA)** – Often called the technical lead, this is the leadership role on the technical team.

- **Project Manager (PM)** – Responsible for planning, organizing and managing resources to bring about the successful completion of the project and communicating project status and risk to the OMO.
- **Application Developer (DV)** – Developer role responsible for producing source code.
- **Application Tester (QMT)** – Responsible for testing all deliverables for bugs, and ensuring the quality of released product

2.5 Work Products

The CITY OF NEW YORK SSDLC has been assembled such that Work Products are the primer and the product for all phases of development. While Work Products are often the interfaces between phases of development, they are living documents and often follow through each phase of the SSDLC, open to the modifications inherent with each. The "QA Checkpoints" represent points in the project's lifecycle where Work Products are assessed to ensure that the proper documentation is being carried through. Work Products in the CITY OF NEW YORK SSDLC have been selectively chosen to provide their intended audience with the right combination of detail and brevity, while allowing for minimally evasive project status and quality measurements.

3. Development Process Outline

The CITY OF NEW YORK SSDLC Development Process is divided into 6 phases:

- Requirements and Analysis
- High Level Design
- Detailed Design
- Construction & Development
- Verification & Testing
- Release & Maintenance

Each phase in the process will designate specific roles and work products vital to its intention. Together, they work to provide an iterative solution to solving larger problems. By iterating through the process, each time focusing on a small subsection of work, large undertakings can be more easily managed. Sudden deviations from project plans, or unforeseen stall points can be dealt with earlier and easier. At the end of each phase, a "QA Checkpoint" provides the feedback necessary to ensure a project stays on target and in compliance. Checkpoints are reached when the necessary Work Products have achieved the "just barely good enough" state as described in the AUP.

3.1 Requirements and Analysis

3.1.1 Purpose – *"The What" of the System*

The Requirements and Analysis phase encompasses the tasks that go into determining what a new or altered system will do, while taking account of the needs of the various stakeholders. The R & A phase should ultimately produce an unambiguous set of requirements defined to a level of detail *sufficient* for system design. Prioritization of requirements will also factor into the determination of what will be developed in earlier iterations.

3.1.2 Activities

There are 5 fundamental activities that will take place during the R & A phase.

- Establishing A Vision – Creating a pointed description of "what" the system will do and what it represents to the stakeholders. Vision should represent a clear picture of the scope of the work to be performed, the priority of the feature to be implemented and a concrete representation of the "end game" of the project.
- Identifying Constraints – Determine the directives, standards, and governing bodies that will directly influence the direction, environment, and qualities of the system.
- Eliciting Requirements – Communicating with customers, stakeholders, and beneficiaries to farm the system requirements.
- Analyzing Requirements – Processing collected requirements and validating for clarity, completeness, and contradicting goals and resolving any issues.
- Recording Requirements – Producing the SSDLC Work Products associated with this phase.

The Requirements and Analysis phase begins with identifying the stakeholders for the project and commencing a kick-off meeting to establish communication channels and discuss the project charter. It is vital that all stakeholders are included the process as early as possible. Although the group responsible for Verification and Testing may not see their needed effort increase for quite some time, their stake in the project schedule and testing plans mandate their involvement in the early stages of the project. By bringing groups into the process early, expectations are established, potential conflicts can be identified early and rectified, and necessary preparations can begin.

Requirements gathering is facilitated through the work products associated with this phase, including the Requirements documents, project charter, and Business Use Cases. Emphasized throughout this SSDLC is the desire for all Work Products to reach the level of detail "sufficient" for moving to the next phase. The purpose is to avoid the "Big Requirements Up Front", or "BRUF" pitfall associated with waterfall methods of development.

3.1.3 Primary Roles

The primary active roles during the R & A phase include:

- PM – Project Manager
- BA – Business Analysts
- SA – Systems Analyst
- AA – Application Architect

3.1.4 Checkpoints

The documents required for the R & A Checkpoint are: QA Checkpoint Doc, Information Security Plan, Quality Management Plan

3.1.5 Prerequisite Work Products

For the first iteration, the R & A phase will include a number of Work Products as input from the Project Origination phase. These Work Products include: Project Charter, Scope Document, Preliminary Project Budget Estimate, EA Architecture Doc, Information Security Plan, Security Categorization and Information Classification Worksheet, Recovery Strategy Budget Plan, High Level Schedule

3.1.6 Work Products

The primary Work Products for this phase include: Business Model, Functional Requirements, Non-Functional Requirements, Business Use Case Doc, Project Schedule, Test Strategy

3.2 High Level Design

3.2.1 Purpose

The high-level design phase involves creating and prototyping architecture for the system or system components, and planning what functionality will be placed in what portions of the system. It includes the overall system architecture, specification of the general responsibilities of major packages, specification of interfaces and flow of data between adjacent systems and the software and the flow among internal packages. After the initial iteration of this phase where a finalized architecture or framework has been selected, the focus of this phase shifts more toward the high level component and function design for incorporating new or altered requirements into the system.

3.2.2 Activities

During this phase the development team's primary focus will be on modeling. Early iterations or iterations involving large or significantly complex tasks may produce working prototypes to demonstrate the feasibility of a technology, or architectural decision. The 5 main activities during the High Level Design Phase are:

- Developing Prototypes (early iterations) – Prototypes uncover potential issues or conflicts not readily uncovered during the R & A or modeling activities. Risk assessments from prototype processes are invaluable in the early stages of development.
- Domain Definition – Model the system as a series of subsystems, objects and responsibilities.
- Develop Models – The process of developing models is often more important to the team than the models themselves. Modeling data storage, processes, and entities helps the development team gain insight to the inner working of the system.
- Develop Test Strategy – The Verification & Testing phase may seem far away, but now is the time to define the issues the test plan should address and how.
- Evaluate Security Concerns – Security considerations should be address now! The need to secure government applications, and the mandates imposed can greatly affect they way a system needs to be structured. Involving security at this phase will ensure that security is built in from the foundation and prevent potentially devastating security related pitfalls in later phases.

3.2.3 Primary Roles

The primary active roles during the High Level Design phase include:

- PM – Project Manager
- BA – Business Analysts
- SA – Systems Analyst
- AA – Application Architect
- QMCA – Quality Management Control Analyst

3.2.4 Checkpoints

The documents required for the HL Design Checkpoint are: QA Checkpoint Doc, Information Security Plan, Test Strategy Doc

3.2.5 Work Products

The primary Work Products for this phase include: Business Model, Functional Requirements, Non-Functional Requirements, Business Use Case Doc, Test Strategy, Test Plan, Software Design Document

3.3 Detailed Design

3.3.1 Purpose

The Detailed Design Phase incorporates the provisions from the earlier phases into a detailed specification of each subsystem by thoroughly describing interfaces and functions provided by each component within. More detailed modeling activities result in lower level models that may or may not be saved and maintained, but resemble blueprints for the Construction and Development phase. The Detailed Design phase is also where we see technology choices, performance requirements, and EA Architecture compliance get incorporated into the system.

3.3.2 Activities

The 4 key activities that will take place during the Detail Design phase are:

- Design Elaboration – Expand the High Level Design output by implementing framework specific decisions, and detailing subsystem functionality and dependencies.
- System Integration – Platforms, hardware, and database selection should be brought into the design, as well as other third party, or serviced components.
- Develop Deployment Plan – How will this system be deployed, and what constraints exists that will affect these decisions.
- Develop Test Plan – Test plans and test cases should be developed along with expectations of the Verification and Testing phase.

The detailed design phase brings the system design into focus. Technical Use Case Documents offer developer insight into the implementation details of the Business Use Cases and models become more representative of the intended deliverables. It is important to incorporate all recognized production constraints into the detailed design phase to reduce risk and maintain focus on a targeted deliverable. It is recommended that members of the development team are included in the detailed design phase. The ***process*** of developing the models and technical use cases inherent with this phase is as vital to the understanding of the system as are the Work Products themselves.

3.3.3 Primary Roles

The primary active roles during the Detailed Design phase include:

- PM – Project Manager
- BA – Business Analyst
- SA – Systems Analyst
- AA – Application Architect
- DV – Application Developer

- QMCA – Quality Management Control Analyst

3.3.4 Checkpoints

The documents required for the Detailed Design Checkpoint are: QA Checkpoint Doc, Information Security Plan, Test Strategy Doc, Security Categorization and Information Classification Worksheet

3.3.5 Work Products

Work Products included in this phase are: Functional Requirements, Non-Functional Requirements, Business Use Case Docs, Technical Use Case Docs, Software Design Document, Deployment Plan, Developers Guide, Test Cases, and Test Plan.

3.4 Construction and Development

3.4.1 Purpose

Construction and Development represents the realization of the Detailed Design Phase. Modeled subsystems, components, and functions become working systems that satisfy the functional requirements and technical use case documents. The purpose of this phase is to produce a working release of the software that incorporates the requirements included in the current iteration.

3.4.2 Activities

The 3 key activities that will take place during the Detail Design phase are:

- Development – Create the software, deployment constructs, and interfaces.
- Test – Execute Test Plan with appropriate test cases to ensure expected results.
- Document – Source code is the ultimate documentation of the system, however the Developers' Guide, Software Design Document, and Deployment Plan are necessary to fully document the details of the iteration.

3.4.3 Primary Roles

The primary active roles during the Construction and Development phase include:

- PM – Project Manager
- SA – Systems Analyst
- AA – Application Architect
- DV – Application Developer
- QMCA – Quality Management Analyst

3.4.4 Checkpoints

The documents required for the Construction and Development Checkpoint are: QA Checkpoint Doc, Deployment Plan

3.4.5 Work Products

Work Products included in this phase are: Project Schedule, Project Plan, Software Design Document, Technical Use Case Documents, Functional Specs, Developers' Guide, Release Notes, Test Plan, Test Cases, Deployment Plan, and Source Code.

3.5 Verification & Testing

3.5.1 Purpose

Verification & Testing ensures the quality of the product, its deployment package, and any training or support materials. This phase is a joint effort between the Development team and QMC, and includes user acceptance testing, product distributable verification, and documentation and support verification. Test and deployment plans are executed and verified for stability and accuracy in an effort to ensure quality product releases.

3.5.2 Activities

The 2 key activities that will take place during the Verification & Testing phase are:

- Execute the test and deployment plans. The application code and deployment package are tested and prepared for delivery. User documentation and any necessary support materials are verified for correctness and completeness and packaged for release.
- Defect Resolution – Bugs are reported by the QMC system testers and resolved before release.

The Verification & Testing phase often includes several "mini-iterations" for resolving reported defects. When bugs are discovered enhancement and defect reports are created that are pushed back into the Construction and Development phase. At this point, a re-evaluation of priorities establishes the work to be completed and a re-iteration of the process is required to repair the associated defects, unit test, and re-deploy the application for the Verification & Testing phase.

3.5.3 Primary Roles

The primary active roles during the Construction and Development phase include:

- PM – Project Manager
- AA – Application Architect
- DV – Application Developer
- QMT – Application Tester
- QMCA – Quality Management Analyst

3.5.4 Checkpoints

The documents required for the Verification & Testing Checkpoint are: Test Strategy, Test Plan, test Cases, Quality Management Plan, Deployment Plan.

3.5.5 Work Products

Work Products included in this phase are: Test Cases, Test Plans, Test Strategy.

3.6 Release and Maintenance

3.6.1 Purpose

The Release and Maintenance phase represents the "end game" of an iteration in the SSDLC. A working, executable application has been released and a new phase of maintenance and support begins. Current release maintenance continues even while additional iterations may be occurring. Defects and enhancement requests can start a new phase of Construction and Development, or may

even push the project back into the Requirement and Analysis phase. Project Management roles may reach a new level of complexity as it is now necessary to balance previously planned development tasks with those coming into the cycle from the Release & Maintenance phase.

3.6.2 Activities

Release notes provide version specific details of the iteration-finalized deliverable. It is imperative that a change management process has been selected and implemented by this time such that when defects are discovered, they can be logged, tracked, and rectified in a structured manner. Likewise, as the new system is used the stakeholder may become aware of additional features and enhancements that were not originally envisioned in the early phases of the project. These requests should also be logged by the change management process. This allows for feature enhancements to follow through the appropriate channels for approval, and prevents requests from falling off the radar. It is also important to note that a change request can be created at any time in the project lifecycle.

3.6.3 Checkpoints

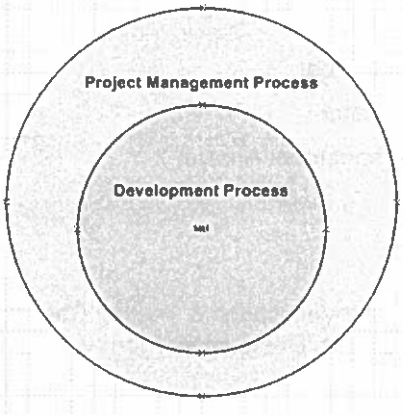
Documentation to consider during this phase: QA Checkpoint Doc, Security Review, Deployment Plan

3.6.4 Work Products

Work Products included in this phase are: Release Notes, Change Request.

4. Project Management Process

Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals and objectives. For software systems, the goal is a highly reliable application that meets the expectation of all stakeholders produced while honoring project constraints such as time, cost, and available resources. The CITY OF NEW YORK SSDLC Project Management Process controls the execution of the Development Process.

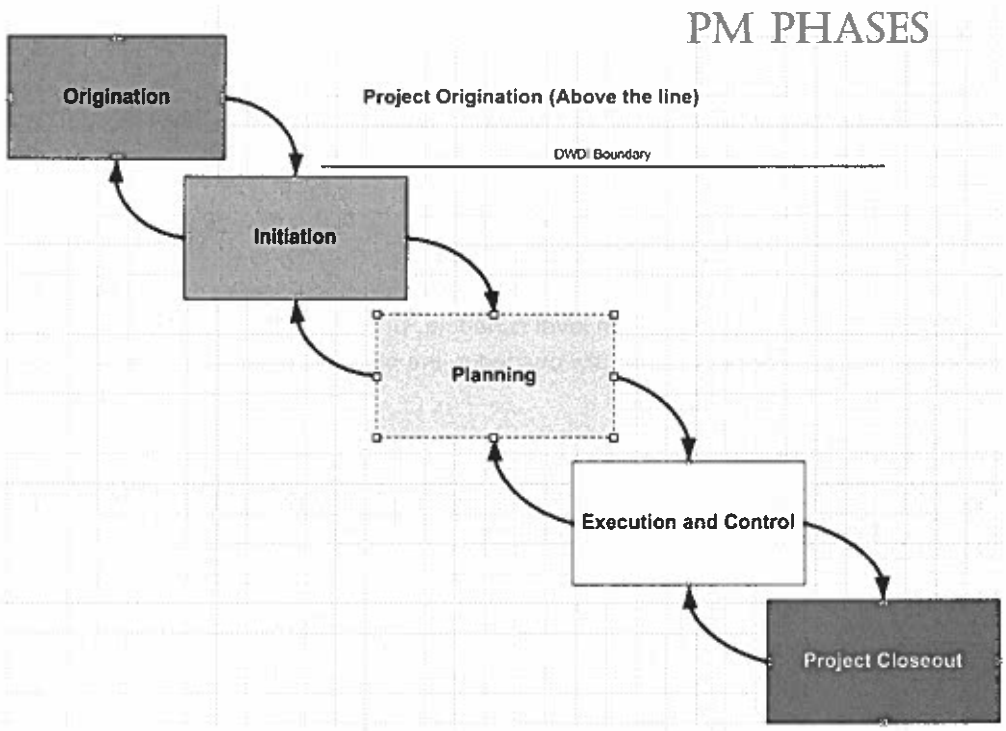


Tasks involved in the Project Management Process include:

- Identifying stakeholder requirements
- Managing Project Scope and project constraints; time, risk, quality, budget, resources
- Managing project priorities, needs, and expectations of stakeholders.
- Monitoring and managing progress.
- Maintaining metrics to interface with OMO and measure the project's state and progress.
- Maintaining Project Plan.

- Achieving QA Checkpoint criteria and quality focus.

4.1 Project Management Phases



The five iterative phases of Project Management as listed by the OMO:

1. Origination – Develop and evaluate, and prioritize the Project Proposals – including business cases and proposed solutions. Select projects and notify project sponsors. This phase of the PM process occurs during the "green-lighting" process and is not the focus of the CITY OF NEW YORK SSDLC.
2. Initiation – Continued activities are intended to assess the final feasibility of a solution. Risk and preliminary budget estimates are ascertained and high level schedule and resource plans are produced.
3. Planning – Includes reappraising the capabilities of the project and creation of a communications plan. This is the final preparations phase that builds the framework for conducting the following iterations. A final project definition is prepared, the project schedule gains more detail, and the change control process is recommended. The kickoff meeting occurs with all members of the development team as the design phases of the development process begin. The Project Plan and Project Schedule are produced to manage the resources as those team member filling technical roles see an increasing level of effort.
4. Execution and Control – Develop and manage the production of the work products in the software development plan. Work products of the current iteration are reviewed for quality and acceptability to stakeholders while planning continues for the next immediate iteration. Metrics and status reports are created as interfaces to other interests such as the OMO.
5. Closeout – Finalize a project and bring it to a close. All required work products have been produced, open items have been resolved, and project meets the criteria for success as initially described in the project charter.

4.2 Origination

Origination occurs prior to the true beginning of the CITY OF NEW YORK SSDLC. Origination is a fundamental component of governance and portfolio management and is the conversion phase whereby a project proposal is transformed into a project.

4.2.1 Work Products

Work products coming out of this phase include: Project Charter, High Level Budget, Scope Document

4.3 Initiation

Initiation takes the project from its initial idea to a point at which it can be decided whether or not to continue or abandon it. The is the elaborative phase of the process whereby the CSSQ is initially defined and activities include collecting process history, identifying objectives and business needs, developing a project definition and creating a high level schedule. Upon completion of these activities, if the project is determined to be feasible, it is formally pushed to the planning phase.

4.3.1 Work Products

The work products included in this phase are: Preliminary Project Budget Estimate, Resource Plan, Risk & Issue Management Plan, High Level Schedule, Initial Risk Assessment

4.4 Planning

Reappraise the project's intended capabilities and characteristics and the risks associated with achieving them. As the capabilities and risks are better understood, the business case should be updated to ensure that the project continues as a viable investment in its current form, or if a change in direction is needed. The framework that guides the development process iteration cycle is produced and high level documents are expanded to include more fine grained detail. The formal kickoff meeting will take place during this phase and project objectives are presented to the team. The designing phases of the development process begin and the details of the Project Schedule and Project Plan manage the daily work activities.

4.4.1 Work Products

Work products included in this phase are: Quality Management Plan, Project Schedule, Communications Plan, Project Definition, Project Schedule, Change Control Process, Status Reports

4.5 Execute & Control

Develop and manage the Software Development Plan and the Work Products associated with each phase. This phase is best summed up as the basic execution of the project plan. Project progress should be tracked, all risks should be closely monitored and strong lines of communication should be maintained between the team and all interested stakeholders. Close monitoring of the progress, complete with the necessary metrics and status reports occurs in parallel with preparations for the next iteration. Management of the change control process for defect reporting and enhancement requests is also necessary to ensure that scope is maintained, stakeholders' needs are met, and project timelines remain consistent.

4.5.1 Work Products

Work Products included in this phase are: Status Reports, Change Control Report, Project Schedule

4.6 Closeout

Finalize a project and bring it to a close. All required work products have been produced, open items have been resolved, and project meets the criteria for success as initially described in the project charter.

4.6.1 Work Products

Work Products include: Any final audit documentation, QA Checkpoints