

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

PURCHASE ORDER & REQUISITION



PURCHASE ORDER INSTRUCTIONS

ALL PACKAGES MUST BE ACCOMPANIED BY A PACKING SLIP.
REFERENCE PURCHASE ORDER NUMBER, PURCHASE ORDER LINE NUMBER, AND
NJT CATLOG NUMBER ON ALL INVOICES, PACKING SLIPS AND BILLS OF LADING.
INVOICES WITHOUT PURCHASE ORDER NUMBERS WILL BE RETURNED. VENDOR
MUST SUPPLY ORIGINAL NON-CONSTRUCTION INVOICE AND ANY FREIGHT BILLS
IN EXCESS OF \$100 TO:

E-MAIL: INVOICES@NJTRANSIT.COM

**IMPORTANT - ONE INVOICE AND ALL OF ITS SUPPORTING DOCUMENTS MUST BE
INCLUDED IN A PDF FORMAT.**

**PURCHASE ORDER NUMBER -INVOICE NUMBER. MULTIPLE FILES MAY BE
INCLUDED IN ONE E-MAIL.**

CONSTRUCTION INVOICES SHOULD CONTINUE TO BE SENT TO THE
CONSTRUCTION MANAGER.

VENDOR MUST ALSO SUPPLY A COPY OF INVOICE(S) TO CONSIGNEE.

VENDOR: IF PRICE ON PO DOES NOT MATCH, DO NOT SHIP MATERIAL, CONTACT
BUYER.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT
ACCOUNTS PAYABLE CUSTOMER RELATIONS AT
APCC@NJTRANSIT.COM AND SOMEONE WILL BE
ABLE TO ASSIST YOU.

PURCHASE ORDER NO		REV NO
230016829		0
VENDOR NO	ISSUE DATE	
80005463	12/20/22	
DATE CHANGED	PAGE NO	
	1	

SUPPLIER:		SHIP TO:	BILL TO:
WSP USA Corp 2 GATEWAY CENTER 18TH FLOOR NEWARK, NJ, , 07102-5093		NEWARK HEADQUARTERS NJ TRANSIT HEADQUARTERS ONE PENN PLAZA EAST NEWARK, NJ 07105-2246	NEWARK HEADQUARTERS NJ TRANSIT HEADQUARTERS ONE PENN PLAZA EAST NEWARK, NJ 07105-2246
BUYER: Faith Blair		FBLAIR@NJTRANSIT.COM	
TERMS	FREIGHT TERMS	FOB	QUOTATION NO
NET 45	100	DESTINATION	
		NJ TRANSIT IS EXEMPT FROM NJ SALES & USE TAXES PURSUANT TO SECT 9(A)(1), OF NJSA 54:32B-1 ET SEQ. FEDERAL T.I.N.: 22-228-1352 TAX EXEMPT #'S 21-60000928 (NJ) 22-75-0050K (FEDERAL)	

NJ TRANSIT ETHICS CODE: NJ TRANSIT IS AN INSTRUMENTALITY OF THE STATE OF NEW JERSEY AND ITS EMPLOYEES AND OFFICERS AND MEMBERS OF THE NJ TRANSIT BOARD OF DIRECTORS ARE PUBLIC SERVANTS AND ARE GOVERNED BY CIVIL AND CRIMINAL LAWS THAT CONTROL HOW NJ TRANSIT AND ITS PERSONNEL CONDUCT BUSINESS WITH VENDORS, CONTRACTORS AND CONSULTANTS. THESE PROVISIONS INCLUDE THE CONFLICTS OF INTEREST LAW, NJSA 52:13D-12; THE GIFTS TO PUBLIC SERVANTS LAW, NJSA 2C:27-6; AND THE COMPENSATION FOR PAST OFFICIAL BEHAVIOR LAW, NJSA 2C:27-4. THESE PROVISIONS CONTAIN UNEQUIVOCAL AND STRINGENT RESTRICTIONS RELATING TO GIFTS AND GRATUITIES BY ANY NJ TRANSIT EMPLOYEE OR ANY PERSON, COMPANY OR ENTITY DOING BUSINESS WITH OR WANTING TO DO BUSINESS WITH NJ TRANSIT. THE TERM "GIFT" INCLUDES ALL THINGS AND OBJECTS, TANGIBLE OR INTANGIBLE INCLUDING SERVICES, GRATUITIES, MEALS, ENTERTAINMENT, EVENT TICKETS, MEMBERSHIP CLUB ACCESS, TRAVEL COSTS AND LODGING. ALSO, NJ TRANSIT'S CODE OF ETHICS AND CODE OF CONTRACTORS AND CONSULTANTS FROM OFFERING ANY GIFTS TO ANY NJ TRANSIT EMPLOYEE. DO NOT, UNDER ANY CIRCUMSTANCES, TEMPT OR PUT AN NJ TRANSIT EMPLOYEE IN THE AWKWARD POSITION OF HAVING TO REFUSE A GIFT OR RETURN A GIFT NO MATTER HOW WELL INTENTIONED OR INNOCUOUS THE GIFT MAY BE.

LINE NUMBER	ITEM NUMBER/ MPN/MFR /DESCRIPTION	DELIVERY DATE	QUANTITY	UOM	UNIT PRICE	AMOUNT
1	CONTRACT #:21-059 SOURCE DOCUMENT: MR #500000677534 GL #1.8840.50305.SMS2400.C.999.00000.00000 DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED GENERATION (DG) PROJECT THE TOTAL EXPENDITURE AMOUNT FOR THIS CONTRACT SHALL NOT EXCEED \$1,636,813.17. REFER TO CONTRACT NO. 21-059 FOR THE COMPLETE TERMS AND CONDITIONS OF THIS AGREEMENT.	09/23/22	1636813.17	\$	1	1,636,813.17
					** TOTAL:	\$ 1,636,813.17



PURCHASE ORDER INSTRUCTIONS

ALL PACKAGES MUST BE ACCOMPANIED BY A PACKING SLIP. REFERENCE PURCHASE ORDER NUMBER, PURCHASE ORDER LINE NUMBER, AND NJT CATALOG NUMBER ON ALL INVOICES, PACKING SLIPS AND BILLS OF LADING. INVOICES WITHOUT PURCHASE ORDER NUMBERS WILL BE RETURNED. VENDOR MUST SUPPLY ORIGINAL NON-CONSTRUCTION INVOICE AND ANY FREIGHT BILLS IN EXCESS OF \$100 TO:

E-MAIL: INVOICES@NJTRANSIT.COM

IMPORTANT - ONE INVOICE AND ALL OF ITS SUPPORTING DOCUMENTS MUST BE INCLUDED IN A PDF FORMAT.

PURCHASE ORDER NUMBER -INVOICE NUMBER. MULTIPLE FILES MAY BE INCLUDED IN ONE E-MAIL.

CONSTRUCTION INVOICES SHOULD CONTINUE TO BE SENT TO THE CONSTRUCTION MANAGER.

VENDOR MUST ALSO SUPPLY A COPY OF INVOICE(S) TO CONSIGNEE.

VENDOR: IF PRICE ON PO DOES NOT MATCH, DO NOT SHIP MATERIAL, CONTACT BUYER.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT ACCOUNTS PAYABLE CUSTOMER RELATIONS AT APCC@NJTRANSIT.COM AND SOMEONE WILL BE ABLE TO ASSIST YOU.

PURCHASE ORDER NO 230016829		REV NO 0	
VENDOR NO 80005463		ISSUE DATE 12/20/22	
DATE CHANGED		PAGE NO 2	

SUPPLIER:

WSP USA Corp
2 GATEWAY CENTER
18TH FLOOR
NEWARK, NJ, , 07102-5093

SHIP TO:

NEWARK HEADQUARTERS
NJ TRANSIT HEADQUARTERS
ONE PENN PLAZA EAST
NEWARK, NJ 07105-2246

BILL TO:

NEWARK HEADQUARTERS
NJ TRANSIT HEADQUARTERS
ONE PENN PLAZA EAST
NEWARK, NJ 07105-2246

BUYER: Faith Blair

FBLAIR@NJTRANSIT.COM

TERMS	FREIGHT TERMS	FOB	QUOTATION NO
NET 45	100	DESTINATION	

NJ TRANSIT IS EXEMPT FROM NJ SALES & USE TAXES PURSUANT TO SECT 9(A)(1), OF NJSA 54:32B-1 ET SEQ.
FEDERAL T.I.N.: 22-228-1352
TAX EXEMPT #'S 21-60000928 (NJ)
22-75-0050K (FEDERAL)

NJ TRANSIT ETHICS CODE: NJ TRANSIT IS AN INSTRUMENTALITY OF THE STATE OF NEW JERSEY AND ITS EMPLOYEES AND OFFICERS AND MEMBERS OF THE NJ TRANSIT BOARD OF DIRECTORS ARE PUBLIC SERVANTS AND ARE GOVERNED BY CIVIL AND CRIMINAL LAWS THAT CONTROL HOW NJ TRANSIT AND ITS PERSONNEL CONDUCT BUSINESS WITH VENDORS, CONTRACTORS AND CONSULTANTS. THESE PROVISIONS INCLUDE THE CONFLICTS OF INTEREST LAW, NJSA 52:13D-12; THE GIFTS TO PUBLIC SERVANTS LAW, NJSA 2C:27-6; AND THE COMPENSATION FOR PAST OFFICIAL BEHAVIOR LAW, NJSA 2C:27-4. THESE PROVISIONS CONTAIN UNEQUIVOCAL AND STRINGENT RESTRICTIONS RELATING TO GIFTS AND GRATUITIES BY ANY NJ TRANSIT EMPLOYEE OR ANY PERSON, COMPANY OR ENTITY DOING BUSINESS WITH OR WANTING TO DO BUSINESS WITH NJ TRANSIT. THE TERM "GIFT" INCLUDES ALL THINGS AND OBJECTS, TANGIBLE OR INTANGIBLE INCLUDING SERVICES, GRATUITIES, MEALS, ENTERTAINMENT, EVENT TICKETS, MEMBERSHIP CLUB ACCESS, TRAVEL COSTS AND LODGING. ALSO, NJ TRANSIT'S CODE OF ETHICS AND CODE OF CONTRACTORS AND CONSULTANTS FROM OFFERING ANY GIFTS TO ANY NJ TRANSIT EMPLOYEE. DO NOT, UNDER ANY CIRCUMSTANCES, TEMPT OR PUT AN NJ TRANSIT EMPLOYEE IN THE AWKWARD POSITION OF HAVING TO REFUSE A GIFT OR RETURN A GIFT NO MATTER HOW WELL INTENTIONED OR INNOCUOUS THE GIFT MAY BE.



WHEN THIS BOX IS CHECKED, THE TERMS AND CONDITIONS OF THE ATTACHED CONTRACT REPLACES THOSE SHOWN ON THE REVERSE SIDE OF THIS PURCHASE ORDER.

Authorized NJ Transit Signature / Date

 12/22/22

**NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT**

EXECUTED CONTRACT DOCUMENT WITH ATTACHMENTS

AGREEMENT (CONTRACT) NO. 21-059

BETWEEN

NEW JERSEY TRANSIT CORPORATION

AND

WSP USA, Inc.

FOR PROFESSIONAL SERVICES

This Agreement (Contract) made as of December 22, 2022 , between New Jersey Transit Corporation (hereinafter "NJ TRANSIT"), a public instrumentality of the State of New Jersey and WSP USA Inc. having its principal place of business at Two Gateway Center, Suite 1000, Newark, NJ 07102 (hereinafter the "Consultant").

WITNESSETH:

WHEREAS, the Board of Directors of NJ TRANSIT, at its meeting of July 20, 2022, authorized the NJ TRANSIT President and CEO (Executive Director) or his designee, to enter into this Agreement (Contract) with the Consultant for design, engineering and other technical services associated with the Newark Penn Station Distributed Generation (DG) Project; and

WHEREAS, the said Consultant, for and in consideration of the payments hereinafter specified and agreed to be made by NJ TRANSIT, hereby covenants and agrees to commence and complete the work as follows:

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties hereto covenant and agree with each other as follows:

1. **CONSULTANT SERVICES:** The Consultant, at the direction of NJ TRANSIT, shall provide to NJ TRANSIT services in conformance with the description of services, deliverables, standards of performance, and acceptance criteria under this Agreement set forth in **Exhibit A** (Scope of Services), annexed hereto and made a part hereof.

2. **COMPENSATION:** This Agreement is a cost plus fixed fee contract. NJ TRANSIT will, subject to the availability of funds and audits, pay the Consultant for work identified in **Exhibit A** (Scope of Services). The Consultant's total costs and fees have been identified as an amount not to exceed

\$1,636,813.17 as set forth in **Exhibit B** (Cost Information), annexed hereto and made part hereof. The costs have been identified as \$600,924.74 for direct labor, \$803,366.67 for indirect costs, and \$92,092.62 for direct expenses. The fixed fee has been identified as \$140,429.14. Payment shall only be made for work that is actually performed and accepted by NJ TRANSIT. The Consultant shall render monthly invoices for direct and indirect charges incurred pursuant to this Agreement no later than two (2) weeks after the end of the month. The invoices shall be detailed in accordance with procedures and formats prescribed by NJ TRANSIT.

Prompt Payment: The Consultant agrees to pay each Subconsultant and Supplier under this Contract for satisfactory performance of completed work under its subcontract no later than ten (10) Calendar Days from the receipt of each payment the Consultant receives from NJ TRANSIT. The Consultant shall ensure that all lower-tier Subconsultants and Suppliers are paid all invoiced amounts that meet all applicable requirements within fifteen (15) Calendar Days from the time the Subconsultant receives payment from the Consultant.

All costs incurred under this Agreement by the Consultant and approved Subconsultants, including those costs resulting from changes to, modifications of and termination of the Agreement, at a minimum, must be considered allowable and allocable in accordance with the cost principles of Part 31 of the Federal Acquisition Regulations (48 C.F.R. Part 31). The Contracting Officer's determination on the allowability, allocability, and reasonableness of incurred costs shall be final and conclusive. The Contracting Officer for NJ TRANSIT shall be the Chief of Procurement & Support Services or his/her designees within NJ TRANSIT's Procurement Department.

Direct labor rates shall be the wages or salaries actually paid to employees, principals or partners directly charging time to the project for work performed as set forth in **Exhibit A** (Scope of Services). Escalation of direct labor rates is subject to a 3% yearly maximum to be applied on the contract anniversary date.

Maximum provisional indirect cost rates (e.g. fringes, overhead, General & Administrative (G&A), etc.) have been computed by the Consultant for it and its Subconsultants and are considered

acceptable by NJ TRANSIT. The following provisional rates shall be in effect for the duration of the Agreement unless revised as mutually agreed or adjusted as provided below:

<i>Consultant and each Subconsultant</i>	<i>Indirect Cost Rates</i>
WSP USA, Inc.	130.75%
Richard Grubb & Associates	141%
AmerCom Corp.	163.304%
Mercer Planning Associates	101%
Sowinski Sullivan	141.96%
Jersey Boring & Drilling	N/A

Should the Consultant's or any of its Subconsultant's actual indirect cost rates for their fiscal year be determined to be less than the established maximum provisional indirect cost rates, and should the amount invoiced by and paid to the Consultant exceed those rates for that fiscal year, then the amounts invoiced shall be adjusted downward as compared to the actual indirect cost rate and overpayment amounts including the corresponding fixed fee shall be remitted to NJ TRANSIT.

Direct expenses shall be only those costs which are necessary to accomplish the Scope of Services and not excludable as direct costs by the Federal Acquisition Regulations or not otherwise compensated under the Consultant's direct labor and indirect cost rates. All direct expense purchases of goods, materials, and services made by the Consultant on behalf of NJ TRANSIT shall be competitively procured wherever practicable.

Direct expense compensation for travel, subsistence and lodging costs shall comply with the NJ TRANSIT Travel and Business Reimbursement Guidelines as set forth in **(Exhibit C)**.

Direct labor rates, hours and costs, indirect labor rates and costs and direct expenses invoiced by the Consultant and paid by NJ TRANSIT are subject to audit and downward adjustment by NJ TRANSIT, in its sole discretion. Any determination of an overpayment by NJ TRANSIT as a result of an audit shall be final and conclusive of the amounts to be refunded. All overpayments shall be reimbursed to NJ TRANSIT within thirty (30) Calendar Days of notification. Alternatively, NJ TRANSIT may deduct the overpayment amount from payments owed to the Consultant under this or any other agreement with NJ TRANSIT. No upward adjustments shall be allowed.

Within one hundred and eighty (180) Calendar Days after the end of the Consultant's and Subconsultant's fiscal year or for accounting periods of no less than three (3) months should the Contract terminate, the Consultant and Subconsultants shall furnish NJ TRANSIT with a Statement of Indirect Labor Costs (Statement of Overhead) attesting that the statement has been prepared in conformity with accounting principles generally accepted in the United States and reflect all adjustments required by Part 31 of the Federal Acquisition Regulations. Such fiscal year or stub period statements must be certified by an independent public accountant. Failure to provide the requisite Statement of Indirect Labor Costs (Statement of Overhead) in a format acceptable to NJ TRANSIT may result in NJ TRANSIT withholding payment of fee and all or a portion of Indirect Labor Costs in an amount determined by NJ TRANSIT.

Interest payable by the Consultant on excess direct labor cost, indirect labor costs (overhead) or any other excess amounts paid to the Consultant by NJ TRANSIT, and not previously remitted to NJ TRANSIT within thirty (30) Calendar Days of notification by NJ TRANSIT, shall accrue at the prime rate as established by the United States Federal Reserve and published in The Wall Street Journal. Interest shall be applied to balances owed to NJ TRANSIT in excess of \$5,000. Application of interest to excess payments made in the preceding fiscal year shall begin six (6) months after the close of the Consultant's fiscal year. Interest shall continue to accrue monthly at the prime rate until all amounts have been remitted to NJ TRANSIT, unless amounts owed NJ TRANSIT including accrued interest, have been deducted by NJ TRANSIT from any payments owed the Consultant on this or any other agreement.

Costs incurred above the contract amounts as set forth in Exhibit B (Cost Information) are not reimbursable, except as authorized by the Contracting Officer in writing in accordance with Article 5, MODIFICATION OF AGREEMENT.

3. LIMITATION OF FUNDS:

A.) The Consultant estimates that performance of this Agreement will not cost NJ TRANSIT more than the estimated amount as set forth in **Exhibit B** (Cost Information). The Consultant agrees to make every effort to perform the work as set forth in **Exhibit A** (Scope of Services) and all obligations under this Agreement within the estimated amount as set forth in **Exhibit B** (Cost Information).

B.) The Purchase Order specifies the amount presently available for payment by NJ TRANSIT and allotted to the Scope of Services and the tasks the allotted amount will cover. The parties contemplate that NJ TRANSIT will allot additional funds incrementally to the Purchase Order up to the full estimated cost as set forth in **Exhibit B** (Cost Information) inclusive of all fees. The Consultant agrees to perform, or have performed, work on the Agreement up to the point at which the total amount paid and payable by NJ TRANSIT under the Agreement approximates but does not exceed the total amount actually allotted by NJ TRANSIT for each of the tasks identified in the Agreement. The Purchase Order is for invoicing purposes only and its attached Terms and Conditions are not part of this Agreement.

C.) The Consultant shall notify the Contracting Officer in writing whenever it has reason to believe that within the next sixty (60) Calendar Days the costs it expects to incur under this Agreement to complete the Scope of Services, when added to all costs previously incurred, will exceed seventy-five percent (75%) of the total amount so far allotted by NJ TRANSIT. The notice shall state the estimated amount, if any, of additional funds required to continue and complete performance of the Scope of Services, as set forth in **Exhibit A** (Scope of Services), beyond the total allotted amount as set forth in **Exhibit B** (Cost Information).

D.) If, after notification by the Consultant pursuant to paragraph C above, additional funds are not allotted for the Scope of Services, the Contracting Officer may terminate this Agreement, in whole or in part, in accordance with the provisions of Article 15, TERMINATION OF THE AGREEMENT FOR CONVENIENCE.

E.) Except as required by other provisions of this Agreement:

1.) NJ TRANSIT is not obligated to reimburse the Consultant for costs incurred in excess of the amount allotted in total by NJ TRANSIT for this Agreement; and

2.) The Consultant is not obligated to continue performance under this Agreement (excluding actions under Article 15, TERMINATION OF THE AGREEMENT FOR CONVENIENCE) or otherwise incur costs in excess of the amount then allotted to the Agreement by NJ TRANSIT until the Contracting Officer notifies the Consultant in writing that the amount allotted by NJ

TRANSIT has been increased and specifies an increased amount, which shall then constitute the total amount allotted by task and in total by NJ TRANSIT for this Agreement.

F.) No notice, communication, or representation in any form other than that specified by the Contracting Officer in writing shall affect the amount allotted by NJ TRANSIT to this Agreement. In the absence of the notice specified in Paragraph C, NJ TRANSIT is not obligated to reimburse the Consultant for any costs in excess of the total costs and fees as set forth in **Exhibit B** (Cost Information) to this Agreement, whether incurred during the course of the Agreement or as a result of termination.

G.) Change Orders shall not be considered an authorization to exceed the amount allotted by NJ TRANSIT as set forth in **Exhibit B** (Cost Information) unless they contain a statement increasing the amount allotted.

H.) Nothing in this clause shall affect the right of NJ TRANSIT to terminate this Agreement.

I.) If NJ TRANSIT does not allot sufficient funds to allow completion of the work, the Consultant will be entitled to the actual costs incurred plus a percentage of the fixed fee as set forth in **Exhibit B** (Cost Information) not to exceed the percentage of completion of the work contemplated by this Agreement.

4. **EFFECTIVE DATE AND TERM OF AGREEMENT:** This Agreement shall become binding upon the parties hereto when executed on behalf of NJ TRANSIT by the Contracting Officer or his/her designee. The Consultant shall commence work upon the Scope of Services within five (5) Calendar Days upon receipt of a written Notice to Proceed to that effect which shall be issued on behalf of NJ TRANSIT by its Contracting Officer or his/her designee upon the execution of the Agreement by NJ TRANSIT. The Consultant shall complete the Scope of Services within Thirty (30) Months.

5. **MODIFICATION OF AGREEMENT:**

A.) The Scope of Services set forth in **Exhibit A** may be reduced, modified or expanded within the scope of this Agreement by written contract modifications executed by NJ TRANSIT's Contracting Officer or his/her designee and the Consultant.

Except as provided in Paragraph B, below, in the event that NJ TRANSIT requires a reduction, expansion, or modification of the Scope of Services of this Agreement, the Contracting Officer will issue to the Consultant a written notification which specifies such reduction, expansion, or modification. Within fifteen (15) Calendar Days after receipt of the written notification, the Consultant shall provide the Contracting Officer with a detailed cost and schedule proposal for the work to be performed or to be reduced. This proposal may be accepted by NJ TRANSIT's Contracting Officer or his/her designee or modified by negotiations between the Consultant and NJ TRANSIT's Contracting Officer or his/her designee. A contract modification (Change Order) shall be effective only if executed in writing by both parties.

B. Notwithstanding Paragraph A. above, the Contracting Officer may at any time, by written order, make changes within the Scope of Services of this Agreement to the work to be performed by the Consultant. If any such change causes an increase or decrease in the estimated cost of, or the time required for, the performance of any part of the work under this Agreement, whether or not changed by the order, the Contracting Officer may make such adjustments as are appropriate and equitable and shall modify the Agreement in writing accordingly. Any claim by the Consultant for adjustment under this clause must be asserted within thirty (30) Calendar Days from the date of receipt by the Consultant of the notification of change; provided however, that the Contracting Officer, if he or she decides that the facts justify such action, may receive and act upon such claim asserted at any time prior to final payment under this Agreement. Failure to agree to any adjustment shall be a dispute within the meaning of Article 38, DISPUTES. However, nothing in this clause shall excuse the Consultant from proceeding with the Agreement as changed.

C. No services for which an additional cost or fee will be charged by the Consultant shall be furnished without the prior express written authorization of the Contracting Officer.

D. Unless specified in a written contract modification, no change, reduction, modification or expansion of the Scope of Services within or beyond the scope of this Agreement shall serve to modify the terms and conditions of this Agreement.

E. Whenever an "AS DIRECTED TASK" appears as set forth in **Exhibit A** (Scope of Services) and **Exhibit B** (Cost Information), NJ TRANSIT has provided an allowance for additional or supplemental work that has not yet been defined. This allowance is provided for the sole convenience of NJ TRANSIT and may only be used for work authorized by NJ TRANSIT's Contracting Officer or his/her designee.

All additional or supplemental work authorized under this provision will be incorporated into the Agreement by Change Order pursuant to Article 5, MODIFICATION OF AGREEMENT. The Change Order will describe the additional or supplemental work with any associated cost changes and will reduce the "AS DIRECTED TASK" allowance in the amount specified in the Change Order. Residual amounts remaining in the "AS DIRECTED TASK" allowance may be deleted from the Agreement by NJ TRANSIT at any time at NJ TRANSIT's sole discretion or at the completion of all work.

6. **STATUS REPORTS:** The Consultant shall submit to NJ TRANSIT monthly or more frequently, at the discretion of NJ TRANSIT, a written status report outlining the status of the Project to date. Each status report shall be a concise narrative description of activities to date and planned activities for the coming month or other period and include, at a minimum: the period's accomplishments by deliverable and/or task; status of deliverables; work-in-progress; next steps; listings and status of documents/data requested; potential impacts to the scope of work, cost or schedule; items or issues identified; total weekly and cumulative hours by task, deliverable, and person; projected hours to complete each task/deliverable; and any other information NJ TRANSIT may require. A final report, one (1) original, and seven (7) copies, and one (1) copy in an electronic format acceptable to NJ TRANSIT shall be submitted by the Consultant upon completion of the project.

7. **REVIEWS:** Until the completion of the Scope of Services by the Consultant and the final payment made by NJ TRANSIT, the Consultant shall allow representatives of NJ TRANSIT to visit the offices and other places of work of the Consultant periodically without prior notice to monitor the Consultant's work completed or in progress pursuant to this Agreement. NJ TRANSIT will, within a reasonable time, review and act upon all documents submitted by the Consultant. Both parties agree that

if either party deems it advisable to hold either a conference or any inspection of work in progress, all parties shall be notified and may participate.

8. ACCEPTANCE OF THE CONSULTANT'S WORK: All services and deliverables that the Consultant must provide and deliver to NJ TRANSIT, as set forth in **Exhibit A** (Scope of Services), shall be provided and delivered to the designated NJ TRANSIT Project Manager. The Project Manager will examine and inspect the deliverables and shall have the right in his/her reasonable judgment to refuse to accept any services or deliverables if they do not meet the requirements of the Scope of Services. Such inspection does not relieve the Consultant of its liability regarding any deficiencies in the performance of the Scope of Services or deliverables, whether obvious or not. If any deliverables are not accepted, NJ TRANSIT may terminate this Agreement, in whole or in part, in accordance with Article 16, TERMINATION OF THE AGREEMENT FOR CAUSE.

9. OVERPAYMENTS: If at any point NJ TRANSIT determines that the Consultant has been overpaid, NJ TRANSIT shall notify the Consultant in writing of the overpayment. The Consultant shall repay the amount of overpayment to NJ TRANSIT within thirty (30) Calendar Days of said notification including interest as applicable. In the event of failure by the Consultant to remit the overpayment amount within the time period set forth above, NJ TRANSIT reserves its right to pursue recovery of said amount pursuant to the terms of this agreement and any means available at law.

10. ASSIGNMENT, SUBCONTRACT AND DISPOSITION APPROVAL: The Consultant shall not sell, transfer or otherwise dispose of this Agreement or its interest therein to any other parties without the prior written consent of NJ TRANSIT's Contracting Officer or his/her designee. The Consultant shall not, without the prior written approval of NJ TRANSIT's Contracting Officer or his/her designee, assign or subcontract any of the Scope of Services under this Agreement. Neither shall any assignee or Subconsultant, without the prior written approval of NJ TRANSIT, further assign or subcontract any of the work to be performed pursuant to this Agreement.

The terms of this Agreement shall be incorporated into and made part of any assignment or subcontract pursuant to this Agreement. As a condition of obtaining NJ TRANSIT's approval of any proposed assignee or Subconsultant, the Consultant shall provide NJ TRANSIT with sufficient

documentation regarding the proposed Subconsultant or assignee for NJ TRANSIT's review and approval and shall provide to NJ TRANSIT a copy of the agreement established between the Consultant and its Subconsultant or assignee. Any assignment or subcontract of work to be performed under this Agreement entered into without prior written approval by NJ TRANSIT's Contracting Officer or his/her designee, shall be void and unenforceable unless NJ TRANSIT's Contracting Officer or his/her designee subsequently gives written approval or consent.

If the Consultant's assignee or Subconsultant fails to perform in accordance with the terms of its assignment or subcontract, the Consultant shall complete or pay to have completed the work which the assignee or Subconsultant failed to complete at no additional cost to NJ TRANSIT.

11. INDEMNIFICATION: The Consultant shall defend, indemnify, protect and save harmless the State of New Jersey, NJ TRANSIT, the U.S. Department of Transportation (USDOT), the Federal Transit Administration (FTA) (if the Agreement is in whole or part Federally funded), and their directors, officers, employees, servants and agents ("Indemnified Parties") from and against all suits, actions, claims demands or damages of whatsoever kind or nature arising out of or related to the performance of this Agreement including, but not limited to, expenditures for and costs of investigations, hiring of expert witnesses, court costs, counsel fees, settlements, judgments or otherwise, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of said Consultant or its Subconsultant in the performance of the work, specified in this Agreement or because of any act, omission, neglect, or misconduct of said Consultant or its Subconsultant in the performance of the work specified in this Agreement; or from any claims or amounts arising or recovered under the Worker's Compensation Act, or any other law, ordinance, order, or decree. So much of the money due the said Consultant under and by virtue of this Agreement as may be considered necessary by NJ TRANSIT for such purpose may be retained for the use of NJ TRANSIT; except that money due to the Consultant will not be withheld when the Consultant produces satisfactory evidence that it is adequately protected by the insurance coverages required in Article 12, INSURANCE. NJ TRANSIT will, as soon as practicable after a claim has been made against it, give written notice thereof to the Consultant along with full and complete particulars of the claim. If the suit is brought against NJ TRANSIT,

NJ TRANSIT will immediately forward to the Consultant every claim, demand, complaint, notice, summons, pleading or other process received by NJ TRANSIT. NJ TRANSIT shall have the right, but not the obligation, to participate, to the extent, it deems appropriate, in the defense of the matter and must concur in the terms of any settlement or other voluntary disposition of the matter. In the defense of any such claims, demands, suits, actions and proceedings, the Consultant shall not raise or introduce, without the express written permission in advance of the Office of the Attorney General of the State of New Jersey, any defense involving in any way the immunity of NJ TRANSIT or the State of New Jersey, the jurisdiction of the tribunal over NJ TRANSIT or the State of New Jersey, or the provisions of any statutes respecting suits against NJ TRANSIT or the State of New Jersey.

The Consultant is an independent professional firm contracting with NJ TRANSIT to provide specialized services. The Consultant, its officers, partners, employees, agents, and servants are not to be deemed employees, agents, extensions of staff or servants of NJ TRANSIT. The Consultant assumes full responsibility for liability arising out of its conduct and the conduct of its Subconsultants whether by action or inaction. NJ TRANSIT assumes no liability or responsibility for the acts of the Consultant, its officers, partners, employees, agents, or servants, by virtue of entering into this Agreement.

12. INSURANCE: The Consultant, and any of its contracting parties, shall carry and maintain, in its name as Insured, the following minimum insurance coverages:

a. Professional Liability Insurance of the type necessary to protect the Consultant from professional liability arising out of the negligent acts, errors or omissions of the Consultant, in connection with the performance of the Consultant's services pursuant to this Agreement. Said insurance shall be in an amount not less than \$5,000,000 for any one claim and annual aggregate with a deductible not to exceed \$50,000 for any one claim, unless approved otherwise by NJ TRANSIT. The Consultant agrees to maintain this coverage for six (6) years after completion of this Agreement including any amendments thereto. There shall be no exclusions in coverage for the insured's interest in a Joint Venture or Limited Liability Company or Limited Liability Partnership. There shall be no exclusions in coverage for pollution, mold or asbestos.

b. Commercial General liability Insurance using ISO Occurrence Form CG0001 10/93 or equivalent. The policy shall provide a minimum amount of \$10,000,000 each occurrence, \$10,000,000

personal and advertising injury, \$10,000,000 per project general aggregate, and \$10,000,000 products completed operations aggregate. Coverage provided under this liability policy shall be on an occurrence basis and shall include, but not be limited to, bodily injury and property damage coverage including products liability/completed operations coverage, premises operations liability, blanket contractual liability, personal injury liability, advertising injury coverage, independent contractors liability, mobile equipment, damage from explosion, collapse and underground hazards, and cross liability and severability of interests clause. Additional insured endorsement CG2026 11/85, together with ISO Form CG 20 10 10 01, and CG 20 37 10 01 or functional equivalents (but only if modified to include both ongoing and completed operations and written on a broad form) naming NJ TRANSIT and the State of New Jersey and the Indemnified Parties and coverage must apply on a primary and non-contributory basis. The policies shall contain a waiver of subrogation in the benefit of the Indemnified Parties. There shall be no coverage exceptions for property containing or adjacent to railroad facilities or other transportation facilities, and to provide the policy endorsement evidencing the contractual exclusion related to construction activities, or any access whatsoever, within fifty (50) feet of the railroad has been deleted. Coverage shall be required and maintained in force for a minimum of six (6) years following acceptance of the overall Contract, regardless of any beneficial occupancy by NJ TRANSIT during the Contract term.

c. Commercial Automobile Liability Insurance applicable to all owned, non-owned, hired or leased vehicle with a minimum of \$5,000,000 combined single limit for bodily injury and property damage. With respect to said insurance, NJ TRANSIT and the Indemnified Parties shall be named as an additional insured at no additional cost to NJ TRANSIT.

d. Workers' Compensation Insurance in compliance with the laws of the state where the work is to be performed and Employer Liability Insurance as follows: Employer's Liability: \$1,000,000 each accident / \$1,000,000 each employee disease / \$1,000,000 policy limit – disease. In the event the Consultant, its Members, or its Contracting parties, if any, are considered a railroad, Employers Liability coverage shall be extended to cover the Federal Employers Liability Act with a limit of not less than \$10,000,000 each accident, illness or occurrence.

e. Security and Privacy Liability (Cyber) insurance with a limit of not less than \$5,000,000 per any one claim covering actual or alleged acts, errors, or omissions committed by Consultant, its agents, employees or any other person or entity that have access to NJ TRANSIT's online systems. The policy shall also extend to include the intentional, fraudulent, or criminal acts of Consultant, its agents, or employees and all other persons or entities. The policy shall expressly provide, but not be limited to, coverage for the following perils: (i) unauthorized use of and/or access to Company Systems, Consultant's computer system or any other system in which Consultant has stored Company Data; (ii) defense of any regulatory action involving a Security Incident; (iii) failure to protect Confidential Information from disclosure; and (iv) Notification Related Costs, whether or not required by statute. If the policy is subject to an aggregate limit, the aggregate limit shall be per project or per location where Work is performed. The policy required to be maintained by Consultant shall include coverage for legal fees; notifications; investigation/forensic and restoration costs; crisis management/public relations; credit monitoring/identity protection services; call center expenses; network interruption and extra expense/business interruption; and cyber threat extortion costs. The insurers shall waive the right to subrogate against the Indemnified Parties.

f. The Consultant agrees to carry, and shall require its assignees and Subconsultants, if any, to carry, Contractor's pollution liability insurance covering the liability arising out of any sudden and/or non-sudden pollution or impairment of the environment, including clean-up and disposal costs and defense that arise from the operation of Consultant or its Subconsultants. Coverage under this policy shall have limits of liability with a minimum of \$5,000,000 per occurrence.

g. The Consultant agrees to carry, and shall require its assignees and Subconsultants, if any, to carry, Contractor's pollution liability insurance covering the liability arising out of any sudden and/or non-sudden pollution or impairment of the environment, including clean-up costs and defense that arise from the operation of Consultant or its Subconsultants. Coverage under this policy shall have limits of liability with a minimum of \$5,000,000 per occurrence. This policy shall name NJ TRANSIT and the indemnified parties as additional insured at no cost to NJ TRANSIT.

h. The Consultant, its assignees or its Subconsultants, if any, (or whoever is performing environmental removal or remediation work) must procure and maintain through the term of the Agreement Environmental Impairment Liability Insurance, including lead abatement if required, and removal operations in an amount of \$5,000,000 per occurrence and \$5,000,000 aggregate.

i. In the event the Consultant, its assignees or its Subconsultants, if any, will be transporting and/or disposing of any hazardous material or waste off the jobsite under this Agreement shall be required to carry Hazardous Waste Haulers Insurance (MCS90) in an amount of \$5,000,000 per occurrence or statutory minimum, whichever is greater. This policy shall name NJ TRANSIT and the Indemnified Parties as additional insured at no cost to NJ TRANSIT.

Should it be required, NJ TRANSIT will provide Railroad Protective Liability Insurance coverage for this Agreement.

All insurance policies shall be written on an occurrence form basis, and shall not include any exclusions for "actions over claims" (insured vs. insured). All policies must be written by insurance companies authorized to do business in New Jersey with an A.M. Best and Company rating of "A-" or better (or equivalent rating). All policies shall contain an endorsement that if the policy is canceled, non-renewed or is subject to any material reduction in limits, the Insurer will provide written notice to NJ TRANSIT at least thirty (30) Calendar Days prior to the occurrence of such event in accordance with Article 35, NOTIFICATION with a copy to NJ TRANSIT's Senior Director of Risk Management as follows:

NJ TRANSIT
One Penn Plaza East
Newark, New Jersey 07105-2246
Attn: Senior Director, Risk Management

The foregoing insurance coverage is not intended to nor does it limit the liability of the Consultant to hold the Indemnified Parties harmless. All the insurance policies required to be maintained hereunder shall be primary and non-contributory and any insurance or self-insurance maintain by NJ TRANSIT or any of the Indemnified Parties shall not contribute to any loss. Further, any self-insurance retention shall be evidenced and approved by NJ TRANSIT. If approved, such self-insured retention

and/or deductible maintained by Consultant, or its contracting parties, shall cover any liability imposed upon the Consultant and its Affiliates with respect to the operations and obligations assumed by the Consultant. The Consultant represent that such deductible or retentions provide NJ TRANSIT and the Indemnified Parties with all rights and protections that would be provided by traditional independent insurance, including but not limited, defense obligations that insurers are required to undertake under liability policies pursuant to the terms of this Agreement. If the Consultant carries higher limits than those required hereunder, or other coverages, those shall be made available to pay claims and provide defense.

The Consultant shall provide NJ TRANSIT with evidence of the Consultant's insurance. Said insurance shall be maintained in full force and effect by the Consultant, Subconsultant and assignee, if any, from the effective date of this Agreement until completion of and final payment for the Scope of Services. If the Consultant (Subconsultant or assignee) shall fail or refuse to renew its insurance, as necessary, NJ TRANSIT may cancel or refuse to make payment of any further monies due under this Agreement. In lieu of requiring its assignees or Subconsultants to carry this coverage, the Consultant may elect to cover them under its policies of insurance.

If the Consultant, its assignees or any Subconsultant is required to perform work on property or facilities owned by a third party, the Consultant, its assignees or any Subconsultant will be required to satisfy the insurance requirements set forth by the third-party property owner. NJ TRANSIT reserves the right to increase the limits of insurances or require additional coverages.

13. AUDIT AND INSPECTION OF RECORDS: The Consultant shall retain all records and permit the authorized representatives of NJ TRANSIT, the State of New Jersey, the US Department of Transportation (USDOT), the Federal Transit Administration (FTA) and the Comptroller of the United States and their duly authorized representatives, such as Project Management Oversight (PMO), Integrity Oversight Monitors (IOM) etc., to inspect and audit all financial data, operational data and other records of the Consultant including but not limited to disclosure forms, payment requests, change orders, invoices, certified payrolls, manifests, etc. related to products, transactions or services provided under this Agreement including the performance of its Subconsultants from the Advertisement of Request for Proposal and for five (5) years after final payment under this Agreement has been made.

NJ TRANSIT, the State of New Jersey, the USDOT, the FTA and the Comptroller General of the United States and their duly authorized representatives also shall have the right to inspect all services hereunder and specifically reserves the right to conduct on-site visits and perform financial audits and operational reviews. Any inspection, audit or review or lack thereof shall not relieve the Consultant of responsibility for satisfactory performance of the Scope of Services. Consultant shall maintain a true and correct set of Records for all financial and operational data in sufficient detail to permit reasonable verification or correction of charges and performance in accordance with this Agreement from the date of Advertisement of this RFP and for five (5) years after final payment under this Agreement has been made.

Any such audit shall be conducted at Consultant's principal place of business during Consultant's normal business hours and at NJ TRANSIT's expense, provided all costs incurred by NJ TRANSIT in conducting any such audit shall be reimbursed by Consultant in the event such audit reveals an aggregate discrepancy in any invoice or cumulative invoice not previously audited by NJ TRANSIT of more than two percent (2%) of the final total costs and fees for the period under audit as determined by NJ TRANSIT.

The Consultant further agrees to include in all its subcontracts hereunder a provision requiring the Subconsultant to keep all Contract records and that NJ TRANSIT, the State of New Jersey, the USDOT, the FTA and the Comptroller General of the United States or any of their duly authorized representatives, such as PMO, IOM, etc. shall, until the expiration of five (5) years after final payment under the subcontract, have access to and the right to examine pertinent books, documents, papers and records of such subcontract, involving transactions related to the Subconsultant. The term "Subconsultant" as used in this clause excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

Documents of every nature prepared pursuant to this Agreement shall be available to and become the property of NJ TRANSIT, and basic notes and other pertinent data shall be made available to NJ TRANSIT upon request without restriction as to their future use. Such documents shall be provided or made available within thirty (30) Calendar Days of NJ TRANSIT's request.

Pursuant to N.J.S.A. 52:15C-14(d) and N.J.A.C. 17:44-2.2, the Consultant shall retain all documentation related to products, transactions or services under this Contract for a period of five (5) years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

The periods of access and examination described above, for Records which relate to: (1) appeals under Article 38, DISPUTES; (2) litigation or the settlement of claims arising out of the performance of this Agreement; or (3) costs and expenses of this Agreement as to which exception has been taken by NJ TRANSIT, State of New Jersey, the Office of the State Comptroller, USDOT, FTA or any of their authorized representatives, shall continue until such appeals, litigation, claims, or exceptions have been disposed of.

14. SUSPENSION OF WORK: NJ TRANSIT may, for any reason, issue a stop order directing the Consultant to suspend work under the Contract for a specific time. The Consultant shall be paid for goods ordered, goods delivered, or services requested and performed until the effective date of the stop order. The Consultant shall resume work upon the date specified in the stop order, or upon such other date as the Contracting Officer or his or her designee, may thereafter direct in writing. The period of suspension shall be deemed added to the Consultant's approved schedule of performance. The Contracting Officer or his or her designee shall make an equitable adjustment, if any is required, to the Contract price. The Consultant shall provide whatever information that the Contracting Officer or his or her designee may require related to the equitable adjustment.

15. TERMINATION OF THE AGREEMENT FOR CONVENIENCE: NJ TRANSIT may terminate the Consultant's services in whole or in part for any reason at any time before completion. In that event, the Consultant will be given written notice by the Contracting Officer of such termination specifying the effective date thereof. Compensation will be paid to the Consultant pursuant to the terms of Article 2, COMPENSATION for the work actually performed prior to such date. All documents begun or completed by the Consultant pursuant to this Agreement shall become the property of NJ TRANSIT. After receipt of such written notice, the Consultant shall not incur any new obligations without the prior written approval of the Contracting Officer and shall cancel as many outstanding obligations so related as possible.

NJ TRANSIT will evaluate each obligation deemed non-cancellable by the Consultant in order to determine its eligibility for inclusion in compensable costs. No damages of any nature shall be claimed against NJ TRANSIT in the event it exercises this right of termination.

16. TERMINATION OF THE AGREEMENT FOR CAUSE: NJ TRANSIT may terminate this Agreement in whole or in part at any time if the Consultant has materially failed to comply with terms of the Agreement. In the event of such failure, NJ TRANSIT will promptly give written notification to the Consultant of its intent to terminate and the reasons therefor. The Consultant shall have ten (10) Calendar Days, or such additional time as NJ TRANSIT may grant, after receipt of notice to cure its failure. If the failure is not cured to the satisfaction of NJ TRANSIT, NJ TRANSIT may terminate this Agreement (in whole or in part) effective immediately.

After receipt of notice of termination, the Consultant shall not incur any new obligations without the approval of NJ TRANSIT and shall cancel as many outstanding obligations as possible. NJ TRANSIT will evaluate each obligation deemed non-cancelable by the Consultant in order to determine its eligibility for inclusion in compensable costs. Compensation shall be made for Scope of Services as set forth in **Exhibit A** (Scope of Services) pursuant to the terms of this Agreement for work actually performed, completed and approved by NJ TRANSIT prior to the date of termination.

If this Agreement or any part thereof is terminated for cause, NJ TRANSIT may procure services similar to those so terminated. The Consultant shall be liable to NJ TRANSIT for any reasonable excess costs incurred for such similar services.

The Consultant shall not claim any damages of any nature against NJ TRANSIT in the event NJ TRANSIT exercises this right of termination. The rights and remedies available to NJ TRANSIT in this Article shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

If, after notice of termination of this Agreement under the provisions of this Article, it is determined for any reason that the Consultant was not in default under the provisions of this Article, or that the default was excusable under the provisions of this Article, the rights and obligations of the parties shall

be the same as if the notice of termination had been issued pursuant to Article 15, TERMINATION FOR CONVENIENCE.

17. BUSINESS REGISTRATION NOTICE: Pursuant to N.J.S.A. 52:32-44, NJ TRANSIT ("Contracting Agency") is prohibited from entering into a contract with an entity unless the Proposer/Consultant and each Subcontractor/Subconsultant that is required by law to be named in a Proposal has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury. Prior to Contract award or authorization, the Consultant shall provide the Contracting Agency with its proof of Business Registration and that of any named Subcontractor(s)/Subconsultant(s).

Subcontractors/Subconsultants named in a Proposal shall provide proof of Business Registration to the Proposer, who in turn, shall provide it to the Contracting Agency prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

During the course of Contract performance:

(1) The Consultant shall not enter into a contract with a Subcontractor/Subconsultant unless the Subcontractor/Subconsultant first provides the Consultant with a valid proof of Business Registration.

(2) The Consultant shall maintain and submit to the Contracting Agency a list of Subcontractors/Subconsultants and their addresses that may be updated from time to time.

(3) The Consultant and any Subcontractor/Subconsultant providing goods or performing services under the Contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.shtml>.

Before final payment is made under the Contract, the Consultant shall submit to the Contracting Agency a complete and accurate list of all Subcontractors/Subconsultants used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a Business Registration as required, or that provides false Business Registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of Business Registration not properly provided under a contract with a contracting agency.

18. SOURCE DISCLOSURE:

A.) Under N.J.S.A. 52:34-13.2, all contracts primarily for services awarded by NJ TRANSIT shall be performed within the United States, except when the Contracting Officer certifies in writing a finding that a required service cannot be provided by a Consultant or Subconsultant within the United States and the certification is approved by the President and CEO (Executive Director) of NJ TRANSIT.

All Consultants seeking a contract primarily for services with NJ TRANSIT must disclose the location, by country, where services under the contract, including subcontracted services, will be performed.

If any of the services cannot be performed within the United States, the Consultant shall certify with specificity the reasons why the services cannot be so performed. NJ TRANSIT's Contracting Officer will determine whether sufficient justification has been provided by the Consultant to form the basis of his/her certification that the services cannot be performed in the United States and whether to seek the approval of the President and CEO (Executive Director).

B.) Breach of Contract for Shift of Services outside the United States

If, during the term of the Agreement, the Consultant or Subconsultant, who had on contract award certified that services would be performed in the United States, proceeds to shift the performance of the services outside the United States, the Consultant shall be deemed to be in breach of the Agreement, which shall be subject to termination for cause pursuant to Article 16, TERMINATION OF THE AGREEMENT FOR CAUSE, unless previously approved by NJ TRANSIT.

19. USE OF BRAND NAME PRODUCTS IN DESIGN: Consultants engaged to prepare specifications or to perform design work, or both, for NJ TRANSIT shall prepare such specifications to encourage full and open competition. A situation considered to be restrictive of competition involves specifying only a "brand name" product instead of allowing "an equal" product to be offered and listing the products' salient characteristics. Accordingly, Consultants engaged in preparing specifications or

performing design work for NJ TRANSIT are required to include the salient characteristics of a product when it is identified by "brand name" and allow for an equivalent. Consultants may define salient characteristics by using language similar to the following:

- A.) Original Equipment Manufacturer (OEM) part #123 or approved equal that complies with the original equipment manufacturer's requirements or specifications and will not compromise any OEM warranties'; or
- B.) 'Original Equipment Manufacturer part #123 or approved equal that is appropriate for use with and fits properly in [describe the bus, engine, or other].

20. PATENT RIGHTS AND RIGHTS IN DATA:

A.) Rights in Data

1.) The term "subject data" as used herein means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under this Agreement. The term includes graphic or pictorial delineations in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards; magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to, computer software, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term does not include financial reports, cost analyses, and similar information incidental to contract administration.

2.) All "subject data" first produced in the performance of this Agreement shall be the sole property of NJ TRANSIT. The Consultant agrees not to assert any rights at common law or equity and not to establish any claim to statutory copyright in such data. Except for its own internal use, the Consultant shall not publish or reproduce such data in whole or in part, or in any manner or form, nor authorize others to do so, without the written consent of NJ TRANSIT until such time as NJ TRANSIT may have released such data to the public.

3.) The Consultant agrees to grant and does hereby grant to NJ TRANSIT and to its officers, agents, and employees acting within the scope of their official duties, a royalty-free, nonexclusive, and irrevocable license throughout the world:

a.) To publish, translate, reproduce, deliver, perform, use, and dispose of, in any manner, any and all data not first produced or composed in the performance of this Agreement, but which is incorporated in the work furnished under this Agreement; and

b.) To authorize others so to do.

4.) The Consultant shall indemnify and save and hold harmless NJ TRANSIT, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Consultant of proprietary rights, copyrights, or rights of privacy, arising out of the publication, translation, reproduction, delivery, performance, use, or disposition of any data furnished under this Agreement.

5.) Nothing contained in this Article shall imply a license to NJ TRANSIT under any patent or be construed as affecting the scope of any license or other right otherwise granted to NJ TRANSIT under any patent.

6.) Paragraphs 3 and 4, above, are not applicable to material furnished to the Consultant by NJ TRANSIT and incorporated in the work furnished under the Agreement; provided that such incorporated material is identified by the Consultant at the time of delivery of such work.

7.) In the event that the project, which is the subject of this Agreement, is not completed, for any reason whatsoever, all data generated under this Agreement shall become subject data as defined in this clause and shall be delivered as NJ TRANSIT may direct.

B.) Patent Rights

1.) NJ TRANSIT shall own any patent or copyright to, and the right to patent or copyright, any plan, drawing, design, specification, report, software, study, survey, data, compositions of matter, manufactures, apparatus, appliances, processes of manufacture or types of construction or materials, regardless of medium (hereafter "Material") prepared by or for the Consultant, any Subconsultant, or by their respective consultants, agents, officers or employees in connection with

performance of the Scope of Services under this Agreement as set forth in **Exhibit A**. Consultant deems all Material produced pursuant to this Agreement as work-made-for-hire under the Federal Copyright Law, United States Copyright Act, 17 U.S.C. § 101, and, to the extent not so deemed, the copyright thereto is hereby assigned to the NJ TRANSIT. Upon completion of the services or the earlier termination of this Agreement, the Consultant shall deliver to NJ TRANSIT all such Material, including such documentation, certifications, and executed forms, assignments and agreements as may be necessary to enable the NJ TRANSIT to fully own, patent or copyright such Material.

2.) If the Material or portions of the Material may be patented or copyrighted by others or are subject to other protection from use or disclosure, then the Consultant must grant or secure for NJ TRANSIT, a royalty-free perpetual license to use the Material for any purpose, without additional compensation. NJ TRANSIT shall have the right to use or permit the use of Materials, and also any oral information received by NJ TRANSIT in connection with performance of the Scope of Services as set forth in **Exhibit A** and any ideas or methods represented by such Materials, for any purposes and at any time without additional compensation.

3.) Subject to the provisions set forth in this section, the Consultant shall defend and indemnify NJ TRANSIT against and save them harmless from all loss and expense incurred in the defense, settlement or satisfaction of any claims in the nature of infringement of any tangible or intangible property right including contract, patent, copyright, trademark or trade secret infringement or unfair competition arising out of or in connection with the use, in accordance with preceding paragraphs 1 and 2 of this Section, of such Materials or portions thereof which are patentable or which may be, or are, copyrighted or trademarked, or otherwise protected by law. If requested by the NJ TRANSIT and if notified promptly in writing of any claim as to which the Consultant shall indemnify NJ TRANSIT, the Consultant shall conduct all negotiations with respect to, and defend, such claim without expense to NJ TRANSIT or such affiliate or subsidiary. If NJ TRANSIT be enjoined from using the product of the Services or any portion thereof as to which the Consultant is to indemnify NJ TRANSIT against such claims, NJ TRANSIT may, at its option and without thereby limiting any other right it may have hereunder or at law or in equity, require the Consultant to provide at its own expense, equivalent substitutes for such product or affected portion thereof not subject

to such injunction and not infringing any patent, copyright, trademark trade secret or other protection from use or disclosure, and if the Consultant shall fail to do so, the Consultant shall, at its expense, refund the cost of the offending product or portion thereof to NJ TRANSIT or take such steps as may be necessary to ensure compliance by NJ TRANSIT with such injunction, to the satisfaction of NJ TRANSIT.

4.) If any invention, improvement, or discovery of the Consultant is conceived or first actually reduced to practice in the course of or under this Agreement, which invention, improvement or discovery may be patentable under the laws of the United States of America or any foreign country, the Consultant shall immediately notify NJ TRANSIT and provide a detailed report to FTA.

5.) The rights and responsibilities of NJ TRANSIT, the Consultant and the FTA with respect to such invention, improvement, or discovery will be determined in accordance with applicable Federal laws, regulations, policies and any waiver thereof.

21. PUBLICATION AND PUBLICITY: The Consultant, its Subconsultants, assignees, employees or agents shall not release or publish any information or material generated from this project to others outside of NJ TRANSIT without the express written permission of NJ TRANSIT except as specified in the Scope of Services.

22. EQUAL EMPLOYMENT OPPORTUNITY:

22.1 The Consultant hereby acknowledges that pursuant to N.J.A.C. 17:27-3.1, N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27 et seq. NJ TRANSIT cannot award a contract or pay money to any Consultant or Subconsultant which has not agreed and guaranteed to afford equal employment opportunity in performance of the contract in accordance with an affirmative action program and, except with respect to affectional or sexual orientation, approved under the terms established in N.J.A.C. 17:27. MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE FOR GOODS, GENERAL SERVICES, AND PROFESSIONAL SERVICES CONTRACTS (required by N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27)

During the performance of this Contract, the Consultant agrees as follows:

The Consultant or Subconsultant, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital

status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the Consultant will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity 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 Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The Consultant or Subconsultant, where applicable 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 age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The Consultant or Subconsultant will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the Contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The Consultant or Subconsultant, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The Consultant or Subconsultant agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The Consultant or Subconsultant agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex,

and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The Consultant or Subconsultant agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the Consultant or Subconsultant agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The Consultant shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three (3) documents:

- Letter of Federal Affirmative Action Plan Approval;
- Certificate of Employee Information Report; or
- Employee Information Report Form AA-302 (electronically provided by the Division and distributed to the public agency through the Division's website at: http://www.state.nj.us/treasury/contract_compliance).

The Consultant and its Subconsultant shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27.

22.2 Non-Discrimination: In accordance with the provisions of N.J.S.A. 10:2-1 the Consultant agrees that:

A.) In the hiring of persons for the performance of work under this Agreement or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this Agreement, no Consultant, nor any person acting on behalf of such Consultant or Subconsultant, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;

B.) No Consultant, Subconsultant, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this Agreement or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such Agreement, on account of age, race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, disability, nationality, or sex;

C.) There may be deducted from the amount payable to the Consultant by the contracting public agency, under this Agreement, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the Agreement; and

D.) This Agreement may be canceled or terminated by the contracting public agency and all money due or to become due hereunder may be forfeited, for any violation of this Article of the Agreement occurring after notice to the Consultant from the contracting public agency of any prior violation of this Article of the Consultant.

23. EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES: The Consultant and NJ TRANSIT agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. § 12101 et seq.), which prohibit discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated thereto, are made a part of this Agreement. In providing any aid, benefit, or service on behalf of NJ TRANSIT pursuant to this Agreement, the Consultant agrees that the performance

shall be in strict compliance with the Act. In the event that the Consultant, its agents, servants, employees, or Subconsultants violate or are alleged to have violated the Act during the performance of this Agreement, the Consultant shall defend NJ TRANSIT and the State of New Jersey in any action or administrative proceeding commenced pursuant to this Act. The Consultant shall indemnify, protect, and save harmless NJ TRANSIT and the State, their agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The Consultant shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the owner's grievance procedure, the Consultant agrees to abide by any decision of the owner which is rendered pursuant to such said grievance procedure. If any action or administrative proceeding results in an award of damages against NJ TRANSIT or the State or if NJ TRANSIT or the State incur any expense to cure a violation of the Act which has been brought pursuant to its grievance procedure, the Consultant shall satisfy and discharge the same at its own expense.

NJ TRANSIT shall, as soon as practicable after a claim has been made against it, give written notice thereof to the Consultant along with full and complete particulars of the claim. If any action or administrative proceeding is brought against NJ TRANSIT or any of its agents, servants, and employees, NJ TRANSIT will forward or have forwarded to the Consultant every demand, complaint, notice, summons, pleading, or other process received by it or its representatives.

It is expressly agreed and understood that any approval by NJ TRANSIT of the services provided by the Consultant pursuant to this Agreement will not relieve the Consultant of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless NJ TRANSIT pursuant to this paragraph.

The Consultant expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the Contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the Consultant from any liability, nor preclude NJ TRANSIT from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

24. DISADVANTAGED BUSINESS ENTERPRISES: As an aid in meeting the commitment of its Disadvantaged Business Enterprise Program, NJ TRANSIT has assigned a DBE goal on the gross sum amount of the bid or contract for DBE subcontracting participation. All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this contract. NJ TRANSIT's DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Contractors shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts. Failure by the Contractor to carry out these requirements shall constitute a breach of the Contract, which may result in the termination of the Contract or other such remedy, as NJ TRANSIT deems appropriate.

The term "disadvantaged business enterprise" means a for-profit small business concern that is owned and controlled by one or more socially and economically disadvantaged persons, as defined by 49 C.F.R. Part 26. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons would include, but not be limited to, Black Americans (not of Hispanic origin); Hispanic Americans; Native Americans; Asian-Pacific Americans; Subcontinent Asian Americans; and Women, regardless of race or ethnicity.

NJ TRANSIT's DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Consultants shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts. Failure by the Consultant to carry out these requirements shall constitute a breach of the Contract, which may result in the termination of the contract or other such remedy, as NJ TRANSIT deems appropriate.

Should the actual Contract amount increase or decrease, through approved change order(s), the Office of Business Development (OBD) must be informed. OBD will determine if this will result in an adjustment to DBE participation to reflect the assigned DBE goal.

The Consultant shall fully comply with the requirements and provisions set forth in the New Jersey Transit Corporation DBE Requirements for Federal Procurement Activities as set forth in **Exhibit D**

25. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAW:

A.) The Consultant shall comply with applicable laws, ordinances, and codes of the United States, the State of New Jersey and local governments within the State. If NJ TRANSIT determines that the Consultant has violated or failed to comply with applicable Federal, State or local laws with respect to its performance under this Agreement, NJ TRANSIT may withhold payments for such performance and take such other action that it deems appropriate under the circumstances until compliance or remedial action has been accomplished by the Consultant to the satisfaction of NJ TRANSIT.

B.) Incorporation of FTA Terms

This Professional Service Agreement includes, in part, certain standard terms and conditions required by USDOT, whether or not expressly set forth in this Agreement. All contractual provisions required by USDOT, as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Consultant shall not perform any act, fail to perform any act, or refuse to comply with any NJ TRANSIT requests which would cause NJ TRANSIT to be in violation of the FTA Master Agreement between NJ TRANSIT and the FTA.

C.) Changes to Federal Requirements

The Consultant shall at all times comply with all applicable FTA regulations, policies, procedures, and directives, including without limitation those listed directly or by reference in the Master Agreement between NJ TRANSIT and the FTA, as they may be amended or promulgated from time to time during the term of this Agreement. Consultant's failure to so comply shall constitute a material breach of this Agreement unless the FTA determines otherwise.

26. CONFLICT OF INTEREST: In the event that the Consultant deems that any work currently being performed by it on other projects or any work to be performed on future projects is in conflict directly or indirectly with this Agreement, the Consultant shall immediately so notify NJ TRANSIT. NJ TRANSIT, in its sole discretion, shall have the right to terminate this Agreement in accordance with Article 15, TERMINATION OF THE AGREEMENT FOR CONVENIENCE hereof. Consultant, its subsidiaries and affiliates, joint ventures involving the Consultant, and its employees, agents or

Subcontractors may be precluded from participating in any follow-up work based on the services provided under this Agreement. See FAR Subpart 9.507.

27. CONSULTANT'S EMPLOYEES: All personnel employed on this project and their daily rates shall first be approved in writing by NJ TRANSIT prior to assignment to this project and, in addition, any employee of the Consultant or its Subconsultants declared undesirable by NJ TRANSIT shall be relieved of any work under this Agreement by the Consultant.

The Consultant must receive NJ TRANSIT's prior written approval of any change in the project organization/manpower and Subconsultant project team approved for this project.

28. PROHIBITED INTEREST: No member, officer, or employee of NJ TRANSIT or its subsidiaries shall have any interest, direct or indirect, in this Agreement or the proceeds thereof. No former member, officer or employee of NJ TRANSIT or its subsidiaries who, during his tenure, had a direct, substantial involvement with matters that are closely related to this Agreement, shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.

29. INTERESTS OF MEMBERS OF OR DELEGATES TO CONGRESS: No member of or delegate to the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefit arising therefrom.

30. NJ TRANSIT CODE OF ETHICS FOR CONSULTANTS:

A.) General

1.) NJ TRANSIT considers the maintenance of public trust and confidence critical to its proper functioning. Consultants of NJ TRANSIT must avoid all situations where proprietary or financial interest, or the opportunity for financial gain, could lead to the favored treatment of any organization or individual. Consultants must also avoid circumstances and conduct which may not constitute actual wrongdoing, or conflict of interest, but might nevertheless constitute the appearance of questionable behavior to the general public, thus compromising the integrity of NJ TRANSIT.

2.) This policy is based upon the principles established in the New Jersey Conflicts of Interest Law (N.J.S.A. 52:13D-12 et seq.) and the regulations promulgated by the New Jersey State Ethics Commission thereunder, as well as the Plain Language Guide to Ethical Business Conduct for

Companies Transacting Business with the State of New Jersey, promulgated by the New Jersey Department of the Treasury.

3.) This Code of Ethics for Consultants shall be deemed to be a substantial and integral part of every NJ TRANSIT Invitation for Bid (IFB), Request for Proposal (RFP) and contract.

4.) This policy is intended to augment, not to replace, existing law, regulations, administrative orders and the current Uniform Ethics Code.

B.) NJ TRANSIT Code of Ethics for Consultants

1.) Gifts, Gratuities and Favors:

a.) A Consultant shall not, either directly or indirectly, pay, offer to pay, or agree to pay any amount of money, fee, commission, compensation, gift, gratuity or other thing of value of any kind to any NJ TRANSIT Board Member or employee or to any member of their immediate family, or to any partnership, firm or corporation with which any such Board Member or employee is employed or associated, or in which (s)he has an interest within the meaning of N.J.S.A. 52:13D-13(g).

b.) A Consultant shall not give or offer any NJ TRANSIT Board Member, employee or their immediate family any amount of money, gift, loan or other thing of value regardless of whether it might be reasonably inferred that such amount of money, gift, loan, service or other thing of value was given or offered for the purpose of influencing the Board Member or employee in the discharge of his or her official duties. In addition, Board Members, employees and their immediate family are not permitted to accept breakfasts, lunches, dinners, alcoholic beverages, tickets to entertainment and/or sporting events, wagers or other items or consideration. A Consultant may not "wine and dine" NJ TRANSIT Board Members, employees or their immediate family.

c.) NJ TRANSIT Board Members and employees may not accept any food or beverages from any Consultant with the exception of coffee, tea, soda, Danish, chips, pretzels, donuts or similar snacks, which may be provided to all attendees at a conference, seminar or business meeting. If food other than the above is provided (e.g., sandwich, pizza or a meal), the Board member or employee must pay the cost for the meal.

d.) Any questions as to what is or is not acceptable or what constitutes proper conduct for an NJ TRANSIT Board Member or employee, and any solicitation of gifts, consideration or items of value by or on behalf of a NJ TRANSIT Board Member or employee, should be referred to:

Chief Ethics Officer
NJ TRANSIT
One Penn Plaza East, 8th Floor
Newark, NJ 07105-2246
(973) 491-8820

2.) Solicitation by NJ TRANSIT Board Member or employee:

A Consultant shall immediately report in writing the solicitation of any fee, commission, compensation, gift, gratuity or other thing of value by a NJ TRANSIT Board Member or employee, to NJ TRANSIT's Chief Ethics Officer, the New Jersey Attorney General and the State Ethics Commission.

3.) Business, commercial or entrepreneurial relationship:

Whether or not pursuant to employment, contract or other agreement, expressed or implied, a Consultant shall not, directly or indirectly, undertake any private business, commercial or entrepreneurial relationship with, or sell any interest in such Consultant to any NJ TRANSIT Board Member or employee having any duties or responsibilities in connection with the purchase, acquisition or sale of any property or services by or to NJ TRANSIT or with any person, firm or entity with which (s)he is employed or associated or in which (s)he has an interest within the meaning of N.J.S.A. 52:13D-13g. Any relationships subject to this provision shall be reported in writing forthwith to NJ TRANSIT's Chief Ethics Officer.

4.) General Standards:

a.) A Consultant shall not influence, or attempt to influence or cause to be influenced, any NJ TRANSIT Board Member or employee in his/her official capacity in any manner which might tend to impair the objectivity or independence of judgment of any Board Member or employee.

b.) A Consultant shall not request, influence, or attempt to request, influence or cause to be requested or influenced, any NJ TRANSIT Board Member or employee to use, or attempt to use, his/her official position in any manner to secure unwarranted privilege or advantage for the Consultant or any other person.

5.) Protected/Confidential Information:

a.) A Consultant may not profit, directly or indirectly, from the use of any secret or confidential NJ TRANSIT information, knowledge or data that has been illicitly disclosed.

b.) Consultants and their employees may not use any secret or confidential NJ TRANSIT information, knowledge or data for any purposes other than complying with their contractual obligations to NJ TRANSIT.

6.) Intellectual Property:

A Consultant may not use NJ TRANSIT branding, logo or any promotional or marketing materials without prior written approval from the NJ TRANSIT Communications Department.

7.) Employment Offers:

a) Current State Employees/Future Employment: If a Consultant offers a job to a NJ TRANSIT employee, with whom they have direct and substantial contact, such offer or solicitation must be immediately disclosed to management and the Chief Ethics Officer. Please also note that NJ TRANSIT employees must secure prior approval for secondary employment. Depending on the consultant relationship with the employee, the consultant employment offer may be disapproved, and the NJ TRANSIT employee could be screened from taking any official action with respect to the particular consultant contracts, applications, or matters in the future.

b) Former State Employees: After leaving NJ TRANSIT, employees are under a lifetime ban against the use or provision of information not generally available to the public acquired during their employment. Additionally, former employees are prohibited from representing or assisting a Consultant concerning a particular contract or other matter if they were substantially and/or directly involved in that particular contract or other matter while employed by NJ TRANSIT.

8. Failure to Comply:

A Consultant's failure to comply with this policy may result in termination of the contract or debarment pursuant to N.J.A.C. 16:72-5.2. Additionally, violations of certain provisions of the Conflict of Interest Law are subject to a fine not to exceed \$1,000, or imprisonment not to exceed six months, or both.

C. CROSS-REFERENCES

New Jersey Uniform Ethics Code, available online at

<https://www.state.nj.us/ethics/docs/ethics/uniformcode.pdf>

New Jersey Conflicts of Interest Law and regulations adopted thereunder (N.J.A.C.

19:61-1.1 et seq.), available online at <https://www.state.nj.us/ethics/statutes/conflicts/> and

<https://www.state.nj.us/ethics/statutes/rules/>

Plain Language Guide to Ethical Business Conduct for Companies Transacting Business

with the State of New Jersey, available online at <https://nj.gov/ethics/docs/ethics/plainlanguage.pdf>

31. POLITICAL ACTIVITY PROHIBITED: None of the funds or services contributed by NJ TRANSIT or the Consultant under this Agreement shall be used for any partisan political activity, or to further the election or defeat of any candidate for public office.

32. CERTIFICATION AND POLITICAL CONTRIBUTION DISCLOSURE (P.L. 2005, C.271): The Consultant is advised of its responsibility to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to N.J.S.A. 19:44A-20.13 (P.L. 2005, c.271, section 3) if the Consultant receives contracts in excess of \$50,000 from a public entity in a calendar year. It is the Consultant's responsibility to determine if filing is necessary. Failure to so file can result in the imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at <http://www.elec.state.nj.us>.

33. NONSOLICITATION: The Consultant warrants that it has not retained any party other than a bona fide employee working for the Consultant to solicit this Agreement, and that it has not paid or agreed to pay any outside party consideration in any form contingent upon securing this Agreement. For breach of this warranty, NJ TRANSIT shall have the right to terminate this Agreement for cause.

34. MERGER AND SEVERABILITY: This Agreement embodies the entire agreement between the parties. If any provision herein is held invalid, it shall be considered deleted herefrom and shall not invalidate the remaining provisions hereof.

35. NOTIFICATION: Any request, demand, authorization, direction, notice, consent, waiver or other document provided or permitted by this Agreement to be made upon, given or furnished to, or filed with one party by another party shall be in writing and shall be delivered by hand or by deposit in the mails of the United States, postage paid, in an envelope addressed as follows:

If to NJ TRANSIT:

Chief of Procurement & Support Services
NJ TRANSIT
One Penn Plaza East
Newark, New Jersey 07105-2246
Attn: Procurement Officer

With a copy to:

NJ TRANSIT
One Penn Plaza East
Newark, New Jersey 07105-2246
Attn: Project Manager

If to the Consultant:

WSP USA, Inc.
Two Gateway Center, Suite 1000
Newark, NJ 07102
Attn: Project Manager

Either party to the Agreement may redesignate the recipient or change the address of the recipient of notifications hereunder by notifying the other party to this Agreement, in writing, of such change.

36. EQUAL PAY ACT: Pursuant to N.J.S.A. 34:11-56.14(a), any employer, regardless of the location of the employer, who enters into a contract with a public body to perform qualifying services to the public body shall provide a report to the Commissioner of the New Jersey Department of Labor and Workforce Development, in a form promulgated by the Commissioner, of information regarding the compensation and hours worked by employees categorized by gender, race, ethnicity and job category.

Information regarding the Diane B. Allen Equal Pay Act and its requirements may be obtained from the New Jersey Department of Labor and Workforce Development (LWD) web site at:
<https://nj.gov/labor/equalpay/equalpay.html>

LWD forms may be obtained from the online web site at:
[https://nj.gov/labor/forms_pdfs/equalpayact/mw563\(6-18\)annualequalpay.pdf](https://nj.gov/labor/forms_pdfs/equalpayact/mw563(6-18)annualequalpay.pdf)

37. **SOVEREIGN IMMUNITY:** NJ TRANSIT in entering into this Contract does not waive its sovereign immunity except as provided in the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1 et seq. The terms and conditions of the Contract are not intended to, and shall not be deemed to, expand the waiver of sovereign immunity as set forth in the Act.

38. **DISPUTES:** Disputes regarding whether a party has failed to make payments will first be submitted for resolution between the parties. If the parties are unable to reach an agreement, the dispute may be submitted to a process of alternative dispute resolution. Disputes arising in the performance of this Agreement which are not resolved by agreement of the parties will be decided in writing by the authorized representative of the Contracting Officer. This decision of the Contracting Officer's authorized representative shall be final and conclusive unless, within ten (10) Calendar Days from the date of receipt of its copy, the Consultant mails or otherwise furnishes a written appeal to the Contracting Officer. In connection with any such appeal, the Consultant shall be afforded an opportunity to be heard and to offer evidence in support of its position. Pending a final decision of a dispute hereunder by the Contracting Officer after a timely appeal, the Consultant shall proceed diligently with performance of the Contract in accordance with the decision of the authorized representative of the Contracting Officer.

39. **LIMITATIONS OF LIABILITY:** In no event, whether under the provisions of this Contract, as a result of breach of contract, tort (including negligence) or otherwise, shall NJ TRANSIT, the State, or USDOT, be liable to the Consultant for special, consequential, incidental or penal damages including, but not limited to, loss of profit or revenues, loss of rental value for Contractor owned equipment, damages to associated equipment, additional risk, cost of capital or interest of any nature (whether characterized as damages for the retention of money, an increase in the cost of performance, a penalty, or otherwise).

40. **NO THIRD PARTY BENEFICIARIES:** It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of any part of the Contract to create the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

It is the further intent of NJ TRANSIT and the Consultant in executing this Contract that no individual, firm, corporation or any combination thereof, which supplies materials, labor, services or equipment to the Consultant for the performance of the Scope of Services becomes thereby a third party beneficiary of this Contract. NJ TRANSIT and the Consultant understand that such individual, firm, corporation or combination thereof, has no right to bring an action in the courts of this State against the State or NJ TRANSIT, by virtue of this lack of standing and also by virtue of the provisions of the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1 et seq.

41. PERSONAL LIABILITY OF PUBLIC OFFICIALS: In carrying out the provisions of the Contract, or in exercising power or authority granted to them by or within the scope of the Contract, there shall be no liability upon any NJ TRANSIT employee, either personally or as officials of the State, it being understood that in all such matters they act solely as agents and representatives of the State.

42. OUT OF STATE CORPORATIONS: If the Consultant is a corporation organized under laws of a state other than New Jersey, the Consultant shall have a certificate of authority to do business in New Jersey in accordance with N.J.S.A. 14A:13-3. In addition, pursuant to N.J.S.A. 14A:4-1 et seq., the Consultant shall maintain a registered office in New Jersey, have a registered agent with a business office in New Jersey and shall file with the Secretary of State the name of said agent and address of said office and provide a copy thereof to NJ TRANSIT.

Inquiries should be directed to:

State of New Jersey
Department of State
Division of Commercial Recording
CN-308
Trenton, New Jersey 08625
www.state.nj.us/njbgs

43. SUCCESSORS: This Agreement shall bind the heirs, representatives, successors, and assignees of the Consultant.

44. GOVERNING LAW: The Agreement shall be governed by and interpreted pursuant to the laws of the State of New Jersey.

45. QUALITY ASSURANCE PLAN: The Consultant shall perform all work consistent with the professional skill and care provided by practitioners of the same discipline under similar circumstances and conditions. The Consultant shall establish and maintain a Quality Assurance Plan, subject to NJ TRANSIT's approval, setting forth the Consultant's policy for quality assurance and procedures for implementing that policy. Such plan must apply to all persons engaged in work under this Agreement, include regular and written procedures for performance of all Project activities, and provide sufficient information to senior managers to enable effective supervision of the Project. The procedures shall provide for sufficient documentation to allow review and audit by NJ TRANSIT, and NJ TRANSIT may, in its discretion, review the Consultant's implementation of the procedures.

46. PROJECT SUPERVISION: If engineering, design, architectural or surveying services are provided under this Agreement, the Consultant shall assign an engineer or architect authorized to practice in the State of New Jersey to supervise the Scope of Services. The design and engineering services for this project shall be performed and/or approved by a Professional Engineer or Registered Architect licensed to practice in the State of New Jersey.

The Consultant shall exercise all due care in its preparation of documents for construction to ensure that they conform to all applicable legal and other requirements in effect at the time of issuance of the Contract documents. The approval of plans and specifications which have been submitted to NJ TRANSIT by the Consultant is not to be construed as authority to violate, cancel or set aside any provisions of such requirements or this Agreement. Nothing contained in this Agreement is intended to relieve the Consultant of responsibility for maintaining adequate supervision over the design in order to guard against deficiencies in the design work.

The Consultant shall be liable to NJ TRANSIT for any reasonable costs incurred by NJ TRANSIT to correct, modify or redesign any drawings submitted by the Consultant that are found to be defective or not in accordance with the provisions of this Agreement as a result of any act, error or omission on the part of the Consultant, or its agents, servants or employees. The Consultant shall be given reasonable opportunity to correct any deficiencies at no additional cost to NJ TRANSIT.

The Consultant shall also be liable to NJ TRANSIT for any reasonable costs incurred to correct, modify or reconstruct contractor work which was done based on any drawings submitted by the Consultant that are found to be defective or not in accordance with the provisions of this Agreement as a result of any act, error or omission on the part of the Consultant, or its agents, servants or employees. The Consultant shall be given reasonable opportunity to correct any deficiencies at no additional cost to NJ TRANSIT.

47. HISTORIC PRESERVATION: The Consultant shall submit to NJ TRANSIT, pursuant to this Agreement, a final design which meets the "Standards for Rehabilitation" established and published by the United States Department of the Interior at 36 C.F.R. Part 67, which standards are applied by the Commissioner of Environmental Protection in the statutory review, required by N.J.S.A. 13:1B-15.131, of projects which will encroach upon a site included in the New Jersey Register of Historic Places. In the event that the final design for the Project is submitted for review pursuant to N.J.S.A. 13:1B-15.131 and is not approved or is approved with conditions by the Commissioner of Environmental Protection, for reasons that the final design does not meet said standards, the Consultant shall correct or modify said design immediately upon notification of non-approval, or shall reimburse NJ TRANSIT for any reasonable costs incurred by NJ TRANSIT to correct or modify the design, so that it may be approved by the Commissioner of Environmental Protection.

48. FALSE OR FRAUDULENT STATEMENTS AND CLAIMS:

A.) The Consultant recognizes that the requirements of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and USDOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to the project. Accordingly, by signing the Agreement, the Consultant certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, or it may make pertaining to the Agreement. In addition to other penalties that may be applicable, the Consultant also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986, as amended, on the Consultant to the extent the Federal Government deems appropriate.

B.) The Consultant also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government in connection with an urbanized area formula project financed with Federal assistance authorized by 49 U.S.C. § 5307, the Government reserves the right to impose on the Consultant the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1), to the extent the Federal Government deems appropriate.

49. NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES: The Consultant agrees that absent the Federal Government's express written consent, the Federal Government shall not be subject to any obligations or liabilities to any sub-recipient, any third-party contractor, or any other person not a party to the Contract in connection with the performance of the project. Notwithstanding any concurrence provided by the Federal Government in the approval of any solicitation, sub-agreement, or third party contract, the Federal Government continues to have no obligations or liabilities to any party, including the sub-recipient and third party contractor.

50. EXCLUSIONARY OR DISCRIMINATORY SPECIFICATIONS: Apart from inconsistent requirements imposed by Federal statute or regulations, the Consultant agrees that it will comply with the requirements of 49 U.S.C. § 5323(h)(3) by refraining from using any Federal assistance awarded by FTA to support procurements using exclusionary or discriminatory specifications.

51. CLEAN WATER AND CLEAN AIR ACTS:

51.1 The Consultant agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.:

A.) With the notification of violating facilities provisions of Executive Order No. 11738; "Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans", 42 U.S.C. § 7606. The Consultant agrees to report each violation to NJ TRANSIT and understands and agrees that NJ TRANSIT will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

B.) With the provisions of the Safe Drinking Water Act of 1974, as amended, 42 U.S.C. § 300h et seq.

51.2 The Consultant agrees to comply with all applicable, standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. The Consultant agrees to report each violation to NJ TRANSIT and understands and agrees that NJ TRANSIT will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

51.3 The Consultant agrees to include both the Clean Water and Clean Air requirements in each subcontract exceeding \$100,000. The \$100,000 limit includes indefinite quantities where the amount is expected to exceed \$100,000 in any year.

52. ENERGY CONSERVATION: The Consultant shall comply with mandatory standards and policies relating to energy efficiency contained in applicable State of New Jersey Energy Conservation Plans issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6321 et seq.).

53. CIVIL RIGHTS: During the performance of this Contract, the Consultant, for itself, its assignees and successors in interest and its Subconsultant at every tier (hereinafter referred to as the "Consultant") agrees as follows:

A.) Compliance with Regulations

The Consultant shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the United States Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.

B.) Nondiscrimination

In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, and N.J.S.A. 10:3-1, the Consultant agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, age, or disability. In addition, the Consultant agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

C.) Equal Employment Opportunity

The following equal employment opportunity requirements apply to the underlying contract:

1.) Race, Color, Religion, National Origin, Sex

In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Consultant agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect activities undertaken in the course of the Project. The Consultant agrees to take affirmative action to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, sex, sexual orientation, gender identity, or age. 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. In addition, the Consultant agrees to comply with any implementing requirements FTA may issue.

2.) Age

In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332 and N.J.S.A. 10:5-12(a), the Consultant agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Consultant agrees to comply with any implementing requirements FTA may issue.

3.) Disabilities

In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Consultant agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans

with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Consultant agrees to comply with N.J.S.A. 10:5-29.1 and any implementing requirements FTA may issue.

D.) The Consultant also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary, to identify the affected parties.

E.) Information and Reports

The Consultant shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or NJ TRANSIT or the FTA to be pertinent to ascertain compliance with such Regulations, orders and instruction. Where any information is required or a Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to NJ TRANSIT, or the FTA, as appropriate, and shall set forth what efforts it has made to obtain the information.

F.) Sanctions for Noncompliance

In the event of the Consultant's noncompliance with the nondiscrimination provisions of this Contract, NJ TRANSIT shall impose such contract sanctions as it or the FTA may determine to be appropriate, including but not limited to:

1.) Withholding of payments to the Consultant under the Contract until the Consultant complies; and/or

2.) Cancellation, termination or suspension of the Contract, in whole or in part.

54. CONTRACT WORK HOURS AND SAFETY STANDARDS: During the performance of this Agreement, the Consultant, for itself, its assignees and successors in interest (hereinafter referred to as the "Consultant") agrees as follows:

A.) Overtime Requirements: No Consultant or Subconsultant contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work-week in which he or she is employed on such work to

work in excess of forty (40) hours in such work-week unless such laborer or mechanic receives compensation at rate not less than one and one-half (1 ½) times the basic rate of pay for all hours worked in excess of forty (40) hours in such work-week, whichever is greater.

B.) Violation; Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in subparagraph (b)(1) of 29 C.F.R. Section 5.5, the Consultant and any Subconsultant responsible therefore shall be liable for the unpaid wages. In addition, such Consultant and Subconsultant shall be liable to the United States (in case the work done under contract for the District of Columbia or a territory, to such district or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (b)(1) of 29 C.F.R. Section 5.5 in the sum of \$25 for each calendar day on which such individual was required or permitted to work in excess of eight (8) hours or in excess of the standard work-week of forty (40) hours without payment of the overtime wages required by the clause set forth in subparagraph (b)(1) of 29 C.F.R. Section 5.5.

C.) Withholding for Unpaid Wages and Liquidated Damages: NJ TRANSIT shall upon its own action or upon written request of an authorized representative of the U.S. Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Consultant or Subconsultant under any such contract or any other Federal contract with the same prime Consultant, or any other Federally-assigned contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Consultant, such sums as may be determined to be necessary to satisfy any liabilities of such Consultant or Subconsultant for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (B)(2) of 29 C.F.R. Section 5.5.

D.) Nonconstruction Grants: The Consultant or Subconsultant shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of five (5) years from the completion of the Agreement for all laborers and mechanics, including guards and watchmen, working on the Agreement. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. These records shall be made available

by the Consultant or Subconsultant for inspection, copying, or transcription by authorized representatives of NJ TRANSIT, the FTA and the Department of Labor, and the Consultant or Subconsultant will permit such representatives to interview employees during working hours on the job.

E.) Subcontracts: The Consultant or Subconsultant shall insert in any subcontracts the clauses set forth in Paragraphs A through E of this Section and also a clause requiring the Subconsultants to include these clauses in any lower-tier subcontracts. The prime Consultant shall be responsible for compliance by any Subconsultant or lower-tier Subconsultant with the clauses set forth in Paragraphs A through E of this Section.

55. CERTIFICATIONS REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTION: By signing this agreement, the lower tier participant, defined as the Consultant and its Subconsultants, is providing the certification set out below.

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

The lower tier participant shall provide immediate written notice to NJ TRANSIT if at any time the lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

Certain terms used in this clause have the meanings set out in 2 C.F.R. Part 1200 and 2 C.F.R. Part 180.

The lower-tier participant agrees by signing this agreement that it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized in writing by NJ TRANSIT.

The lower-tier participant further agrees by signing this agreement that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion –

Lower-Tier Covered Transaction", without modification, in all lower tier covered transactions (valued at \$25,000 or more) and in all solicitations for lower tier covered transactions.

A participant in a covered transaction may rely upon a certification of a participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. Each participant shall check the U.S. Government System for Award Management (SAM) database.

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

Except for transactions authorized under the fifth paragraph above, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, NJ TRANSIT may pursue available remedies including suspension and/or debarment.

The lower tier participant certifies by signing this agreement that neither it nor its "principals" (as defined 2 C.F.R. § 180.995) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. A participant may decide the method and frequency by which it determines the eligibility of its principals.

When the lower tier participant is unable to certify to the statements in this certification, such participant shall submit a written explanation.

The lower tier participant shall also be currently registered and active with no exclusion on the U.S. Government System for Award Management (SAM) database.

56. LIMITATIONS ON LOBBYING: The Consultant and its Subconsultants shall comply with 31 U.S.C. § 1352, entitled "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions".

A.) No appropriated funds may be expended by the recipient of a Federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

B.) Any Consultant and any Subconsultant at any tier who requests or receives a Federally-assisted contract or subcontract in excess of \$100,000 from NJ TRANSIT shall file with NJ TRANSIT the certification attached to this Agreement and entitled "Certification for Contracts, Grants, Loans and Cooperative Agreements" which certifies that the Consultant or Subconsultant, as applicable, has not made, and will not make, any payment prohibited by paragraph A.) of this Section.

C.) Any Consultant and any Subconsultant who has made or has agreed to make any payment using non-appropriated funds (to include profits from any covered Federal action) which would be prohibited under paragraph A.) of this Section if paid for with appropriated funds, shall file with NJ TRANSIT a disclosure form entitled "Disclosure of Lobbying Activities", which is available from NJ TRANSIT.

D.) Any certification or disclosure form filed under paragraphs B.) and C.) of this Section shall be forwarded from tier to tier until received by NJ TRANSIT. Any certification or disclosure form shall be treated as a material representation of fact upon which all receiving tiers shall rely. All liability arising from an erroneous representation shall be borne solely by the tier filing that representation and shall not be shared by any tier to which the erroneous representation is forwarded.

E.) The prohibition on the use of appropriated funds does not apply in the case of a payment of reasonable compensation to an officer or employee of the Consultant or Subconsultant if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

F.) The prohibition on the use of appropriated funds does not apply in the case of any reasonable payment to an officer or employee of a Consultant or Subconsultant or to a person, other than an officer or employee of a Consultant or Subconsultant, if the payment is for professional or technical

services rendered directly in the preparation, submission or negotiation of any bid, proposal or application for a Federal contract, grant, loan or cooperative agreement.

57. BUY AMERICA DESIGN REQUIREMENTS AND BUY AMERICA

PREFERENCE:

(a) Buy America Design Requirements

The Consultant shall design the Project to ensure that the plans and specifications produced by the Consultant under this Agreement permit compliance with Section 165 of the Surface Transportation Assistance Act of 1982 (P.L. 97-424). All iron, steel and manufactured products specified by the Consultant shall be of domestic manufacture or origin, except as otherwise approved by NJ TRANSIT. Whenever the Consultant lists a product by make, manufacturer or model number in the specifications, the Consultant shall first ensure that the product is of domestic manufacture or origin. Should the Consultant find it necessary to specify iron, steel, or manufactured products which are not produced in the United States in sufficient and reasonably available quantities, then the Consultant shall submit a written justification to the Contracting Officer describing in detail the product, its estimated cost, the rationale for its use in the project and the basis for the Consultant's belief that the product is of limited domestic availability. NJ TRANSIT, in its sole discretion, will determine whether to seek a waiver of the Buy America requirements from the U.S. Secretary of Transportation. Should NJ TRANSIT determine that there is insufficient basis for seeking a waiver or if a waiver request is denied by USDOT, the Consultant shall redesign the project to conform with Buy America requirements at no additional cost to NJ TRANSIT.

(b) Domestic Preferences for Procurement

In accordance with 2 C.F.R. 200.322, the Contractor is advised of NJ TRANSIT's preference, to the greatest extent practicable, for the purchase, acquisition, or use of goods, products, or materials, produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products).

(1) For purposes of this section:

- i. "Produced in the United States" means, for iron and steel products, that all

manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

ii “Manufactured products” means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

58. FLY AMERICA REQUIREMENTS: The Consultant agrees to comply with 49 U.S.C. § 40118 (the “Fly America” Act) in accordance with the General Services Administration’s regulations at 41 C.F.R. Part 301-10, which provide that recipients and sub-recipients of Federal funds and their Consultants are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Consultant shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Consultant agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

59. FEDERAL PROVISIONS RELATED TO CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT:

(a) Definitions.

As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy, #405-143-1 Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services.

(b) Prohibitions.

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13,

2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant funds to: (i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Exceptions.

(1) This clause does not prohibit contractors from providing— a. A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or b. Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

a. Covered telecommunications equipment or services that:

- i. Are not used as a substantial or essential component of any system; and
- ii. Are not used as critical technology of any system.

b. Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) Reporting requirement.

(1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any

other source, the contractor shall report the information in paragraph (d)(2) of this clause to NJ TRANSIT, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one (1) business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within ten (10) business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts.

The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

60. SEISMIC SAFETY: The Consultant agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 C.F.R. Part 41 and will certify to compliance to the extent required by the regulation. The Consultant also agrees to ensure that all work performed under this Contract including work performed by a Subconsultant is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

61. SETTING OFF TAX ARREARS AGAINST SUMS OWED: Whenever a taxpayer under contract with the State of New Jersey is indebted for any State Tax in accordance with N.J.S.A. 54:49-19, the State of New Jersey shall seek to set off the indebtedness as follows:

Whenever any taxpayer under contract to provide goods or services to the State of New Jersey or its agencies or instrumentalities, and including the legislative and judicial branches of State government, or under contract for construction projects of the State of New Jersey or its agencies or instrumentalities, and including the legislative and judicial branches of State government, is entitled to payment for the goods or services or on that construction project and at the same time the taxpayer is indebted for any State tax, the Director of the Division of Taxation shall seek to set off so much of that payment as may be necessary to satisfy the indebtedness. The Director, in consultation with the Director of the Division of Budget and Accounting in the Department of the Treasury, shall establish procedures and methods to effect a set-off. The Director shall give notice of the set-off to the taxpayer, the provider of goods or services or the Contractor or Subcontractor of construction projects and provide an opportunity for a hearing within thirty (30) Calendar Days of such notice under the procedures for protests established under N.J.S.A 54:49-18, but no request for conference, protest, or subsequent appeal to the Tax Court from any protest under this Article shall stay the collection of the indebtedness. No payment shall be made to the taxpayer, the provider of goods or services or the Contractor or Subcontractor of construction projects pending resolution of the indebtedness. Interest that may be payable by the State pursuant to N.J.S.A. 52:32-32 et seq. to the taxpayer, the provider of goods and services or the Contractor or Subcontractor of construction projects shall be stayed.

62. DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN: Pursuant to N.J.S.A. 52:32-55 et seq., any person or entity that submits a proposal or otherwise proposes to enter into or renew a contract must complete the certification to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the Division's website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Consultants must review this list prior to completing the Disclosure of Investment Activities in Iran Certification. If NJ TRANSIT finds a person or entity to be in violation of law, NJ TRANSIT shall take action as may be appropriate and

provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

63. ADA ACCESS: Facilities to be used in public transportation service must comply with the Americans with Disabilities Act, 42 U.S.C. § 12101 et seq.; DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. Part 37; and Joint Access Board/DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 C.F.R. Part 1192 and 49 C.F.R. Part 38. Notably, DOT incorporated by reference into Appendix A of its regulations at 49 C.F.R. Part 37 the Access Board's "Americans with Disabilities Act Accessibility Guidelines" (ADAAG), revised July 2004, which include accessibility guidelines for buildings and facilities. DOT also added specific provisions to Appendix A of 49 C.F.R. Part 37 modifying the ADAAG with the result that buildings and facilities must comply with both the ADAAG and the DOT amendments.

64. TRANSITION: In the event that a new Contract has not been awarded prior to the expiration date of this Contract, including any extensions exercised, and the Contracting Officer elects to exercise this Contract transition, the Contractor shall continue the Contract under the same terms, conditions, and pricing until a new Contract can be completely operational. At no time shall this transition period extend more than 365 Calendar Days beyond the expiration date of this Contract, including any extensions exercised.

65. EXTENSION: If in the opinion of the Contracting Officer, it is in the best interest of NJ TRANSIT to extend the Contract, the Contractor shall be so notified of the Contracting Officer's intent at least thirty (30) Calendar Days prior to the expiration date of the existing Contract. The Contractor shall have fifteen (15) Calendar Days to respond to the Contractor Officer's request to extend the term and period of performance of the Contract. If the Contractor agrees to the extension, all terms and conditions including pricing of the original Contract shall apply unless more favorable terms for NJ TRANSIT have been negotiated.

66. ATTACHMENTS/EXHIBITS: All of the following Appendices, Attachments, and Exhibits, are annexed hereto and made a part of this agreement:

Exhibit A: Scope of Services

Exhibit B: Cost Information

Exhibit C: NJ TRANSIT Travel and Business Reimbursement Guidelines

Exhibit D: DBE Requirements and Forms

Exhibit E: Consultant Certifications

Exhibit F: Addenda

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed the 22nd day of December to be effective as of the day and year first above written.

WITNESS:

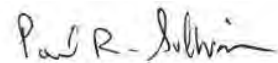
NEW JERSEY TRANSIT CORPORATION

By: 
Title Acting Director of Professional Services

By: 
Contracting Officer or Duly Authorized Designee

WITNESS:

CONSULTANT

By: 
Title Deputy Project Manager

By: 
Title Senior Vice President

The aforementioned Agreement has been reviewed and approved as to form only.

MATTHEW J. PLATKIN
ATTORNEY GENERAL OF NEW JERSEY

By: 
Deputy Attorney General

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EXHIBIT A
SCOPE OF WORK

Detailed Scope of Services

RFP NO. 21-059
FINAL DESIGN, ENGINEERING, AND OTHER TECHNICAL SERVICES FOR THE
NEWARK PENN STATION DISTRIBUTED GENERATION (DG) PROJECT

PROJECT BACKGROUND & DETAILED SCOPE OF SERVICES

TABLE OF CONTENTS

II. PROJECT BACKGROUND AND DESCRIPTION	Page 4
Need for Project	Page 4
Project Development	Page 4
Project Technical Overview	Page 6
Project Transportation Objective	Page 7
Technical Services Contemplated in this RFP	Page 8
Organizational Structure	Page 8
Project Manager Responsibilities	Page 9
Required Consultant Team Capabilities	Page 10
 IV. SCOPE OF SERVICES - DETAILED DESCRIPTION OF TASKS	 Page 12
Project Management and Engineering	Page 12
 <u>TASK 1 - PROJECT MANAGEMENT AND ADMINISTRATION</u>	 Page 14
<u>Subtask 1.1</u> - Project Management Plan	Page 15
<u>Subtask 1.2</u> - Project Control	Page 16
Subtask 1.2.1- Final Scoping/Final Engineering	
(FE) Schedule	Page 16
Subtask 1.2.2 - Records Management Control System	Page 21
Subtask 1.2.3 - Monthly Progress Reporting	Page 23
<u>Subtask 1.3</u> - Quality Control	Page 24
Subtask 1.3.1 - Quality Management Plan (QMP)	Page 24
Subtask 1.3.2 - Quality Management Plan Requirements	Page 25
Subtask 1.3.3 - ISO 9001 Requirements	Page 26
Subtask 1.3.4 - Quality Manager and Other Resources	Page 26
Subtask 1.3.5 - Design Control	Page 27
Subtask 1.3.6 - Control of Quality Records	Page 28
Subtask 1.3.7 - Internal Quality Audits	Page 28
<u>Subtask 1.4</u> -Configuration Management	Page 29
<u>Subtask 1.5</u> - Project Meetings	Page 30
Subtask 1.6 - Payment Procedures	Page 31

<u>TASK 2</u> – ENGINEERING	Page 33
Project General Plan and Specification Requirements	Page 34
Electric Power Loads	Page 39
Incident Transportation Plan	Page 39
Cybersecurity	Page 42
Distributed Energy Resources Design Attributes	Page 44
<u>Subtask 2.1</u> - Verification of Concept	
Design Criteria (20% baseline design)	Page 45
<u>Subtask 2.2</u> – Engineering and Design	Page 45
Subtask 2.2.1 – Facility Structural Modifications	
Supporting DG	Page 46
Subtask 2.2.2 - Power Management Design	Page 50
Subtask 2.2.3 - Civil, Structural, Geotechnical & Hydraulic	Page 53
Subtask 2.2.4 - Subsurface Investigations	Page 55
Subtask 2.2.5 – Topographical Survey Reference	
NJDOT Survey Standards	Page 56
General Notes Regarding Utilities and Coordination	Page 57
Subtask 2.2.6 – Utility Engineering	Page 58
Subtask 2.2.7 - Structures	Page 61
Subtask 2.2.8 - Power Management Communications	Page 62
Subtask 2.2.9 – Concept of Operations	Page 65
 <u>TASK 3</u> - COST ESTIMATING	 Page 66
General Notes on Cost Estimating	Page 66
Design Cost Considerations	Page 67
<u>TASK 4</u> – RISK MANAGEMENT	Page 67
<u>TASK 5</u> - SYSTEM SAFETY AND SECURITY	
MANAGEMENT	Page 68
<u>TASK 6</u> – PUBLIC INVOLVEMENT AND AGENCY	
COORDINATION	Page 76
<u>TASK 7</u> - INTEGRATION AND INTERFACE	Page 77
<u>TASK 8</u> - CONSTRUCTABILITY REVIEWS	Page 79
<u>TASK 9</u> - CONTRACT PACKAGING	Page 80

**TASK 10 - PREPARATION AND SUBSEQUENT
SUPPORT OF CONTRACT BID DOCUMENTS
AND BIDDING PROCESS**

Page 80

TASK 11 - AS DIRECTED BY NJ TRANSIT

Page 81

I. PROJECT BACKGROUND AND DESCRIPTION

Need for Project

Superstorm Sandy significantly impacted New Jersey's public transit systems. Commuter rail service was disrupted for months in what has been described by the President's Hurricane Sandy Rebuilding Task Force as "the worst disaster for public transit systems (e.g., bus, subway, commuter rail) in the nation's history." NJ TRANSIT's rail network experienced substation inundation, track washouts, downed catenary wires, and damage to signal and communications systems. Prolonged and diffuse electrical outages also significantly hampered the system's recovery. As the heaviest traveled portion of the Northeast Corridor, damage to NJ TRANSIT's systems had significant ripple effects across the region, impacting thousands of customers and doubling or tripling commuter travel time.

Since Superstorm Sandy, NJ TRANSIT has focused on making immediate repairs to restore service, planning for long-term repair and replacement of key NJ TRANSIT assets, and identifying opportunities to incorporate mitigation and resilience elements, allowing the system to better withstand storm surge associated flooding from future extreme weather events and other hazards.

NJ TRANSIT's energy systems and ability to power locomotives, stations, and critical facilities, however, remain vulnerable to future outages. Superstorm Sandy, Hurricane Irene, Hurricane Floyd, the 2003 Northeast Blackout, and other events demonstrate that a reliable source of electric power for traction, signals, switches, and railroad communications, as well as power for other related transportation infrastructure including bus garages and ferry operations, all key components of system-wide resiliency, remain beyond NJ TRANSIT's control. New and innovative solutions are needed to address these energy vulnerabilities.

Project Development

To address energy vulnerabilities, on August 19, 2013, NJ TRANSIT, the U.S. Department of Energy ("USDOE"), and the New Jersey Board of Public Utilities ("NJBPU") entered into a Memorandum of Understanding to collaborate to develop and conceptually design an advanced microgrid system known as NJ TRANSIT-DG in consultation with USDOE's Sandia National Laboratories ("Sandia").

Under the terms of the Memorandum of Understanding, NJ TRANSIT, USDOE, and NJBPU agreed to study the energy needs of NJ TRANSIT's commuter operations (including rail, bus and ferry services) in the Northeast region of New Jersey that provide critical interconnections between New Jersey communities and New York City, and that form part of the larger Northeast Corridor that Amtrak utilizes. USDOE agreed to engage Sandia in performing a conceptual design study of an advanced microgrid system to support NJ TRANSIT's operations. In performing this work, Sandia would employ its Energy Surety Design Methodology ("ESDM"), which is a quantitative risk based assessment approach developed to help communities evaluate regional critical and priority energy needs and identify advanced solutions to attain energy system performance goals. The conceptual design of NJ TRANSIT-DG would represent the first transportation system application of ESDM in the nation.

Over the course of six (6) months, NJ TRANSIT worked with Sandia, the New Jersey Governor's Office of Recovery and Rebuilding, USDOE, NJBPU, and other State agencies to advance the conceptual design. To inform the effort, in collaboration with Rutgers University, NJ TRANSIT modeled transportation capacity to identify target locations including select Passenger stations, operations support facilities and Ferry boat service between Manhattan and New Jersey, that would need to be powered in order to maximize available service. NJ TRANSIT worked with Sandia to define system boundaries, identify the Design Basis Threat (DBT) to the system, determine performance objectives, and to review energy usage needs and data over an extended period of time. NJ TRANSIT worked with two (2) regional partners to explore potential for partnership on the project: Amtrak and the Port Authority of New York & New Jersey's Trans-Hudson System (PATH). NJ TRANSIT also sought input from PSE&G, the Environmental Defense Fund, and other regional stakeholders.

This effort culminated in Sandia's issuance of a feasibility study report in February 2014 (A. Ellis et al., *Sandia Report: Feasibility Study* (Feb. 2014, SAND2014-1100)).

The Sandia Report and other information were submitted for consideration to the U.S. Department of Transportation's Federal Transit Administration ("FTA") in March 2014 as part of a thirteen-state resiliency competition. NJ TRANSIT is coordinating the project with other FTA-funded activities as part of NJ TRANSIT's Superstorm Sandy Recovery and Resilience Program.

Project Technical Overview

As detailed in the Sandia Report¹, NJ TRANSIT-DG would protect the “inner core” rail system from regional power blackouts, by supplying independently generated electric power directly to the constituent systems, through engineered control technology that can deliver reliable and consistent power as required for the NJ TRANSIT Morris & Essex lines, a portion of Amtrak’s Northeast Corridor Line, NJ TRANSIT’s Hudson-Bergen Light Rail system, and several NJ TRANSIT bus, station, maintenance and ferry facilities. By retaining critical inner-core rail, light rail and bus service, the region shall retain a level of functionality in the event of a major power disruption.

Distributed generation designed with micro-grid controls to enable off-grid capabilities allows a facility to continue operations during a utility power failure and can supply continuous base load power throughout the year resulting in energy cost savings. A well-designed system will supply the majority of the facility’s energy needs and draw power from the utility grid to make up for any energy deficits. When the utility grid is down, the distributed generation system will transfer seamlessly to operate in off-grid mode or “islanded mode” and supply power to designated critical load allowing for continued operations.

As currently contemplated, the distributed generation aspect of the NJ TRANSIT-DG, Newark Penn Station shall be designed, constructed, and operated as an on-site distributed generation and distribution resource, with islanding mode capabilities. The implementation and continuous operation of distributed generation technologies may also offset consumption of power from the bulk electric power grid, thereby replacing it with cost effective clean technology that result in a cleaner emissions profile. When the utility grid is compromised, these distributed generation resources shall be able to operate in island mode and supply power to the facility in support of the NJ TRANSIT public transit system and limited Northeast Corridor Rail Passenger Service.

The referenced Program feasibility study contemplates that the critical loads of key facilities would be supplied power through individual or combinations where most efficient, of photovoltaic power generation, of energy storage and heat recovery units. This generation infrastructure would be located at a select facility where electric power demand would optimize the use of these technologies.

The DG type that can be considered for a particular location depends on a number of facility-specific factors such as load magnitude, space availability, structural integrity, and thermal load availability. Photo Voltaic (PV), possibly coupled with energy

¹ The Sandia Report explores multiple DG configuration scenarios.

storage, is a possible option to consider for small loads, such as ferry, light-rail, and even maintenance facilities terminals. Combine Heat and Power (CHP), or cogeneration, is the use of a prime mover to simultaneously generate electricity and useful heat. Several CHP technologies can be considered. Fuel cells have the advantage of being compact, have a low emissions profile, are electricity efficient and easier to integrate into an existing facility. The selected Newark Penn Station baseline generation portfolio is discussed below.

Nevertheless, opportunities to implement energy efficiency and demand response measures should be considered where technically feasible. Final design and engineering will support safe and reliable system operation and the design shall include an extensive communication, control, and protection infrastructure, with robust cybersecurity protocols.

Project Transportation Objective

The fundamental purpose of the NJ TRANSIT-DG is to support a sustainable level of transit service as contemplated by the “Incident Transportation Plan” immediately following a major event that negatively impacts the supply of electric power to transit facilities.

The overall service goal is to transport as many people as possible to greater Newark, the New Jersey Hudson River Waterfront in Hudson County, or the Manhattan Central Business District (south of 59th Street) utilizing an array of bus, commuter rail, light rail, rail rapid transit and ferry services. While some services shall operate in a limited manner because of available electrical power, and some shall operate fully, all shall benefit from the implementation of Distributed Generation.

Within New Jersey, a limited portion of the NJ TRANSIT commuter rail system in northern New Jersey shall have electrical power provided to it from the NJ TRANSIT-DG to sustain a core system operation. NJ TRANSIT's intrastate bus services shall be operating, and interstate bus services shall be redirected to locations where travelers can transfer to available trans-Hudson services. NJ TRANSIT shall be operating the Hudson Bergen Light Rail Line to provide transit service to the New Jersey Hudson River Waterfront in Hudson County, New Jersey. There are four (4) primary locations where trans-Hudson travelers shall be able to board public transit into Manhattan: Hoboken Terminal, Secaucus Junction, Weehawken Ferry Terminal, and Newark Penn Station. There are also a few smaller locations where travelers shall be able to access lower-capacity private ferry services. While the focus is on AM peak period demand, it is assumed a PM peak period service shall also be provided where historically, demand is more spread out.

Technical Services Contemplated in this RFP

The Technical Services contemplated in this RFP shall inform NJ TRANSIT's project development strategy through the review, validation and/or modification of prior studies and assumptions, ultimately resulting in the development of a 100% Design bid package for procuring construction, including potentially through build, operate and maintain procurement or other procurement vehicle as warranted by the project.

The Technical Services in this RFP includes the preparation of a 100% Design bid package, generally based upon previously developed Concept Design as described in the Sandia Report, information contained in the NJ TRANSIT-Project Grant Application dated March 25, 2014 and the Preliminary 20% Design performed by AECOM included in the Appendix. In addition, Technical Services in this RFP includes Environmental/regulatory compliance technical engineering support and documents for this project as directed by NJ TRANSIT to support Permit Applications and Regulatory Approvals prepared by others.

Technical Services in this RFP also include the development and implementation of bid assistance support, contract packaging, and procurement support during the bid process.

In addition, RFP Technical Services include identification of Project task risks and a recommended mitigation program along with other NJ TRANSIT Superstorm Sandy programmatic requirements.

The initial NTP shall be for completion of Final Design and bid assistance as described above. The Consultant's technical proposal shall provide a detailed scope of services for the completion of final design and bid assistance as specified above. Accordingly, the Consultant's cost proposal shall provide a cost proposal for the provision of services described above.

Required "Team" Organizational Structure

- The Consultant shall provide an organizational structure of a Project Team, which shall address each Task, identified herein; control the budget, schedule, and product quality; and advance the Project to a successful completion.
- The Consultant shall organize and staff a project office in New Jersey accessible to NJ TRANSIT Project staff and reasonably near the Project Area, with adequate staffing, hardware and support to successfully manage and complete the

requirements for the Project.

- The Consultant shall receive written approval from NJ TRANSIT prior to any change in the Consultant's organization, key personnel, and/or manpower structure subsequent to Contract Award.
- The Consultant shall perform services for, attend and assist at required meetings and coordinate work, with NJ TRANSIT and other Project participants and relevant state, federal, regional regulatory authorities and local governmental entities as directed by NJ TRANSIT. The Consultant shall be responsible for identifying any other stakeholders including agencies, community groups, associations or organizations that must be coordinated with in connection with the Project. All communication with all outside agencies shall be accomplished solely through NJ TRANSIT. The Consultant shall NOT contact outside agencies or stakeholders directly. Draft Meeting minutes shall be prepared and distributed in accordance with the requirements of sub-task 1.6. Final Meeting Minutes shall be approved by NJ TRANSIT and subsequently distributed to participants upon NJ TRANSIT request.

This work shall be directed by a designated Consultant Project Manager, who is employed full-time by the Consultant on the Project, and who shall coordinate all efforts and serve as liaison between all parties implementing this Project. This Consultant Project Manager shall be a licensed Professional Engineer and shall be supported by principals of the consultant and other specialists as required.

Project Manager Responsibilities

- The Consultant Project Manager shall represent the entire Consultant team and be responsible for all communications with NJ TRANSIT. It shall be the responsibility of this individual to coordinate the activities of the multi-disciplined effort to provide NJ TRANSIT with a completed Project within the established schedule and cost.
- The Consultant Project Manager shall conduct review meetings, progress meetings and attend workshops or meetings with other consultants performing work for NJ TRANSIT, bi-weekly, monthly, or as often as required by NJ TRANSIT and shall ensure minutes of the same are taken and provided to NJ TRANSIT.

Required Project Manager Capabilities

The Consultant Project Manager (PM) shall have demonstrated experience of ten (10) years or more in the design, construction, and commissioning of Distributed Energy Resources. This experience shall also include experience and working knowledge of

advanced, smart-grid technologies to improve the reliability, security, and resiliency of the electric grid during a disruptive event.

Required Deputy Project Manager Capabilities

The Consultant Deputy Project Manager (DPM) shall have demonstrated experience of ten (10) years or more working with commuter rail or inter-city rail environments. Specifically, the DPM shall have experience working with passenger rail design and engineering as related to the civil, structural, geotechnical engineering, design and construction of electrical power transmission/interconnection compatible with existing commuter rail infrastructure in the Project Area. The DPM shall demonstrate requisite prior experience that shall ensure the successful integration of NJ TRANSIT's Newark Penn Station operations with Distributed Generation aspects of the NJ TRANSIT-DG electric power systems as outlined in this RFP.

Required Consultant Team Capabilities

Proposers should be thoroughly familiar with the most recent Federal and State guidance on the conduct and preparation of design and engineering efforts as well as associated environmental and regulatory compliance requirements for design, construction and operation of renewable and energy efficiency elements, including, large-scale PV generation, high-efficiency CHP, and energy efficiency technologies such as the implementation of fuel cell power generation technology, distributed power generation to selected transportation and support facilities as well as rail projects as prescribed by Federal Energy Regulatory Commission ("FERC"), North American Electric Reliability Corporation ("NERC"), New Jersey Board of Public Utilities ("NJBPU"), Northeast Power Coordinating Council ("NPCC"), Pennsylvania, Jersey, Maryland Interconnection LLC (PJM) regulations and practices, as well as other Regional Entity Reliability Standards, the Federal Railroad Administration (FRA) policies and regulations and other applicable agencies or jurisdictions including the Federal Transit Administration (FTA).

The Consultant Team must possess a working knowledge and expertise in the areas of Regulatory Compliance as applicable to the registration, certification and operation of DG power generating equipment as well as the distribution of such electric power. The ensuing discussion shall not be considered exhaustive but provides an initial background characterization of required work elements to be provided by the successful Consultant Team, to the extent applicable to the Project. The RFP's reference to any specific statute, regulation, order, reporting form, or requirement does not indicate that NJ TRANSIT has determined that the statute, regulation, order, reporting form, or requirement is applicable to the Project.

In addition to the foregoing technical expertise, consultants must demonstrate a capability to design and assist NJ TRANSIT in selecting and implementing optimal renewable and energy efficiency elements where technically and financially feasible as determined by NJ TRANSIT. Such technologies may include; large-scale PV generation, other distributed generation solutions that might include stationary fuel cell systems using one of three fuel cell technologies that are currently available to support power generation and CHP stationary systems: proton exchange membrane fuel cell (PEM) systems; molten carbonate fuel cell (MCFC) systems and solid oxide fuel cell (SOFC) systems, connection to natural gas supply as necessary, equipment commissioning and operation along with power transmission inter-connection to the regional power grid if appropriate.

Furthermore, the Consultant teams responding to this RFP shall be able to demonstrate relevant experience, working with commuter rail or inter-city rail environments, as well design experience related to freshwater wetlands, riverine environments and regulated floodplains, as well as brownfield settings.

The Consultant team shall have multidisciplinary staff resources with experience and expertise in such aspects as:

- Management and successful completion of engineering of distributed generation, Photovoltaic electric power generation and storage, facility power distribution, electric power control architecture including industry standard software (including cybersecurity) and hardware design, as well as.
- Experience and working knowledge of advanced, smart-grid technologies to improve the reliability, security, and resiliency of the electric grid during a disruptive event. Advanced or smart design approaches use modern communication and energy-management and energy-control technologies to enable distribution system feeders to operate both "grid-tied" and "islanded" modes using natural gas photovoltaic energy storage and combinations of multiple technologies resulting in hybrid energy resource systems. Such design shall support facility reliability and resiliency when islanded.
- Where applicable, determination of environmental and compliance impacts as well as mitigation techniques with respect to noise and vibration, air quality, aesthetics, energy, archeology/historic preservation, wetlands, development in the floodplains (hydraulic, net fill, riparian mitigation and storm-water management), parks and recreation areas, water resources, wildlife and vegetation and the development of associated mitigation measures along with an ability to fully support NJ TRANSIT Project Federal and State permit and agency approval efforts. The selected Consultant will support NJ TRANSIT's efforts (as and where applicable) in.
- Facility/Plant Operations and maintenance cost estimation.

- Experience and knowledge of wholesale electricity markets.
- Engineering and capital cost estimation for selected facility DG power generation resiliency enhancements, associated distribution and interconnection infrastructure if applicable and related transit facilities, structures and utilities, at preliminary levels of design.
- Civil, structural, geotechnical engineering, studies for design and implementation of natural gas fired electric CHP power generation enhancements along with PV and energy storage solutions where applicable and cost efficient, electrical power distribution/interconnection compatible with existing commuter rail passenger stations in the Project Area as well as the commercial power grid supplying the electric power to the Project Area;
- Utility relocation/construction.
- Hazardous waste as well as regulated soil and ground and surface water testing, analysis, cleanup and/or remediation planning and cost estimation
- Stakeholder participation and agency coordination for major projects under and through NJ TRANSIT direction.
- NJDEP/USACOE rules and regulations pertaining to Project construction impacts, Electric Traction demand analysis and forecasting.
- Surveying, mapping, right-of-way identification and title research.
- Report preparation and presentation graphics.
- Development and operation of an electronic project document control and data management system.

II. SCOPE OF SERVICES - DETAILED DESCRIPTION OF TASKS

Project Management and Engineering

The Project Management and Engineering Phase of the Project includes design elements for the implementation and operation of distributed generation resources at Newark Penn Station, facility-wide power distribution and infrastructure for the electric power generated, associated control and management with inter-connection to the Regional Commercial Power Grid where technically feasible and desired by NJ TRANSIT. In addition, this effort shall require, all structural and infrastructure components and control elements necessary to maintain a defined level of operations at Newark Penn Station, complementing regional transportation of patrons along NJ TRANSIT Rail and Light Rail Lines. Not included in this RFP is the progression of the separate Microgrid Central Facility (MCF) and associated transmission and distribution infrastructure, design, construction, commissioning, financing as well as its operations and maintenance in support of limited passenger rail service along the NEC, the M&E and the Hudson Bergen Light Rail.

Related Field Activities

- The Consultant may be required to secure the right to enter upon, cross over, under or above the property of owners owning land adjacent to the proposed Project as directed by NJ TRANSIT. The Consultant shall therefore obtain written approval to enter upon this property from said owners prior to any entry onto the property by the Consultant following permission by and coordination with NJ TRANSIT. Furthermore, the Consultant shall upon direction by NJ TRANSIT, secure approval to enter Amtrak property.
- The Federal Roadway Worker Safety Act requires “Roadway Worker Protection (RWP)” training for anyone working on or near an active railroad. Satisfaction of this requirement is the responsibility of the Consultant. A certification to this effect must be presented to NJ TRANSIT prior to any Consultant or Sub-consultant’s employee entering onto or near the R-O-W. If the Consultant does not have the required training, NJ TRANSIT can and shall provide it relative to entry upon NJ TRANSIT right-of-way. All contractors entering upon Amtrak property are required to attend Amtrak contractor safety training annually.
- All requirements of 49 CFR 214 shall be followed as applicable.
- When working within the Project site, the Consultant shall be governed by the following Site Work Procedures;
 - i. The Consultant shall limit work to the areas necessary for the performance of such inspections and shall not interfere with the operation of adjacent commercial activities, the bus, ferry and railroad and associated infrastructure without first obtaining specific approval from NJ TRANSIT. Any activity that requires access to the rail road right of way must be conducted with personnel that have the relevant and current rail safety training as a minimum, but not limited to, Roadway Worker Protection (RWP) training.
 - ii. During all periods of time when not performing operations at the field work site, the Consultant shall store all equipment being used for the inspection in pre-approved areas and shall provide all security required for such equipment. The Consultant shall not permit any objects or pieces of equipment to lie unattended on sidewalks, roadways, passageways, corridors, stairways, platforms or structures at any time.
 - iii. Survey work (as qualified as necessary by NJ TRANSIT), within the existing Right-of-Way (ROW) of the railroad or NJ TRANSIT property shall be performed at the site only between the hours of 9:30 AM and 3:30 PM, Monday through Friday, unless otherwise directed by the NJ TRANSIT Project Director or designee. Subsequent references to the “Project Manager approval” in this RFP are meant to identify the

appropriate NJ TRANSIT Project Director or his designee.

- iv. The Consultant shall coordinate all site work necessary to conduct the inspection and survey work, (as required in this RFP with NJ TRANSIT approval) will be coordinated with the NJ TRANSIT Project Director. Such work shall only advance following approval by the NJ TRANSIT Project Director.
- v. The Consultant shall provide the NJ TRANSIT Project Director with a minimum of two (2) working days of notice prior to the intent to conduct site inspections on NJ TRANSIT property (prepare and submit SSWP as required in sufficient time prior to such notice) and fourteen (14) working days' notice for access to Amtrak or privately owned property. At that time, the Consultant shall provide details relevant to the character and nature of the inspections planned and prepare a SSWP if required. Work shall only commence following the approval of the SSWP by the subject Railroad.
- Work within the fouling limits of the railroad (defined as within 18 feet of the centerline of track on NJ TRANSIT's right-of-way and within 25 feet of the centerline on Amtrak's right-of-way), shall require appropriate flag protection. The Consultant is not to work within the fouling limits of the railroad without flag protection cost of which will be accommodated by NJ TRANSIT. Track fouling shall be coordinated through NJ TRANSIT but fouling time cannot be guaranteed by either Railroad.

The deliverables of each task shall be provided in the form of camera-ready originals as applicable and electronically in their native format and in Adobe pdf format. All reports, drawings and text material shall be provided in hard copy, electronic transmission and on CD Rom as directed by the NJ TRANSIT Project Director.

TASK 1 - PROJECT MANAGEMENT AND ADMINISTRATION

The objective of this task is to keep NJ TRANSIT informed in a timely fashion with regard to both technical progress and financial status of the Project. Project management shall anticipate problems and delays as best as possible and address them before they reach crisis level. Another objective is to maintain a continuous and timely dialogue and flow of information between the Consultant and NJ TRANSIT. Coordination and assistance with Amtrak, utilities and other related jurisdictional agency reviews is required subject to NJ TRANSIT direction.

The Consultant shall provide an experienced, integrated team with the specific combination of technical and management expertise across all required disciplines necessary to meet all Contract requirements.

To these ends, the project management team shall implement and maintain a three-step approach to project management and control:

Subtask 1.1 Project Management Plan

A Project Management Plan (PMP) shall be prepared and implemented by the Consultant and NJ TRANSIT at the outset of the Project. The plan shall clearly define the roles and responsibilities of all parties involved. Formal lines of communication shall be outlined, budgets shall be established, schedules agreed upon, quality control procedures identified and invoicing procedures established.

The Consultant shall prepare a comprehensive PMP for the Project, fully addressing the means, methodologies, procedures and resources to be applied by both NJ TRANSIT and the Consultant in achieving the Project Management objectives stated above. The PMP shall work in conjunction with the Quality Management Plan as described later in this Scope.

The PMP shall be prepared in accordance with the established guidelines of the FTA and shall be of sufficient detail to monitor the Project's planning, engineering, and third party coordination throughout the duration of the Contract. NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJ TRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the PMP submission shall be available to the Contractor subsequent to Contract award. The Consultant shall submit a draft of the PMP within four (4) weeks of NTP, and the final PMP within eight (8) weeks of the NTP after receiving comments from NJ TRANSIT including comments from the FTA representative. Updates to the PMP shall be made periodically or as directed by NJ TRANSIT.

The PMP shall include appropriate charts and narrative to describe the organization, relationships, responsibilities, and procedures to be implemented to manage all aspects of the Project. At a minimum, the PMP shall address the following:

- Roles and Responsibilities
- Project Controls Management – schedule and budget
- Communications Protocol
- Design Management – internal reviews and checking procedures
- Configuration Management
- Interface and Integration Management
- Third Party Coordination / Third Party Agreements management
- Records Management

Subtask 1.2 Project Control

The Consultant, after discussion with NJ TRANSIT, shall establish a formal Critical Path Method (CPM) project schedule (min. Primavera 6) for the accomplishment of all tasks in this RFP. CPM updates shall be provided to NJ TRANSIT on a monthly basis or upon request. In addition, the Consultant shall establish a system of monthly progress and cost control reports attached to monthly invoices (see Appendix Four for Sample Invoice Report). All sub-consultants employed shall be required to render invoices for the same general time periods that are utilized by the prime consultant. FAILURE TO SUBMIT THE INVOICES IN THE PRESCRIBED MANNER SHALL RESULT IN SUCH INVOICES BEING HELD UNTIL THE FOLLOWING INVOICE PERIOD. Exceptions identified following NJ TRANSIT invoice review must be resolved to NJ TRANSIT's satisfaction within two (2) working days. Absent such resolution, disputed invoice amounts shall be deducted from that invoice. The report form as well as invoice(s) shall include a written description of current technical, budget and schedule status as well as a comparison of this information to the preceding month, project-to-date and projected future work efforts as applicable. Milestones, decisions made, issues and action items shall be highlighted. Any unanticipated delays or gains or cost adjustments driven by unforeseen circumstances should be discussed in terms of completing the overall project on time and within budget. The Consultant shall provide a summary of all invoice costs in a format depicting values as described in Appendix Four .

Subtask 1.2.1 Final Scoping/Final Design (FE) Schedule

Timely and successful completion of FE is pivotal to the advancement of subsequent contracts and phases as well as regulatory compliance documentation including but not limited to the Project Federal CE, Federal and State Permits, etc. The Consultant shall develop and maintain a detailed project schedule, representing a practical plan to complete the Contract scope of work, and to meet the overall schedule objective of achieving Bid Ready status by NTP plus twelve(12) months. Additionally, the Consultant shall prepare a projected construction schedule(s) for the work required to complete the NJ TRANSIT-DG Newark Penn Station component and have it fully operational.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the Project Schedule submission shall be available to the Contractor subsequent to Contract award.

The purpose of the schedule is to provide an effective management tool by which the Consultant and NJ TRANSIT can measure progress of the work, identify areas of

schedule risk, and mitigate against any potential delays on a timely basis. The actual number of activities in the schedule shall, in the judgment of NJ TRANSIT, be sufficient to assure adequate planning of the Project and to permit monitoring and evaluation of progress and the analysis of time impacts.

The FE Schedule shall be detailed and correlate with the work plan described in the PMP and organized based on the tasks and major elements of the Project. The Phase I schedule shall identify all activities and milestones associated with the PE Contract's scope of work.

The Consultant shall use Project Primavera 6.0, or NJ TRANSIT approved equal. The format of the schedule shall include bar chart plots and shall show columns for:

- Activity ID
- Activity Description
- Original Duration
- Early Start, Late Start, Early Finish and Late Finish
- Total Floats.

Timescale shall be shown in calendar days.

Initial Scheduling Meetings and Schedule Update Meetings shall be held to review, agree and approve all schedule deliverables.

The Work Breakdown Structure (WBS) codes shall be presented in organizational-chart format for approval prior to developing the Contract Schedule. Consultant shall code the Baseline Schedule using no more than 8 alpha-numeric characters for the Activity ID, and shall utilize the approved WBS.

The Consultant shall submit the draft Baseline Schedule without status within three (3) weeks of the NTP. The Baseline Schedule shall be accompanied by a narrative outlining the assumptions made, formatting approach, definitions of terminology to be used in monthly reporting, estimates of original durations, calendar types used, explanation of resources and the production rates, relevant drawings or charts.

The Consultant shall make all corrections to the draft Baseline Schedule requested by NJ TRANSIT and resubmit within two (2) weeks of receiving comments. If the Consultant does not agree with NJ TRANSIT's comments, the Consultant shall provide written notice of disagreement within five (5) days from the receipt of the comments. The items in disagreement will be resolved in a meeting held for that purpose, if necessary.

The Baseline Schedule shall show the sequence and interdependence of activities required for complete performance of the Project beginning with the date of the NTP, and concluding with the date of acceptance of the Project and shall list specifically:

- Interim milestone completion dates required by the Contract shall be characterized. Phasing of all design activities as specified shall be prominently identified. Particular attention shall be given to design submittals.
- Submittal and review of design submittals and other deliverables shall include review time for designated reviewers.
- Submittals to, and reviews by outside agencies
- shall allow sufficient time for review.
- Interface coordination and dependencies with proceeding, concurrent, and follow on contracts shall be developed.
- NJ TRANSIT designated milestones shall be developed.
- NJ TRANSIT, Amtrak, Third Party Commercial and Regulatory milestones, as required to achieve approval into Final Design shall be developed .
- Acceptance of the Project, including completion of unfinished items prior to completion of any Contract milestones shall be noted.
- Work to be performed by other Consultants and agencies that affect the schedule and shall allow reasonable time for completion shall be noted.
- Acquisition of permits and related environmental approval, licenses, agreements, and coordination with, municipalities, other agencies and community groups shall be noted.

The Consultant shall accurately develop the schedule logic and activity interdependencies, such that the schedule can fully convey an understanding of the Critical Path.

The Progress Schedule shall include all information current as of the status date. The Progress Schedule submittal to NJ TRANSIT shall be accompanied by a Schedule Status Report. This narrative report shall describe activities completed and progressed during the report period, activities planned for the forthcoming report period, potential issues, delay chain analysis as required, and actions required to correct any negative float (actual or predicted). The report shall include an explanation of potential delays and problems, their estimated impact on performance, and their estimated impact on the Contract completion date. In addition, alternatives for possible schedule recovery, complete with a narrative rationale, to mitigate any potential delay shall be included for consideration by NJ TRANSIT.

Every Progress Schedule shall be submitted for approval at least five (5) days prior to the NJ TRANSIT designated Progress Schedule Meeting. The Progress Meeting shall include consultant percentage complete, actual start/finish, earned values and remaining

duration. Upon approval of the Progress Schedule, it shall be included in the Monthly Report. The status date of the Progress Schedule shall be the last day of each month.

Timely progress reporting and review by the Consultant's management team shall be critical in avoiding schedule creep or delays which shall be detrimental to the schedule given the objectives of the project. Progress Reports shall include;

- Consultant's Transmittal Letter;
- Description of Problem Areas;
- Current and Anticipated Delays; and the following information;
- Cause of the delay;
- Corrective action and schedule adjustments to correct the delay; and
- Impact of the delay on other activities, milestones, and completion dates.
- Pending Items and Status Thereof, regarding the following requirements:
 - Permits;
 - Commercial agreements with Third Parties, i.e. natural gas pipeline supply connections, interconnections with PJM, etc.
 - Change Order;
 - Time extensions; and
 - Interim Milestone Dates and Contract Completion Dates Status
- Discussion of critical path for month and any changes to critical path since the last report;
- Progress during period and plans for Project in forthcoming period.

Planned schedule percentage complete versus actual percentage achieved and earned value versus planned usage for each resource shall be computed in tabular format from the resource and price loading developed for this RFP and Contract execution.

An overall cumulative progress curve shall be plotted with the horizontal axis in calendar months.

A schedule found to be unsatisfactory, or otherwise not in compliance with Contract documents shall be revised by the Consultant and resubmitted. Re-submittals shall conform to the same requirements as original submittals.

Use of float suppression techniques such as preferential sequencing, special lead/lag logic restraints, negative lags, long lags, extended activity times, or imposed or constrained dates, shall be cause for rejection of the Detailed CPM Schedule and any revisions or updates.

The Consultant shall schedule submittals for review by NJ TRANSIT in a manner that distributes reviews across time to avoid concentration of reviews in any discipline.

Whenever it becomes apparent in the course of the current Progress Schedule Meeting or from the Progress Schedule itself that interim milestones, constraints, or submittal dates shall not be met, the Consultant shall identify remedial actions through a Recovery Plan & Schedule, to be included as supplement/attachment to the Schedule Status Report. The Recovery Schedule shall be a separate discrete “break-out” schedule, which shall include activities as required to achieve the final milestones that shall coincide with the approved Baseline Schedule. Prior to executing remedial actions, the Consultant shall immediately notify NJ TRANSIT, and obtain approval before proceeding with same.

If original Baseline Schedule dates cannot be maintained, then the Consultant shall obtain approval from NJ TRANSIT prior to incorporating any revised dates into the next Progress Schedule submittal.

The last updated schedule submitted shall be identified as the “Final Progress Schedule.” This schedule shall reflect the exact manner in which the Contract was actually completed (including start and completion dates, activities, actual duration’s, sequences, and logic), and shall be signed and certified by the Consultant’s Project Manager and the Consultant’s scheduler as being a true reflection of the way in which the Contract was actually completed.

Deliverables:

Work Breakdown Structure Codes

Baseline Schedule – draft and final

Monthly Progress Schedule and Schedule Status Report

Recovery Plan and Schedule, as required

As-Built Schedule

In addition to routine reporting, the Consultant shall create and maintain an intra-project, password protected web-site through which NJ TRANSIT and the Consultant can communicate and share data, drawings and reports rapidly and efficiently. This shall help the Consultant operate proactively to both inform NJ TRANSIT of emerging issues and facilitate rapid resolution to maintain schedule and budget. This system shall also be utilized as the Project’s file cabinet and for archiving all project documents and correspondence. The said system shall be compatible with the document control records management system outlined below. Upon completion of the Project or at such time as directed by NJ TRANSIT, the Consultant shall provide all data contained therein to NJ TRANSIT using computer hardware storage approved by NJ TRANSIT for incorporation into the NJ TRANSIT computer network system.

Subtask 1.2.2 - Records Management Control System

The Consultant shall develop and maintain a system to identify and manage correspondence, business documents, current revision of instructions, procedures, drawings, specifications, reports and analyses, etc. The document database developed on this project shall be kept current throughout the term of the Contract, and provided to NJ TRANSIT in a condition suitable for use by others without need for additional licenses for another five (5) years from Project Completion and be in compliance with the Consultant's Configuration Management Plan. NJ TRANSIT's objective is to establish a "paperless" project to the extent as practicable.

The system at a minimum shall provide the following definition and components:

- a) A system designed around the Consultant's evaluation and analysis of NJ TRANSIT's work flow and business practices;
- b) An electronic interface ("desktop") that requires nominal user training and provides quick response time for document creation, storage, and retrieval;
- c) A highly secure system that can assign different access clearances for staff and project stakeholders;
- d) A system that is fully compatible with and utilizes the same assumptions as the NJ TRANSIT Enterprise Content Management System (ECMS) document control system.

The system must manage manual and electronic documents including:

- General correspondence
- Contracts, specifications, progress reports, invoices
- Budget & finance data
- Drawings, plans, & images
- Email messages & attachments
- CDs, DVDs, and other hard media
- Native files & image files of all documents

The system must provide the following features:

- Central clearinghouse for all project documents
- Categorization of inbound traffic
- Marking of each document with (at a minimum):
 - o Originating date
 - o Received date
 - o From organization
 - o To organization

- o Subject
- o Unique sequence number
- Scanning and indexing
- Posting of scanned documents for retrieval
- Email notification to document recipients
- Maintenance of the document database
- On-site printing capability for all document sizes and formats
- Filing of original hardcopy
- Transmitting of original hardcopy to offsite records warehouse (If needed for compliance with New Jersey Department of Archives and Records Management (NJDARM) requirements)

The system shall also provide a fully-integrated Electronic Content Management (ECM) system, including the following components:

- Digital Mailroom (DM) - or future project field office
- Scan, index & distribute
- Electronic Document Management System (EDMS) - web-based
- Electronic Document posting & notification
- Document collaboration capabilities
- Email management including forced classifications
- Check-in and check-out protocols
- Revision control
- Audit trail
- Security (document by user/group)
- Watermarking for printed copies
- Administrator reports
- Workflow
- Records Management (RM)
- Retention schedules
- Notification of destruction

NJ TRANSIT is using an in house ECMS, using Open Text Live Link as the platform. Upon request by NJ TRANSIT, the Consultant shall provide personnel at a designated NJ TRANSIT Office to assist NJ TRANSIT in data entry as well as down loading and up loading of documents into the NJ TRANSIT ECMS. The schedule for data uploads to the NJ TRANSIT ECMS shall be determined subsequent to Contract award. However, such uploads shall occur at a minimum on a monthly basis. It is anticipated that the Consultant shall employ an ftp site or similar portal to transfer documents between NJT's ECMS and the Consultant's document system. The personnel should be cognizant of DARM regulations concerning document scanning and management

procedures.

Deliverable:

Records Document Management System and identification of appropriate support staff subject to NJ TRANSIT approval.

Subtask 1.2.3 - Monthly Progress Reporting

The Consultant shall carefully monitor the progress of the Project during design and provide NJ TRANSIT with Monthly Progress Reports. The approved schedules shall be used by the Consultant to ensure adequate planning, scheduling, management, and execution of the Project and to enable NJ TRANSIT to evaluate Project progress and requests for payments by the Consultant.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJ TRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the Project Monthly Progress Report submission shall be available to the Contractor subsequent to Contract award. Upon direction by NJ TRANSIT, the Consultant shall assist and provide support to NJ TRANSIT staff in the preparation and submittal of Project reports to the FTA.

The Consultant shall submit one (1) hard copy and one (1) electronic copy of the Monthly Progress Report to NJ TRANSIT by the 7th day of each month that shall cover a reporting period for the preceding month. The Monthly Progress Report shall be submitted by the Consultant's principal and shall include as a minimum the following:

- A written review of progress of the progress achieved for that month with specific reference to the activities detailed on the Baseline Schedule and detailed progress on each stage of the design during the reporting period.
- Details of any delays shall be specifically highlighted together with details of the Consultant's actions/proposals for corrective action and schedule recovery.
- Areas of concern and proposed resolution.
- Per task, planned schedule percentage complete versus actual percentage achieved and earned value versus planned usage for each resource shall be computed in tabular format from the resource and price loading. An overall cumulative progress curve shall be plotted with the horizontal axis in calendar months.
- Comparative progress curves and histograms showing actual versus planned performance in respect to major activities as may be required by NJ TRANSIT.
- A monthly update of the overall progress curve (or S curve) versus baseline progress curve.

- Updates of the Consultant's labor curve/table showing actual and planned labor, including sub-consultant labor.
- Status of DBE participation.
- An up-to-date copy of the Delivery Submittal Schedule to NJ TRANSIT.
- Other content as directed by NJ TRANSIT.

A certificate signed by the Quality Manager certifying for the previous month that:

- All work, including that of sub-consultants at all tiers, has been checked and/or inspected by the Consultant's quality staff and that all work, except as specifically noted in the certification, conforms to the requirements of the Contract.
- The Quality Management Plan (QMP) and all measures and procedures provided therein are functioning properly and are being followed, except as specifically noted in the certification.

Deliverables:

Monthly Progress Report

Monthly Quality Certificate

Subtask 1.3 - Quality Control

A QMP shall cover not only the Consultant but also all sub-consultants; the procedures shall be uniformly applied to all phases of the Project. The QMP requires the completion, checking, and correcting of work products before releasing them, to ensure accuracy, completeness, and ability to be understood by target audience.

Subtask 1.3.1 - Quality Management Plan

The Consultant shall develop a comprehensive QMP for the work defined in this RFP for the Distributed Generation Project. The Consultant shall be responsible for conducting an ongoing quality program during the entire period of performance of the Contract based upon the QMP approved by NJ TRANSIT. An effective quality program is fundamental to all work performed by the Consultant.

The QMP shall require the completion, checking, and correcting of work products before releasing them, to ensure accuracy, completeness, and ability to be understood by target audience.

The purpose of the quality program is to effectively and economically assure technical quality in the design of the Project, thus reducing the potential for:

- Adverse schedule and cost impacts.
- A poor quality design.

- Poor quality products.
- Interface and integration problems among various design elements.
- overall interface with elements of the NJ TRANSIT SANDY Resiliency Program and Amtrak NEC/Gateway Program.
- Personal and public safety problems.

The QMP shall document how the Consultant shall execute the Project to assure that:

- The Consultant's design process translates NJ TRANSIT's needs and requirements into an acceptable design.
- The Project is properly completed and furnished to NJ TRANSIT on time.

During the term of the Contract, the Consultant shall exercise positive control over the entire Project including the work of its subcontractors and sub-consultants as described in the approved QMP.

Subtask 1.3.2 - Quality Management Plan Requirements

The QMP shall be prepared in general accordance with the established guidelines of the FTA, which essentially follow article 4.0 of the ISO 9001:2000 and ISO 10013 guides, and are further discussed below. The QMP shall be an executable system of processes defined and established for the Project. At a minimum, the QMP shall include a Quality Policy and Procedures, and reference other plans as may be specified herein and elsewhere in the Contract.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the Project QMP submission shall be available to the Contractor subsequent to Contract award.

The QMP shall be approved by the Principal-In-Charge in the Consultant's organization having primary responsibility for the Contract. The Consultant shall submit a draft within four (4) weeks of NTP, and a final within eight (8) weeks of the NTP, incorporating comments from NJ TRANSIT and other stakeholders as applicable. The QMP shall be revised, updated, and approved as necessary throughout the term of the Contract to reflect the management system being currently used as the means for executing the Contract.

Implementation of the QMP shall be subject to NJ TRANSIT audit throughout the term of the Contract.

Subtask 1.3.3 - ISO 9001 Requirements

Certification of the Consultant under ISO 9001:2000 is not required for this Contract; however, the quality principles established by ISO 9001:2000, as set forth herein, form the basis for the quality system and Quality Management Plan required to be established by the Consultant.

The quality standards applicable to the Project under the Contract include the following:

- ISO 9001:2000: Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation and Servicing.
- ISO 10013:2000: Guidelines for Developing Quality Manuals
- ISO 8402: 2000: Quality Management and Quality Assurance – Vocabulary

Subtask 1.3.4 - Quality Manager and Other Resources

The Consultant shall appoint an experienced, qualified Quality Manager trained in accordance with established quality management standards, requirements and regulations. The selection of this individual is subject to NJ TRANSIT's approval. The Quality Manager shall perform as the Consultant management representative and shall:

- Be responsible for implementing the QMP and shall have the authority to stop the Project. There shall be a clearly articulated Quality Policy approved by the Executive(s) of the Consultant and it shall be widely publicized and known throughout the project team.
- Report directly to the Consultant's Project Support Manager or more senior employee.
- Have direct access to a senior executive in the selected Consultant's Executive Management team.
- Be responsible for ensuring that the Quality Management effort is effective in ensuring that all Contract requirements are satisfied.
- Have direct access to and by NJ TRANSIT's Quality Director.

An Internal Quality Management Review shall occur at least bimonthly. A report regarding the results of the review shall be forwarded to NJ TRANSIT. Organizational and technical interfaces shall be defined in a manner that assures inter-discipline coordination and communication among and between designers and major subcontractors and sub-consultants and NJ TRANSIT.

Subtask 1.3.5 - Design Control

The Consultant shall develop a Design Control Plan (DCP), establishing design control procedures that shall be integrated and consistent with the requirements described throughout this RFP. The Plan shall visibly track and report the status of design products to be submitted by the Consultant for NJ TRANSIT review. The Consultant shall revise, update, and submit for approval the Plan as required. The Plan shall:

- Define procedures for completing internal verification prior to the submission of documents to NJ TRANSIT for its review. Design Verification Activities shall include checking and back-checking calculations, drawings, and other design elements without reliance on review and comments from NJ TRANSIT and shall be conducted before providing each design submittal to NJ TRANSIT.
- Define how design inputs and changes shall be managed by the Consultant in a manner that assures Contract and Consultant requirements are correctly translated into the drawings and specifications.
- Include a Design Review Schedule which shall be revised as needed as the design progresses.
- Be consistent with and follow from the QMP and shall specifically track all design and design verification activities included in the approved QMP .
- Be in a format that allows the Consultant and NJ TRANSIT to reasonably understand the means by which each design element of the project is being completed. It shall provide planned versus actual schedule performance and be accurate and useful as a means for NJ TRANSIT to determine how the design is proceeding throughout the design phase of the Project.
- Include subcontracted design elements, if appropriate.

The Consultant shall be liable to NJ TRANSIT for any costs incurred during the Construction Phase to correct, modify or redesign any drawings completed by the Consultant that are later found to be defective, or not in accordance with the provisions of this agreement as a result of any act, error or omission on the part of the Consultant or its agents, servants or employees. The Consultant shall be given reasonable opportunity to correct any deficiencies at no additional cost to NJT.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to Design Control submissions shall be available to the Contractor subsequent to Contract award.

Subtask 1.3.6 - Control of Quality Records

The Consultant shall establish and implement procedures to identify, collect, index, file, store and retrieve all quality records required by the Contract and generated pursuant to the QMP and shall include the records of sub-consultants and subcontractors, as appropriate. These procedures shall include an electronic database to track and maintain control over all quality records generated by the Contract, which shall be part of the Records Management System and subject to data transfer to the NJ TRANSIT ECMS system referenced above.

Quality records shall be stored and maintained in such a way that they are readily retrievable and provided with a suitable environment that shall minimize deterioration or damage, and prevent unauthorized alteration or loss.

Quality control records shall be legible, reproducible, and identifiable with the item involved, and contain the date of origination and identity of the originator, verifier, and/or responsible supervisor.

The Consultant shall retain all quality records for a period of seven (7) years from the date of completion of the Project unless otherwise specified in the Contract. All quality records shall be made available to NJ TRANSIT throughout the retention period.

Subtask 1.3.7 - Internal Quality Audits

The Contactor shall establish a procedure for conducting internal quality audits throughout the period of performance of the Contract as follows:

- Perform internal audits at least quarterly.
- Identify in the audit any deficiencies found in the quality system, the causes of deficiencies and the status of corrective action or preventive action, when appropriate.
- Provide the audit results to NJ TRANSIT within five (5) days of the completion of the audit, including required corrective actions.
- Provide a final report to NJ TRANSIT confirming the completion of required corrective actions within thirty (30) days of the audit.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the Project Quality Audit Reports submissions shall be available to the Contractor subsequent to Contract award.

Deliverables:

Quality Management Plan
Design Control Plan
Internal Quality Management Review reports
Audit Reports
Report of Completion of Corrective Actions

Subtask 1.4 -Configuration Management

The Consultant shall be responsible for configuration management and document change control for its design for the duration of the Project. The Consultant shall prepare and submit to NJ TRANSIT for its approval, a Configuration Management Plan (CMP) which is in accordance with the requirements of ISO 10000. The CMP shall utilize a proven, auditable electronic based configuration management system to its design of the Project. Configuration management of drawings, specifications, documents, reports and analyses is the responsibility of the Consultant. The Consultant shall maintain document change control, including engineering plans, drawings and specifications and shall update all project documents as the design progresses. Configuration management shall provide an accurate historical record that can trace decisions made throughout the life of the Project.

The Consultant shall develop and maintain a Contract Documents Log created in an electronic data base format acceptable to NJ TRANSIT for NJ TRANSIT's review and approval. The Log shall list all design drawings, specifications, design calculations, analyses, reports and other documents to be prepared by the Consultant. Only one (1) version of a document may be effective at any one time. The Log shall function to keep a history of each document created by the Consultant and its evolutionary status. The Log shall form an integrated part of the Records Management System.

At the end of the Project, the Consultant shall provide NJ TRANSIT in electronic format, a complete configuration management history, fully documenting all required project information, including the final revision status of all design elements that shall allow for the progress of the Project design to proceed.

Deliverables:

Configuration Management Plan – draft and final
Contract Document Log

Subtask 1.5 - Project Meetings

This provision specifies the requirements for project meetings to be held during the term of the Contract. The Consultant shall attend and participate in the meetings set forth

herein with NJ TRANSIT, its representatives, government officials or other parties interested in the Project as may be determined by NJ TRANSIT.

The Consultant shall prepare a record of the meetings stating: the date and place, meeting purpose, names and titles of those present, a brief description of the matters discussed, agreements reached/decisions made, action items and the party responsible for taking the identified action. Meeting minutes shall be prepared and provided within seven (7) calendar days from the meeting date to NJ TRANSIT for review and comments. Final meeting minutes shall be issued to all appropriate parties within fourteen (14) calendar days of the meeting date.

NJ TRANSIT shall schedule a kickoff meeting with the Consultant within ten (10) days of issuance of the NTP for the Contract. The purpose of meeting shall be to review the parties' responsibilities, major project milestones, procedures and submittals and personnel assignments. This meeting shall be chaired by NJ TRANSIT and be attended by representatives of NJ TRANSIT, all key personnel identified by the Consultant and all major sub-consultants proposed by the Consultant. Agenda items shall include:

- Consultant's personnel roster
- Identification of all sub-consultants
- Consultant's project schedule, WBS, critical paths and major milestones
- Project Management Plan
- Design Control Plan
- Interface and Integration Management Plan
- Configuration Management Plan
- Quality Management Plan, including quality documents & records to be generated
- Procedures for processing design decisions and approvals
- Procedure for processing applications for payment
- Mobilization Issues

The Consultant shall conduct monthly (or more frequently if deemed necessary by NJ TRANSIT) systems interface and integration meetings throughout the design process in order to ensure that all of the design elements properly interface with each other, and also to assure that the elements properly interface and are integrated with the other elements of the NJ TRANSIT Superstorm Sandy Recovery and Resilience Program and other NJ TRANSIT Capital Programs as well as the Amtrak Raceway & Gateway Programs where applicable (and as provided by other consultants or parties). The basis for conducting these meetings is to implement and monitor the Consultant's Interface Management Plan. These meetings shall be attended by the Consultant, NJ TRANSIT and all other parties whose design activities shall interface with the CE/PE Consultant.

The Consultant shall conduct monthly progress meetings with NJ TRANSIT on a regularly established date, convenient for all parties involved (or more frequently if deemed necessary by NJ TRANSIT). Progress meetings shall be held in addition to other specific meetings held for other purposes. The meeting shall address technical and administrative issues of concern, determine courses of action, develop appropriate deadlines for resolution of issues, and assign individuals responsible for resolution of those issues. The Consultant and NJ TRANSIT shall determine who, in addition to themselves, shall attend the meetings. Additional attendees may include other parties as deemed appropriate for the success of the Project.

Agenda items shall include matters of significance that could affect progress such as:

- Review of the previous meetings minutes and resolution of open items.
- Consultant's FE, bid package support schedule.
- Interface requirements and coordination with other Amtrak/Yard Consultants.
- Requests for information and/or approvals.
- Changes
- Invoices and Payment Procedures

Status meetings shall be held prior to the submittal of the Consultant's Application for Payment. The purpose of the meetings is to determine that the status of activities as stated in Consultant's Monthly Progress Report and Progress Schedule. This meeting shall be attended by NJ TRANSIT and the Consultant. NJ TRANSIT disposition on the matter shall be documented. The Consultant shall prepare meeting minutes.

Deliverables:

Kickoff Meeting Minutes

Interface and Integration Management Meeting Minutes

Progress Meeting Minutes

Subtask 1.6 - Payment Procedures

This provision specifies the procedures for the Consultant's submission of Applications for Payments under this Contract and NJ TRANSIT's processing of those applications.

The Consultant shall bill monthly and be eligible to receive payment upon successfully achieving verifiable progress and compliance with the requirements of this provision and any other applicable provisions of the Contract.

The Consultant shall notify NJ TRANSIT in writing that it has achieved verifiable progress and requests reimbursement in connection with said progress. NJ TRANSIT shall

ascertain whether the claimed progress has been achieved or not during the status review meetings and by review of valid Progress Reports as prescribed above.

Applications for payment shall at a minimum contain:

- The Consultant's name and address.
- The remittance address or bank to which payment is to be made.
- The Contract name or title and Contract number.
- An actual invoice for the amount identified above plus any other amounts due the Consultant under any other provision of the Contract signed by the Consultants Project Support Manager.
- The Consultant's certification that the amount requested is due and payable under the Contract and has not been previously invoiced or paid
- Certified Payrolls (timesheets not required).
- Supporting documentation for all expenses incurred.
- DBE participation levels.

NJ TRANSIT shall promptly review the Consultant's Application for Payment upon receipt for accuracy and conformance with the above and shall prepare and issue a Payment certificate, with a copy provided to the Consultant, showing the amount payable by NJ TRANSIT to the Consultant.

NJ TRANSIT may, by any payment, make any correction or modification that should properly be made to any amount previously considered due and paid by NJ TRANSIT.

A payment issued by NJ TRANSIT shall not be construed as waiving any rights of NJ TRANSIT under the Contract or to be an acceptance of the Project or any portion thereof nor shall it relieve the Consultant from any requirement or responsibility under the Contract or from replacing or revising unsatisfactory work for which it is responsible.

Deliverables:

Applications of Payment

Final Invoice

TASK 2 - ENGINEERING

The engineering of major elements of the Project shall be required, including value engineering analysis. This design effort shall generally be progressed to the 30%, 60%, 90% and 100% design level. However, the actual level for each element shall be coordinated with the National Environmental Policy Act (NEPA), Permitting and Regulatory Compliance engineering data requirements as well as Risk Assessment, and

Contract Packaging tasks to produce the best value for NJ TRANSIT to move the project forward to completion.

Newark Penn Station will not be connected to the Main Central Facility (MCF) and thus, will require separate Distributed Energy Resources (DER) for power generation. (For the purposes of this section and continuing discussions throughout this document, the term DER refers to any energy systems, equipment or processes that are small, modular, and decentralized to provide onsite power as opposed to the customer obtaining power from the grid from a larger centralized power.). Energy storage alone is not cost-effective due to the size of the demand and the performance requirements (a 7 day outage); however, if determined to be economically and technically feasible, storage could be used in combination with PV or other distributed generation (DG). (For the purposes of this section and continuing discussions throughout this document, the term DG refers to the on-site generation portion of DER.)

The Consultant shall advise NJ TRANSIT and confirm which DG technology can be considered, accounting for facility-specific factors such as load magnitude, and variation, operational constraints space availability, structural integrity, and thermal load availability. PV, possibly coupled with energy storage, may be considered for small loads..

The required design elements include, but are not limited to, an engineering review of Newark Penn Station for the implementation of distributed energy resources. This review shall account for facility structural characteristics that support the implementation of such electrical power generation, resiliency, foundations, earthwork, facility enclosures, natural gas supply and facility interconnections, and distribution infrastructure (including, but not limited to, circuits, i.e. cabling, transformers, as applicable), facility function and control architecture and hardware. The Consultant shall use this information to develop cost analyses to determine the efficacy of applied resiliency technologies, also accounting for reconstruction and modification costs of existing structures and infrastructure as necessary. In addition, the Consultant shall perform analysis of critical operations to be maintained during islanded operations including but not limited to evaluation of facility power demands, in turn, selection of appropriate power generation technology, i.e. CHP, solar power generation, energy storage or a combination thereof. The electrical power supply to support facility operations must accommodate facility critical loads including, but not limited to, emergency lighting, ventilation, pumps, compressors, and communications where applicable.

Required design elements shall also include methods for satisfaction of project environmental, regulatory compliance requirements, staging options and cost implications to Project Design and Construction. A proposed construction schedule for DG related modifications, i.e. operating windows, shall also be developed as part of this task. The format of the proposed Construction Schedule shall be consistent with NJ

TRANSIT's Superstorm Sandy Recovery and Resilience Program requirements. Such requirements shall be available subsequent to Contract award.

Project General Plan and Specification Requirements:

As applicable, the Consultant shall provide all necessary architectural, engineering and professional services required to prepare all contract plans, technical specifications, special provisions, and a detailed cost estimate and bid documents for all sections of the proposed work. The construction plans shall be on 24" x 36" with standard NJ TRANSIT title box and shall consist of: Key Map, Location Map, Estimate of Quantities, Distribution of Quantities sheet, Site Plan, Elevations, Sections, Typical Sections Standard Details, etc. Certain copies of design development drawings may be half-size as designated and/or agreed by NJ TRANSIT. Specifications and supplemental specifications shall conform to Construction Specification Institute (CSI) format or other acceptable format as pre-approved by NJ TRANSIT. Use of graphics shall conform to the NJ TRANSIT Graphics Manual where applicable. Construction plans shall be prepared with a computer-assisted drafting program; disks containing final design drawings shall also be submitted to NJ TRANSIT.

For Amtrak facilities, Amtrak standards shall be met. These standards will be provided by Amtrak to NJ TRANSIT's CM .

The Consultant shall coordinate the plans with other project tasks as necessary to advance the design to the 30%, 60%, 90% and 100% level. Develop a construction plan showing all elements to be constructed. Such plans shall detail requirements as applicable for natural gas supply and connection, electrical power distribution and interconnection, water, sewer, communications, parking, roads, traffic signalization and catenary modifications as applicable. In addition, the electrical plans shall include location of cable and conduit runs and lighting as applicable.

The civil drawings shall graphically depict the proposed layout of facility modifications necessary to implement and operate Distributed Energy Resources as they relate to NJDEP Land Use Program as well as Arm Corps of Engineers (ACOE) regulatory limits of disturbance for the selected Project footprints. Demolition of structures and utilities shall also be identified as applicable. The structural drawings shall depict the type of structures necessary and the size and type of foundations to be proposed. The geotechnical design (if required as determined by NJ TRANSIT), shall include a report and foundation recommendations for required facility modifications. A construction-staging plan shall describe potential methods and sequence of construction to complete the project while maintaining facility operations and/or passenger service where

applicable. The hydraulic design (if required as determined by NJ TRANSIT), shall include the delineation of the drainage patterns for modified facilities and resulting appurtenances. The location of drainage features shall be defined and sized. Drainage requirements in floodplains and wetland areas shall be defined as necessary. A report describing the entire drainage program for the project shall be prepared discussing the impacts and requirements of NJDEP and United States Environmental Protection Agency (USEPA) and taking into account guidance per American Association of State Highway and Transportation Officials (AASHTO) / NJDOT criteria. It is the Consultant's responsibility to ensure that all plans and drawings developed for this Project shall comply with project permit conditions and associated regulatory compliance requirements. Upon the direction by NJ TRANSIT, the Consultant shall be prepared to demonstrate said compliance. Preliminary Design drawings, specifications, schedules and associated documents shall be prepared consistent with the standards set forth in the RFP and shall include at least the following information:

1. Cover Sheet
2. Index of Drawings
3. Site Drawings
4. Facility Plans, Profiles and Cross Sections.
5. Plans, Elevations, Sections and other details pertinent to the feature of Design.
6. Design Analyses, shall completely cover the electrical design requirements for electrical systems necessary for the Project. It shall be used to justify Concept Design and verification. The Basis for Design shall include a concise outline for functional features, including a description of existing systems and other considerations affecting the design. In addition, a full description of any special requirements and justification for any proposed departure from standard criteria are required. The Analysis shall be separately bound and labeled and sufficiently complete to permit review of:
 - a. Structural analyses
 - b. Mechanical analysis with line diagrams
 - c. Electrical analysis with line diagrams and load protection
 - d. Special features (e.g. automated systems, corrosion prevention, etc.)
 - e. Site security (as applicable)
 - f. As applicable, project utilities such as telephone, communications, lighting, etc.
 - g. An estimate of total connected loads, power factors, demand factors, diversity factors, load profiles where required, resulting demands and sizes of proposed transformers to serve either the complete project or the

various portions involved shall be provided

- h. The basis for selection for primary and secondary distribution voltages and of overhead or underground construction shall be provided
- i. Computations shall be provided to indicate that systems and materials are adequate but not over designed and are correctly coordinated

7. Technical Specifications

8. Statement of Estimated Construction Costs and Schedule (staging if appropriate) in sufficient detail (quantity take-offs) so as to permit evaluation. The format of the Cost Estimate reports shall be consistent with NJTRANSIT's Superstorm Sandy Recovery and Resilience Program requirements. Such requirements shall be available subsequent to Contract award.

Plans, Profiles and Section Drawings:

- Develop plans for use in cost estimating and display of plans and profiles for NJ TRANSIT review and approval.
- Prepare plans, profiles, typical sections, and sketches in sufficient number and detail to define and allow for the evaluation of the alternative construction and implementation concepts.

Support NJ TRANSIT complete permit applications as required and directed by NJ TRANSIT, in a format for presentation of plan, profiles and sections, for use in an 11 inch-by 17 inch, or 8.5 inch-by-11 inch report in both hard copy and electronic format. Plan and profile drawings for these purposes shall be presented in the report and as reductions of the full-size drawings. Plans for special facilities for these purposes shall also be presented in the report as reductions of the full-size drawings. The formats shall be submitted to NJ TRANSIT followed by other agencies for prior review and approval.

Deliverables

- Drawing formats for approval.
- Technical Memoranda documenting additional engineering studies as required (fifteen (15) copies);
- Review Set, plan and profile drawings for the, sections at appropriate scales;
- Final Set, plan, profile and section drawings as above (fifteen (15) copies CADD files on CD-Disc);
- Review set, 11 x 17 inches and 8 1/2 x 11 inches drawing reductions as above (fifteen (15) copies originals plus CADD files on Disc).

(Note: For the facilities that shall be owned and maintained by Amtrak, Amtrak may elect to further modify requirements relative to the types and scales of drawings required.)

In addition and in order to facilitate reviews, the drawings shall also be made available on the project website and formatted as Adobe documentation.

Note on use of CADD: Due to the many differing needs of NJ TRANSIT and outside interested parties for review of specific elements of the projects, it shall be necessary to reproduce the design documents. They shall require enlargement, downsizing, and modification, showing without certain elements or emphasis on certain elements. To facilitate these requirements, the use of Computer-Aided Design and Drafting (CADD) is required. The Consultant shall accommodate such requirements in its proposed resource allocations.

The Design documents shall be submitted in fifteen (15) copies [10 half-scale and three full-size set of plans] to NJ TRANSIT for review and comment. Any comments /revisions generated as a result of the review process shall be incorporated during the Final Design Task.

CADD Standards Manual: The documents shall be submitted in both their original software format (e.g. WORD, EXCEL, CAD, Photoshop) and as pdf files. The electronic submittals can also be provided via FTP Site.

General Notes: The preparation of all Project plans, details and sections, related but not limited to natural gas supply and connection, electrical power distribution and interconnection, water, sewer, communications, parking, roads, traffic signalization and rail signalization as well as roadway alignment, Facility structural, right-of-way, architectural, building systems including layout plans, shall be guided by the following requirements;

- i. All Project documents shall be developed by the Consultant at such scales and of sufficient detail to indicate the full extent of work required;
- ii. The engineering and /or construction shall consist of: Key Map, Location Map, Estimate of Quantities, Distribution of Quantities sheet, Site Plan, Elevations, Sections, Typical Sections, Standard Details, etc.
- iii. All design work shall be incorporated on plans on a scale of at least 1" = 20'. Architectural plans shall be developed to a similar scale. Certain engineering drawings may be half-size;
- iv. More detailed structural drawings shall be prepared at the appropriate scales to depict necessary details;
- v. All contract documents must be made with a computer-assisted drafting program so long as the

elements specified herein are included. The latest or applicable version of AutoCAD shall be used in accordance with NJT's CAD standards. [Note – Amtrak owned and maintained facilities shall be drawn using Amtrak CAD standards. MicroStation for Amtrak – the Consultant shall confirm the version in use by NJ TRANSIT and Amtrak, – NJ TRANSIT standard libraries shall be used as applicable]

- vi. Design calculations for the work shall be recorded on 8 ½" by 11" calculation paper, shall be indexed by subject and electronic copy provided;
- vii. All plans and calculations shall be signed and dated by both the designer and checker, and shall be compiled in separate volumes for future reference;
- viii. Specifications and supplemental specifications shall conform to the Construction Specification Institute (CSI) format.
- ix. All computer runs shall be reduced to similar size, indexed and compiled with input and output identified; and,
- x. Sketches, as may be required, shall accompany design calculations to outline design concepts and results.
- xi. Signed and sealed survey drawings of all base maps surveyed for the preparation of the project plans including draft right-of-way metes and bounds descriptions.

Deliverables:

30%, 60%, 90%, 100% Plans & Specs including supporting interim Plans & Specs review packages

Electric Power Loads

The overall performance objective is to enable critical facility operations capability in the event that electricity cannot be supplied from the existing commercial grid as a result of an event consistent with the Project's **Design Basis Threat (DBT)**.

The design shall provide for selection and implementation of appropriate DER systems to supply necessary electrical power to Newark Penn Station. The two operating modes shall be: a grid-tied mode that shall supply continuous power to offset a portion of the

facility's use of commercial grid electric power; an Islanded Mode that shall meet the critical operational power needs for the Incident Transportation Plan, allowing for operation of facility critical elements.

The following information, as applicable, is required for design:

- (1) Forecast of annual diversified peak load to be served by the project.
- (2) Typical seasonal and daily load curves and load duration curves of the load to be served.
- (3) If the facility is to operate interconnected with the local utility company, the Consultant shall develop information such as capacity, rates, metering, and interface switchgear requirements.
- (4) If the facility is to operate in ISLANDED MODE, the Consultant shall also develop:
 - (a) Estimated operating power consumption data for each element required to implement the transportation plan
 - (b) Recommended distribution voltage, generator voltage, and interconnecting substation voltages (where applicable).

The system shall be designed to minimize the need for significant upgrades to existing utility distribution or transmission systems.

Incident Transportation Plan

The overall service goal is to transport as many people as possible to greater Newark, the New Jersey Hudson River Waterfront in Hudson County, or the Manhattan Central Business District (south of 59th Street) utilizing an array of bus, commuter rail, light rail, rail rapid transit and ferry services. While some services shall operate in a limited manner because of available electrical power, and some shall operate fully, all shall benefit from the implementation of the Distributed Generation Project.

Within New Jersey, a limited portion of NJ TRANSIT commuter rail system in northern New Jersey shall have electrical power provided to it from the NJ TRANSIT-DG to sustain a core system operation. NJ TRANSIT's intrastate bus services shall be operating and interstate bus services shall be redirected to locations where travelers can transfer to available trans-Hudson services. NJ TRANSIT shall be operating the Hudson Bergen Light Rail Line to provide transit service to the New Jersey Hudson River Waterfront in Hudson County, New Jersey. There are four (4) primary locations where trans-Hudson travelers shall be able to board public transit into Manhattan: Hoboken Terminal, Secaucus Junction, Weehawken Ferry Terminal and Newark Penn Station. There are also a few smaller locations where travelers shall be able to access lower-capacity private ferry services. While the focus is on AM peak period demand, it is assumed a PM peak period service shall also be provided where historically demand is more spread out.

Major Public Transit Travel Modes: Eastbound Dominant Trans-Hudson AM Flows

This is a public transit operating scenario associated with the proposed implementation of a microgrid electrical power generation and distribution system. The system would be located within a limited geographic area of northern New Jersey containing the core of the critical public transit system serving Newark, Hudson County, the New Jersey Hudson River Waterfront and Manhattan, New York. All of these locations are characterized by very high transit dependency, both for work and non-work trips.

Critical Assumptions:

- No electrical power from grid in northern New Jersey and Manhattan
- No power for ventilation of Lincoln and Holland Tunnels
- No power for traffic lights at intersections or at-grade crossing gates
- No power for Port Authority Bus Terminal or George Washington Bridge Bus Station
- No subway service in NYC. Local bus service is operating.
- No service on Newark Light Rail
- No Amtrak service
- The system is managed to balance demand on public transit services more evenly over four hour AM peak period (6-10 am) – transit service shall continue outside of this peak period time but at a lower frequency and capacity
- An PM peak period service plan shall be implemented to match the volumes of AM peak period inbound travelers
- Highways and major roads are usable as are arterials with police assistance at intersections (possibly using barricades to prevent turning movements)
- NJ TRANSIT intrastate bus routes shall operate as close to normal schedule as permitted locally
- National electrical grid feeding northern New Jersey and Manhattan initially shut down completely, and subsequently impaired from normal operation with full power restoration not achieved for two (2) weeks requiring alternate power supply.

THE NJ TRANSIT-DG POWERED FACILITIES AND SERVICES²: Base Case Scenario

- Power for switches and signals only for NJ TRANSIT owned lines:
Bergen County/Pascack Valley to Sports Complex via Secaucus Junction to Hoboken Terminal using diesel powered trains

² Assume these services are operational 24 hours after power outage begins. This allows time to position transit equipment and operating personnel. If the outage is tied to a weather condition, transit equipment may be stored someplace other than in its normal location.

- Morris & Essex Line trains operate from Maplewood to Hoboken Terminal
 - o using diesel powered trains (no use of overhead electrical power)
- Northeast Corridor switches and signals powered, electrical/diesel powered
 - o trains operate from North Brunswick to Newark Penn Station. Limited service continuing into Penn Station, New York
- Hudson-Bergen Light Rail fully powered
- Hoboken Terminal fully powered (able to accommodate all modes)
- Weehawken Ferry Terminal fully powered with service to Manhattan
- Newark Penn Station and Frank R Lautenberg Transportation Center at Secaucus Junction operable (able to accommodate all modes) Penn Station, New York, partial power sufficient to accommodate limited NJ TRANSIT service
- Rail system is otherwise physically undamaged and capable of supporting operation of a limited number of trains
- Although the focus of this exercise is on the dominant AM eastbound flows, rail, bus, ferry and light rail services shall also operate in the reverse direction during these time periods
- NJ TRANSIT and private interstate buses shall be diverted to selected intercept locations where passengers can transfer to functioning trans-Hudson modes (PATH, Rail into PSNY & Ferry into Manhattan)

Specific NJ TRANSIT Commuter Rail Lines/Services NOT Operating:

- Raritan Valley Line
- North Jersey Coast Line
- Bergen County Line (other than using line to get to Sports Complex)
- Main Line
- Pascack Valley Line (other than trains operating on it for short distance to access Sports Complex)
- Montclair-Boonton Line
- Gladstone Branch
- Morris & Essex west of Maplewood
- Northeast Corridor west of North Brunswick
- Port Jervis Line (although it is operated under contract to Metro North Railroad it must use either the Bergen County Line or Main Line to reach Hoboken Terminal, the terminus of this service)

Two main issues prevent operations on these rail lines:

- No power for at-grade crossing gates, impractical to effectively staff every at grade location; and,
- No ability to distribute power to signals and switches to outlying areas.

Bus Services Not Operating:

- No Lincoln or Holland Tunnel bus service due to lack of power for ventilation fans
- No buses into Port Authority Bus Terminal or George Washington Bridge Bus Station because of electrical power limitations permitting full functioning of these facilities

Light Rail Services Not Operating:

- Newark Light Rail shall not be operating but NJT shall provide parallel bus services and enhance other bus services serving the same general ridership markets.

CYBERSECURITY

The Project's critical nature requires a robust cybersecurity architecture. As a baseline, and where applicable, industry standard best practices for typical power grid industrial control systems (ICSs), including those found in NERC Critical Infrastructure Protection (CIP) and the National Institute of Standards and Technology (NIST) Interagency Report (IR) 7628, shall be incorporated in the design.² However, a goal of the project is to make the project more robust than ICSs given that the microgrid shall be used in emergency situations and may be critical to emergency operation continuity. In addition to referenced best practices, additional rigor shall be applied to strengthen the microgrid control system's defense-in-depth. To further enforce defense-in-depth and expand on industry standard best practices, segmentation strategies within the microgrid control system itself are required to reduce the risk of widespread control system damage as a result of malicious activity or unexpected failures.

² The Consultant shall review the SANDIA Cybersecurity design evaluation report and associated design recommendations for Project implementation, included as Attachment D.

At a minimum, the Consultant shall address the following recommendations as they relate to hardening of the cybersecurity aspects of NJ TRANSIT-DG controls;

Policy/Procedural

- Developing and maintaining security policies, procedures, training and educational material that applies specifically to the microgrid control system.
- Establishment of a cross functional cyber security team is required and should consist of Information Technology staff, control engineer, control system operator,

network and system security experts, management staff, and physical security department member at minimum.

- Addressing security throughout the lifecycle of the microgrid control system, including architecture design, procurement, installation, maintenance, and decommissioning.
- Evaluate control system security policies and procedures based on the Homeland Security Advisory System Threat Level and deploy increasingly heightened security postures as the Threat Level increases.
- Reviewing user accounts on regular basis and providing a means of quickly changing accounts when access privileges change (e.g., employment termination).
- Authentication/Encryption
- The use of separate authentication mechanisms and credentials for users of the control system network and corporate network.
- Restricting user privileges to only those that are required to perform each person's job (i.e., establishing role-based access control and configuring each role based on the principle of least privilege).
- Applying security techniques such as encryption and/or cryptographic hashes to control system data storage and communications where appropriate.
- Using modern technology, such as smart cards, for additional factors for identity verification.

Segmentation

- Implementing a network topology for the control system that has multiple layers, with the most critical communications occurring in the most secure and reliable layer.
- Providing physical separation between the corporate and control system networks.
- Employing a DMZ network architecture to prevent direct traffic between corporate and control system networks while allowing historian data transfer.

Redundancy/Spares

- Ensuring that critical components are redundant and are on redundant networks.
- Designing critical systems for graceful degradation (fault tolerant) to prevent catastrophic cascading events.

Physical Protection

- Restricting physical access to the control system network and devices.

Monitoring/Audit

- Tracking and monitoring audit trails on critical areas of the control system.

- Establishing use restrictions, monitors, and effectively managing access to the control system.

Change Control

- Expeditiously deploying security patches after testing all patches under field conditions on a test system if possible, before installation on the control system.

Security Controls

- Implementing security controls such as intrusion detection software, antivirus software, and file integrity checking software, where technically feasible, to prevent, deter, detect, and mitigate the introduction, exposure, and propagation of malicious software to, within, and from the control system network.
- Disabling unused ports and services on control system devices and networking equipment.
- Establishing usage restrictions and implementation guidance for allowing remote vendor connections, including authorization of remote access before each connection, automatic session termination, and physical disconnection of remote connection when complete.
- Implementation of strong, non-default passwords and two-factor authentication where feasible.

Distributed Energy Resources Design Attributes

Distributed energy resources (DER) are electric generation units (typically in the range of 3 kW to 50 MW) located within the electric distribution system at or near the end user. They are parallel to the electric utility or stand-alone units. DER have been available for many years, and are known by different names such as generators, back-up generators, or on-site power systems. Within the electric industry the terms that have been used include distributed generation (DG), distributed power (DP), and DER. "DER" refers to the broadest range of technologies that can provide power to the user outside of the grid, and includes demand-side measures such as energy efficiency and demand response.

Distributed Generation—Any technology that produces power outside of the utility grid (e.g, microturbines, natural gas generator's

Subtask 2.1 - Verification of Concept Design Criteria (20% baseline design)

The objective of this subtask is to ensure accuracy and update information and engineering/design data developed during previous NJ TRANSIT efforts in order to

develop the project Design Criteria resulting in 20% Design Documents. This activity is a prerequisite to initiating further engineering on the Project. The Design Criteria shall be prepared for review and approval by NJ TRANSIT. Once approved by NJ TRANSIT, the Design Criteria shall be utilized by the Consultant to progress engineering.

A list of relevant documents previously developed by NJ TRANSIT can be found in the FTA Grant Application for the Project dated March 25, 2014 and which is included as part of this RFP with emphasis on the following:

- Sandia Report Phase I dated February 2014
- INCIDENT TRANSPORTATION PLAN

Pivotal Design Criteria considerations include but are not limited to;

- A thorough analysis of power usage, projected and temporal, with regard to peak and non-peak loading. Similarly, ramping of power demand shall also require characterization. Project/System Power demand characterization from a generation and distribution perspective relative to operation of each facility must also be analyzed.
- In all cases, DG type and configuration accounting for physical footprint and general layout requirements shall also be determined. (Discussed further in Subtask 2.2 – Engineering and Design).

Physical design parameters/specifications (including electrical power loads) and construction requirements for Distribution infrastructure to support facility operations including and as applicable;

- o Other NJ TRANSIT identified Project transformers;
- o Power distribution to control and communication systems.

Another key component of 20% Design verification is the selection and verification of appropriate power generation technology if technically and financially practicable and desired by NJ TRANSIT. The Consultant shall assist NJ TRANSIT in this selection by providing a comprehensive review and summary of available technologies to achieve the requisite power generation capability for this NJ TRANSIT-DG Distributed Generation component critical operation. As part of this evaluation, the Consultant shall characterize a cost-benefit analysis of each technology for power generation accounting for maximum operational efficiencies in the grid connected mode and islanded modes, related emission characteristics, along with the use of heat-recovery steam generators as practicable. Finally, the Consultant shall verify the peak load assumptions and critical operation loads at Newark Penn Station, i.e. the selected DG technology(s) and resultant power generation capacity is optimal to achieve stated emergency operational power demands and advise NJ TRANSIT accordingly. This review shall apply to both the Grid Connected as well as Islanded modes of operation. Facility DG configurations must be designed to

be black-start capable as necessary. A life cycle cost analysis shall be presented in support of the Consultant's conclusions.

The results of this study shall be provided to NJ TRANSIT in report form for review and approval. As noted above, this effort is a pre-requisite before commencing the next level of Design and Engineering.

Deliverable:

30%,60%,90, 100% Design Documents
Design Criteria Manual

Power Generation Technology Analysis Report for NJ TRANSIT-DG, Newark Penn Station

Subtask 2.2 – Engineering and Design

The Consultant shall assist NJ TRANSIT in the selection and implementation of appropriate DER technology for Newark Penn Station as described in Task 2 above. Potential technologies may include one or more, or combinations of the following.

- Combined heat and power, or CHP, is the joint production of both heat (usually steam or hot water) and electricity from a single fuel source. Collecting and making productive use of that waste heat can result in total efficiencies over 70 percent. Combined heat and power is often referred to as cogeneration.
- Energy storage, a device that stores energy to produce useful work at a later time
- Demand side energy management, the modification of consumer demand for energy through various methods such as changes to operations, energy efficiency measures, demand response, etc.

Subtask 2.2.1 – Facility Structural Modifications Supporting DG

Building Modifications

Any modifications to Newark Penn Station arrangements shall depend on the selected equipment or combinations of DG equipment including fuel cells, photovoltaics and CHP with provisions for future expansion and aesthetic and environmental considerations.

1. DG Equipment shall be located in an area that shall not interfere with future Newark Penn Station expansion and isolated from main facilities to control noise;

2. For semi-outdoor or outdoor locations, enclosures for controls shall be enclosed in manufacturer supplied walk-in metal housings or site fabricated closures;
3. Structural design – The Consultant shall advise NJ TRANSIT and upon approval design any modifications necessary to support the addition of DG equipment . Provision must be made in such event for support of piping, trays and conduits.

Live loads. Modifications to Buildings, structures and all portions thereof shall be designed and constructed to support all live and dead loads without exceeding the allowable stresses of the selected materials in the structural members and connections as applicable.

Other loads. In addition to the live and dead loads, the following loadings shall be provided for, as applicable:

- (a) *Wind loading.* Modified structures shall be designed to resist the horizontal wind pressure available for the site on all surfaces exposed to the wind and in accordance with any applicable code or standards requirements;
 - (b) *Seismic loading.* Modified structures shall be designed to resist seismic loading in accordance with the zone in which the building is located and in accordance with any applicable code or standards requirements;
 - (c) *Equipment loading.* Equipment loads are furnished by the various manufacturers of each equipment item. In addition to equipment dead loads, impact loads, short circuit forces for generators, and other pertinent special loads prescribed by the equipment function or requirements shall be included.
 - (d) *Foundation design.* Foundations shall be designed to safely support all structures, considering type of foundation and allowable bearing pressures.
4. Vibration mounts or “floating floor” foundations where equipment or equipment foundation inertia blocks are separated from the main building floor by springs or precompressed material shall generally not be used. In these circumstances where such inertia blocks are considered necessary for equipment not normally so mounted, written justification shall be included in the project design analysis supporting such a necessity and shall be submitted to NJ TRANSIT for review and approval prior to being used.

Safety

The following general requirements with regard to safety shall be incorporated where applicable;

- (1) Equipment shall be arranged with adequate access space for operation and for maintenance.
- (2) Safety guards shall be provided on moving parts of all equipment.

- (3) All valves, specialties, and devices needing manipulation by operators shall be accessible without ladders, and preferably without using chain wheels. This can be achieved by careful piping design, but some access platforms or remote mechanical operators may be necessary.
 - (4) Impact type handwheels shall be used for high pressure valves and all large valves.
 - (5) Valve centers shall be mounted approximately seven feet above floors and platforms so that rising stems and bottom rims of handwheels shall not be a hazard.
 - (6) Stairs with conventional riser-tread proportions shall be used. Vertical ladders, installed only as a last resort, must have a safety cage if required by the Occupational Safety and Health Act (OSHA).
 - (7) All floors, gratings and checkered plates shall have non-slip surfaces.
 - (8) No platform or walkway shall be less than three feet wide.
 - (9) Toe plates, fitted closely to the edge of all floor openings, platforms and stairways, shall be provided in all cases.
 - (10) Adequate piping and equipment drains to waste shall be provided.
 - (11) All floors subject to washdown or leaks shall be sloped to floor drains.
 - (12) All areas subject to lube oil or chemical spills shall be provided with curbs and drains,
 - (13) Adequate illumination shall be provided throughout the plant. Illumination shall comply with requirements of the Illuminating Engineers Society (IES) Lighting Handbook
 - (15) Mechanical supply and exhaust ventilation shall be provided for all of the equipment where applicable and necessary. Battery room (as applicable) shall have separate exhaust fans to remove hydrogen emitted by batteries.
 - (16) Noise level shall be reduced to at least the recommended maximum levels of OSHA. Control valves shall be designed to limit noise emissions.
 - (17) Each equipment item shall be clearly labelled in block letters identifying it both by equipment item number and name. A complete, coordinated system of pipe markers shall be used for identification of each separate cycle and power plant service system. All switches, controls, and devices on all control panels shall be labelled using the identical names shown on equipment or remote devices being controlled.
1. Provide 1" = 20' scale layouts of DG Power Equipment, associated building or facility modifications, associated electric power inverters, transformers, cabling and distribution infrastructure, along with grading, utility and drainage requirements, as well as construction cost estimates and half-size drawings. One set of copies shall also be required.
 2. The Consultant is advised that supporting documentation accompanying this

RFP is the result of a 20% design phase to assist in ascertaining the optimum physical layout and construction for this project. Particular attention should be focused on NJ TRANSIT Newark Penn Station operations requirements with regard to the introduction of new equipment.

3. The goal of this subtask is to confirm baseline (20%) design criteria compatible with the 20% design package that shall be advanced to final design of the Project. While the data obtained in other sections may provide some of the standards and design criteria, this information shall be augmented through detailed discussions with NJ TRANSIT personnel as necessary, in the engineering, maintenance, and operations departments as well as representative staff of regional power generation, transmission and distribution agencies and regulatory authorities. If not already available in published standards, the criteria and design parameters established through these discussions shall be documented for use on this Project, and a minimum shall include the following:
 - Building and facilities design modifications
 - Supporting Electric Power cabling modifications and additions, control functions Distribution Facilities
 - Permanent and temporary clearance restrictions
 - Typical subgrade cross sections where required
 - Drainage standards where required
 - Slope Protection Standards where required
6. The above list is not all inclusive, but is shown to illustrate the nature of criteria and parameters that must be established for consideration of constructability studies. The design criteria shall be in accordance with applicable standards and/or recommendations set forth by; American National Standards Institute (ANSI), American Society of Mechanical Engineers, Institute of Electrical and Electronic Engineers, National Electrical Manufacturer's Association, National Fire Protection Association, current NJ TRANSIT design standards as applicable as well as American Railway Engineering and Maintenance Association (AREMA) design standards, where applicable. The Consultant shall attempt to improve upon these criteria with regard to increasing and/or improving Newark Penn Station operations, power generation, system resiliency and power distribution if possible.

Deliverable:

Design Plans and Specifications of the new Newark Penn Station DG Facility modifications and additions and associated electric power distribution requirements as detailed above.

Subtask 2.2.2 - Power Management Design

DG Power Generation Control

- All generators at the DG powered Newark Penn Station shall be retrofitted with a networked connected controller.
- Local generator controls must regulate local voltage and frequency during microgrid operation and be retrofitted with control switchgear that enable paralleling and synchronizing to the grid, safely disconnecting from the grid, and synchronizing and paralleling with other generators.
- Local controllers must also provide adequate dynamic response so that transient stability shall be maintained for load steps, generation unit outages, and faults.
- Controllers must be enabled to respond to EMS and Supervisory Control and Data Acquisition (SCADA) commands to support microgrid operations and market based decisions.
- DG controllers at Newark Penn Station shall have network capabilities to support monitoring functions.
- In the event of CHP implementation, continuous monitoring and control should be implemented by recording vital operational parameters (e.g., heat & power outputs, fuel consumption, water consumption, gas pressure and temperature, etc.) and reporting alarm conditions to the control center.
- DG controllers should provide provisions for remote starting and stopping and provide detailed operational data for monitoring and situational awareness purposes.

Load Control

- Monitoring of microgrid loads should be conducted and configured to record real power, reactive power, frequency, and voltage for all buildings and feeders.
- Load data must be recorded at high enough fidelity to conduct load-shedding schemes should they become necessary.
- Inrush current mitigation strategies should be implemented for all problematic loads, including large motor loads and transformers.
- Load control must be implemented in all single-phase systems to maintain proper phase balancing, as outlined in ANSI/NEMA MG 1-2006.
- Automation should be added to medium and /or low voltage switchgear to regulate load connections, depending on the building/equipment location and cost.

- Real-time and historical load data for all building and feeder loads during both islanded and normal operation should be collected and used to identify issues and opportunities for improved performance and operational savings.
- Smart metering should be implemented to collect load data and augment grid telemetry.
- Grounding schemes need to be maintained during microgrid operations.
- During microgrid operation, facility operation mitigation strategies should be implemented to reduce stress on power system if needed.

Distribution and Protection System

- Overcurrent relays, synchronizing relays, breakers, and fuses shall be necessary to protect the distribution system assets during islanded conditions, normal operations, and the brief transition intervals.
- All protection must conform to industry requirements, including the addition of grounding apparatus if necessary for Medium Voltage (MV) systems.
- For faults within the microgrid, the affected area must be isolated from the rest of the microgrid before the entire microgrid is disbanded, requiring facilities or equipment within the affected area to revert to standard building backup.
- For faults within a building, the building should disconnect from the microgrid before other (unfaulted) buildings, facilities or equipment assumes that the fault is in the MV network.
- Faults within equipment shall result in their disconnection before other protection is activated in either the Low Voltage (LV) or MV network.
- Coordination studies should be conducted and implemented for both microgrid and grid connected conditions.
- Protection schemes during grid connected and microgrid mode should be implemented to account for difference in power flow directions, distance calculations, and pilot schemes.
- The Cis required to develop detailed construction phasing and cutover plans for replacement and/or modifications of existing systems.
- Provide interfacing, coordination and integration of the new systems with existing systems.
- The Consultant shall obtain approval of Electric Power DG design for Newark Penn Station from NJ TRANSIT as necessary.

Deliverables:

Power Management Design 30%, 60%, 90% and 100% - Final

Prior to the start of any work, the Consultant shall submit a design schedule to NJ TRANSIT for review and acceptance. Once the 20% design package is validated,

resulting in the selection of the “best” design and operations option, NJ TRANSIT shall direct the Consultant to progress the 20% Design to the 30%, 60%, 90% and 100% Design Levels. The Consultant shall not proceed with the 30% of this project until directed to do so by NJ TRANSIT.

The 30%, 60%, 90% and 100% Designs shall include:

1. Site Preparation, and Layout – the Consultant shall complete necessary field assessment. The Consultant shall develop plans and specifications at all design progress levels that are complete for the preparation of the site(s) including modifications to existing transmission facilities.
2. Site Plans – the Consultant shall prepare and submit 30%, 60%, 90% and 100% site plans and specifications.
3. Electrical Systems – the Consultant shall prepare and submit 30%, 60%, 90% and 100% plans and specifications and perform all calculations for the Electrical Work, including but not limited to the following:
 - a. Location Plan
 - b. Wiring Plans (Single Line Diagram, Main Wiring Diagram)
 - c. Wire, Cable and Conduit Runs
 - d. Relay and Control Schematics
 - e. Cable List
 - f. Electrical Details
 - g. Equipment Layouts
 - h. Hardware
 - i. Bill of Material
4. Structural – the Consultant shall prepare and submit 30% plans and specifications and perform all calculations for any Structural design necessary. A separate Structure Package shall include the following:
 - a. Equipment Mounting Details
 - b. Structural Support Modifications
 - c. Steel Details
 - d. Structure, and Foundation Repairs as Required
 - e. Bill of Material
5. Technical Specification – Technical Specifications shall be prepared to the 30%, 60%, 90% and 100% levels in CSI format for construction tasks performed by a contractor and for all special and non -standard Equipment and Material.

6. Construction Cost Estimate and Schedule – the Consultant shall prepare an “order of magnitude” construction cost estimate at the 30%, 60%, 90% and 100% levels of design.
7. Administration – the Consultant shall provide administrative Project Management as outlined in this RFP.

The coordinated design schedule shall assume NJ TRANSIT Facility Managers and Project Management staff shall require twenty-one (21) calendar days from the date of receipt of each design submittal for review and comments.

Geotechnical analyses necessary, as determined by NJ TRANSIT, shall include the collection and review of pre-existing geotechnical test boring and laboratory data as available from facilities designated for energy resiliency improvements. Additional borings and laboratory testing may be approved by NJ TRANSIT as needed.

An analysis shall be performed for structural support options. Settlement and stability characteristics of proposed foundations for DG equipment shall be evaluated, as well as a conceptual-level comparison of construction costs. The analysis shall also consider regulatory compliance implications for presented options. In addition, the Consultant shall assist and support NJ TRANSIT in satisfaction of regulatory compliance permitting and related efforts.

A conceptual geotechnical recommendations report shall be prepared summarizing the existing data available, the results of the foundation(s) analysis, and preliminary recommendations regarding the preferred structural support pad alternative.

Deliverables:

30%, 60%, 90% and 100% Design Packages as outlined above.

Subtask 2.2.3 - Civil, Structural, Geotechnical & Hydraulic

- a. Perform the required Civil, Structural, Geotechnical and Hydraulic design calculations necessary for construction. Compare and analyze alternative foundation design and construction methods as applicable.
- b. Prepare design plans and typical preliminary details for the required structures as necessary. Show horizontal and vertical control lengths and widths of structures, typical foundation design and construction staging. Specify design criteria to be used.

The civil drawings shall graphically depict the proposed DG equipment installations and all associated generation and distribution equipment in support of Newark Penn Station operations requirements and ACOE and NJDEP Land Use regulatory limits of disturbance for the selected Project site where applicable. Demolition of structures and utilities to be relocated shall also be identified as applicable. The structural drawings shall depict the type of structures necessary, and the size and type of foundations to be proposed. The geotechnical design shall include a report and foundation recommendations as necessary. Foundation design shall be based upon geotechnical data obtained from existing data and by the borings taken for this project under the engineering task. A geotechnical investigation shall be conducted to support the design and contract packaging tasks where required and approved by NJ TRANSIT. A construction-staging plan shall describe the methods and sequence of construction to complete the project along with detailed description of construction windows so as to maintain uninterrupted Newark Penn Station service and adjacent commercial operations as applicable. The hydraulic design shall include the delineation of the drainage patterns for modified facilities and associated appurtenances as well as modifications to related electrical power distribution infrastructure including, but not limited to, inverters, transformers and control apparatus. The location of drainage features shall be defined and sized. Drainage requirements in floodplains and wetland areas shall be defined. A report describing the entire drainage program for the project shall be prepared discussing the impacts and requirements of NJDEP, USACOE and USEPA.

It is the Consultant's responsibility to ensure that all plans and drawings developed for this Project shall comply with project permit conditions and associated regulatory compliance requirements as developed by NJ TRANSIT under separate Contract. Upon the direction by NJ TRANSIT, the Consultant shall be prepared to demonstrate said compliance to all Federal and State regulatory agencies, NJ TRANSIT and/or Amtrak .

Design considerations. The DG system shall meet all applicable regulatory requirements, and the application shall be the most technically and economically feasible method of accomplishment for such regulatory compliance. All alternative solutions addressing compliance shall be considered which shall satisfy the given load and which shall produce the least objectionable wastes. Newark Penn Station design modifications shall be such as to accommodate future additions or modifications at minimum cost.

Deliverables:

Reports as detailed above.

30%, 60%, 90% and 100% Plans & Specs and in conformance with Project General Plan and Specification Requirements as well as General Notes as detailed in Task 2 – Engineering above.

Subtask 2.2.4 - Subsurface Investigations

The Consultant shall ensure that uncertainty relative to Project Subsurface conditions shall be minimized to the extent practicable by the application of a subsurface investigation effort where necessary to support additional structures or modifications to existing facilities. Prepare boring plans including Railroad flagging requirements (where necessary), subject to NJ TRANSIT and Amtrak approvals, for a Soil Engineer's use in order to take borings and provide diagrammatic sketches for foundation explorations and test pits for subsurface, DG related Newark Penn Station modifications and design, associated distribution infrastructure, natural gas supply connections, and service road design data. When required, prepare Site Specific Work Plans (SSWP) for Amtrak and NJ TRANSIT review and approval. The report shall include a proposed schedule that shall allow work to continue without impact to daily rail passenger service as applicable.

The plan shall identify the locations at which additional subsurface information is required in order to ascertain the bedrock profile and quality of subsoils. The Consultant shall conduct the investigation and document the data and findings in a geotechnical report, providing an appropriate level of analysis as required to support final design, temporary support and underpinning design and to determine constructability implications for all facilities and systems associated with the Project.

- a. An outline of the Geotechnical Investigation and a Soil Borings Plan shall be submitted to NJ TRANSIT for approval, prior to the initiation of the detailed investigation. The Consultant shall arrange for the services of an Archeological Sub-consultant acceptable to NJ TRANSIT to provide field support during this phase and in concert with the findings of any previously developed Section 1(A) Report of Archeological Resources and Effects. In the event that such a report is not available, the Consultant shall develop necessary Federal and State compliance documentation as required. All test boring samples shall be inspected by the Archeological Sub-consultant, to determine the possible existence of archeologically significant artifacts. The Archeological Sub-consultant shall prepare and submit all necessary documentation in compliance with applicable requirements set forth by the New Jersey State Historic Preservation Office and in compliance with Federal Section 106 guidelines.
- b. The Consultant shall designate and stake out all necessary boring locations prior to initiation of field activities as well as notify NJ TRANSIT when said task is complete in order to facilitate NJ TRANSIT review. The Consultant should not rely solely on historic or archived soils data to formulate necessary documentation. This effort shall require accumulation of field data and subsequent reporting as detailed herein.

- c. Perform necessary foundation borings and field and laboratory soil tests.
- d. Coordinate and inspect any boring operations and test pit excavations where applicable.
- e. Analyze all data obtained by borings and laboratory tests and prepare a soils report with recommendations for approval by NJ TRANSIT.
- f. Identify temporary or permanent sheet piling and dewatering measures for construction of structures where applicable.

Deliverables:

Geotechnical Investigation Plan and Boring Program

Boring Plan and Profiles

Geotechnical Report, with boring logs and analysis for each geologically discrete project element.

Section 1(A) Report of Archeological Resources and Effects as necessary.

Subtask 2.2.5 – Topographical Survey Reference NJDOT Survey Standards

Where directed and approved by NJ TRANSIT, the Consultant shall conduct a topographic survey of the proposed Project footprint at scales of 1" = 40' horizontal and 1" = 2' vertical. The base sheets shall show the project coordinate grid system, datum references, all existing surface features and the existing utilities as verified by NJ TRANSIT and through field observation. The Facility location (footprint), including related site appurtenances, utility and drainage work, shall be shown on reproductions of the base sheets for the 100% PE design level. The surveys shall include, but not be limited to:

- Horizontal datum (NAD 83) control in the New Jersey and Pennsylvania Plane Coordinate System.
- Contours at 1' intervals and key spot elevations to accuracy of 1/10 of a foot.
- Existing above and below utilities, from NJ TRANSIT, Amtrak and Utility records.
- Site topography including buildings, structures, drainage channels and any other features.
- Conditions of soils and pavement, including evidence of hazardous waste with the support of a qualified Environmental Inspector as provided by NJ TRANSIT under a separate contract. Conditions of soils shall be determined through borings or test pits.
- Property lines, easement lines, railroad and street rights-of-way and any property encumbrances on or adjacent to the site.

Any drawings or data obtained from NJ TRANSIT shall require verification in the field.

General Notes Regarding Topographical Surveys:

- All surveying activities for the Project as prescribed by the Task shall be coordinated with the requirements of; Tasks 4 (Environmental Analysis), 5.0 (Required State and Federal Permits) and Task 6 (NJDEP Site Remediation Compliance), with regards to Data Collection and Mapping.
- Photogrammetry: The Consultant shall secure, review and analyze existing survey data and topographic mapping previously prepared for nearby projects either sponsored by NJ TRANSIT, adjacent property development or Amtrak. The topographic mapping shall be field edited, and necessary changes drafted.
- The Project shall be surveyed under the New Jersey State Plane Coordinate System, NAD83. The Vertical Datum reference shall be to the NGVD29 system. Monumented baselines within the project limit area shall be recovered and missing monuments re-established.
- Location of Borings, Test Pits and Probes: Borings required for the subsurface investigation tasks shall be staked-out in relation to the established baseline monumentation and plotted on prepared boring location plans. Elevations and coordinates shall be established within the project datum for each boring location.
- Location of Utilities and Adjacent Structures: Utility companies having facilities in the project area shall be contacted to provide plans of their facilities that may be affected by the proposed design. Included shall be sewer, water, electric, gas, telephone, data transmission and cable television. Upon receipt of the available plans, a survey field edit shall be performed to verify all subsurface utilities within the right-of-way limits. Inverts of sanitary and storm sewer pipes at manholes, catch basins and outfalls, and top of grate elevations shall be obtained for the affected facilities where accessible by survey equipment. Further details regarding these requirements are provided in Subtask 2.2.6.
- A composite utility plan shall be compiled, incorporating the plans obtained from the utilities and field survey notes. From this, the Consultant shall identify facilities in conflict with the proposed design.
- Field surveys shall be conducted as required to provide the additional information needed to perform the design, such as critical clearance dimensions to adjacent development, property boundaries, environmental control features, etc.
- Field surveys shall utilize the existing horizontal and vertical control established for the original mapping. New monumentation shall be established, as required, to facilitate construction.
- Topography: Fills or cuts due to construction or other activities after the original topographic maps were prepared, shall also be field edited. New contours (@ 1' intervals) and elevations shall be drawn on the topographic maps.

- The photogrammetric mapping shall be prepared in a scale of 1" = 40' with field survey details needed for the existing structures/buildings, existing electric power distribution and transmission facilities, adjacent rail structures including bridges, rail station(s) and signal and communication system components located in or near the Project Area. It shall include:
 - i. A survey of all structures to verify location and size of all poles, towers, foundations, elevations from top of rail, top of road or structural details.
 - ii. Detailed surveys of existing buildings, bridges, retaining walls and other structures within the project area.
 - iii. Drainage structures, utilities, streets, roads, tree masses, etc.
- Existing plans obtained from others may show structures referenced to a different vertical datum than the project vertical datum. Survey work shall be performed to relate all established vertical datum to the project datum. For preliminary design purposes, the azimuth and bearing of each roadway and track within the project limits shall be obtained.
- Preparation of Cross-Sections: Where agreed upon and required by NJ TRANSIT, Cross-sections of the Project area at 50' intervals shall be developed through photogrammetric methods and field survey verification.
- Digitized Data: To convert the field surveys, as well as the topographic mapping in digitized format, the Consultant shall Import all survey data by file transfer directly to electronic drawings. The data shall be translated to a computerized system for convenient use with CADD systems used by NJ TRANSIT or Amtrak.

Deliverables:

Topographical Survey as detailed above.

Topographic Survey (Supplement to NJ TRANSIT's baseline mapping as necessary).

Subtask 2.2.6 – Utility Engineering

1. Utility Engineering is also a vital component of the preliminary engineering and production of 30%, 60%, 90% and 100% construction plans. Using already available Project data as a starting point, the Consultant shall identify all existing and proposed utilities within and immediately adjacent to the site including, but not limited to, the aerial, surface and subsurface PSE&G power lines and commercially owned natural gas transmission pipelines in the Project area. The Consultant shall identify the locations of possible utility impacts or conflicts resulting from the project and determine the required improvement. The Consultant shall locate all types and sizes of utilities, including mains, high pressure lines, aerial transmission lines, fiber optic banks, etc. and prepare both existing utility and utility relocation drawings.

Where agreed upon and required by NJ TRANSIT, the Consultant shall conduct Subsurface Utility Engineering (SUE) for determination of the location of underground utilities. The Consultant shall prepare a SUE Plan, comprising of Test Pit Plans identifying where test pits are needed, a description of what equipment and methods shall be used, method of repair to existing properties, and a plan for coordinating with municipal and state requirements during the investigations. Innovative and non-destructive methods for the preliminary location of utilities shall also be considered.

The utility drawings shall include all facilities such as duct banks, vaults, manholes, telephone poles, utility poles, hydrants, and other relevant structures or facilities that may be potentially impacted by Project Construction. The Consultant shall determine the utility owners' horizontal and vertical controls, and convert the survey the data to comply with the project standards. The Consultant shall catalog data collected, and maintain file copies of source documents, such as deeds, licenses, plots, easements, or other documents used to locate utilities.

Utilities shall also be located on the base mapping.

Upon NJ TRANSIT direction, the Consultant shall support NJ TRANSIT meetings with utility owners and associated regulatory agencies to ascertain the requirements for permanent utility relocations, as well as for temporary supports and work-around as required during construction. The Consultant shall support NJ TRANSIT in developing Utility Agreements based on these discussions.

The Consultant shall also develop utility cost estimates for all temporary and permanent work, including providing support during construction. The format of the Cost Estimate reports shall be consistent with NJ TRANSIT's Superstorm Sandy Recovery and Resilience Program requirements. Such requirements shall be available subsequent to Contract award.

The Consultant shall develop the drawings in compliance with rules of the appropriate regulatory authority.

The Consultant shall evaluate and provide for electrical, water, natural gas supply, sewerage and other utilities needed to support construction operations in all design documentation. The Consultant shall incorporate these services into the utility cost estimates and agreements.

General notes regarding Utilities and Coordination:

- During development of the preliminary design documents for utility work, liaison shall be maintained with agencies and utility companies whose facilities maybe impacted by this Project. Available utility plans, records, reports and surveys

shall be initially reviewed and shall be followed by a site inspection to:

- i. confirm the specific existing utilities in the field;
 - ii. assess the condition of such utilities;
 - iii. determine the impact of design on such utilities; and
 - iv. determine the impact of construction on such utilities.
- The location, type, and size of the systems operated by the respective utilities shall be identified. Affected utility owners shall be contacted by NJ TRANSIT to discuss general policies concerning the operation, protection, support, relocation, and reconstruction of the facility.
 - The utility facilities can be relocated as necessary, subject to approval by the appropriate utility and NJ TRANSIT. Coordination meetings shall be scheduled to obtain utility input during the early stages of the design, at which time comments shall be considered for use during the development of the preliminary design documents.
 - The Consultant shall establish, using the standards and practices of utility owners, the design criteria for utilities that shall be used as a basis for the preparation of construction phase documents. The standards shall be developed using current NJ TRANSIT/Amtrak/utility standards as a base, with modifications to be made where necessary to accommodate the special needs of this Project. Proposed modifications or additions to existing design standards shall be identified and submitted to NJ TRANSIT/Amtrak/Utilities as applicable for their approval prior to use to support design preparation.
 - All design documents for utility relocation shall be prepared in accordance with applicable regional, county or municipal, and utility company's applicable rules and regulations. The Consultant shall prepare the necessary sketches, plans, and agreements, along with descriptions of work, to accompany utility permit applications. The Consultant shall also be available to assist NJ TRANSIT and the Utilities in preparing agreements for the correction of utility-related problems with the respective utility owners, if required.
 - The Consultant shall provide necessary documents and applications required to permit rearrangement of utilities and/or secure easements. Standard procedures for submission of modifications, changes or relocations shall be noted in the construction contract documents.

Deliverables:

Subsurface Utility Engineering Plan
Existing Utility Drawings

Proposed Utility Relocation Drawings

Utility Cost Estimates

Utility Agreements – drafts and final for reimbursement of engineering cost.

Utility Catalog and Files

Physical Facilities 30%, 60%, 90%, 100% Construction Plans as detailed above

Subtask 2.2.7 - Structures

- This task encompasses the establishment of design criteria and standards for structural elements of the Project in accordance with design standards as set forth above and as applicable, as well as NJ TRANSIT and Amtrak standards and specifications as applicable. These standards, in addition to the normal structural design standards of AREMA, AASHTO, NJDOT, ACI and AISC, where applicable, shall also contain criteria to meet specific requirements of applicable railroad and roadway design standards. Where conflicts occur in the railroad design criteria and standards, NJ TRANSIT and Amtrak shall provide guidance as necessary. These criteria and standards shall be the basis for developing preliminary structural schemes, construction staging procedures and preliminary drawings in sufficient detail so as to identify the structural requirements of the Project.
- The major structural requirements for this Project shall be imposed by the layout and operational schemes of the proposed DG Newark Penn Station facility modifications and new or modified alignments for power distribution. Alternate structural systems, elements, and components shall be evaluated considering various substructure and superstructure systems to achieve low maintenance, aesthetic, practical and cost-effective structures.
- The evaluation of candidate structures shall be an iterative process. Constructability, in light of operational and environmental constraints, shall be considered for all alternatives. Maintenance criteria shall be included in the evaluation.
- The structural effort under this task shall include the design and layout of the new Project Newark Penn Station structures. Additional factors of ROW or NJ TRANSIT property limitations, impact on abutting properties and facilities, constructability, maintenance, and cost shall be considered for structural alternatives.
- Designs and plans for structural elements required for the Project shall be prepared in sufficient detail to evaluate and assess the alternatives to be considered. Plans to be developed under this task shall include, but not be limited to:
 - i. Foundation, building and superstructure plans
 - ii. Culverts

- iii. Retaining walls
- iv. Structural modifications to existing facilities

Major requirements of this task shall include preparing cost estimates for the primary designs, alternatives and sub-options to be developed by the Consultant for comparison of cost effectiveness, and determination of funding implications. As noted previously, cost estimates shall be prepared consistent with NJTRANSIT's Superstorm Sandy Recovery and Resilience Program requirements. Such requirements shall be available subsequent to Contract award.

- The results of this work effort along with recommendations for final implementation shall be presented to NJ TRANSIT for approval and selection of the preferred concept. All alternative concept studies and their comparative cost, constructability, performance and maintenance shall be presented. Recommendations shall be fully supported and documented in the Draft Design/Project Definition Report.
- Detailed quantities shall be checked, compiled and indexed for future reference. Technical and procurement specifications, required as a result of the design process, shall be identified for future inclusion into the final contract documents.

Subtask 2.2.8 - Power Management Communications

The Consultant shall establish design criteria for the Communications Systems to be compatible with NJ TRANSIT systems. Proposed systems shall specify the communication infrastructure that is required to maintain normal communication systems necessary for functional interface with operations and interconnection with the area commercial power grid.

The control architecture for the NJ TRANSIT-DG is program essential to the stability and efficiency of its operation. A dedicated communication network shall be required for monitoring and data exchange. Optimal operation shall require controllers on energy resources that shall likely replace or interface with OEM controls.

Microgrid Communication Network

- Network connectivity shall be provided to all microgrid monitored assets, controlled assets, and the primary and secondary control and monitoring centers.
- Network communications must satisfy low latency requirements for control and provide a highly reliable information channel that retains the integrity of data.

- Control system network must, at minimum, meet industry standard best practices for cyber security (reference cyber security section).
- Network architecture and communication protocols must have point-to-point and broadcast capabilities.
- All communications must support interoperability between all distributed devices using published object functions, standard commands, and standard protocols.
- Communications must be adequately extensible to accommodate future additions/modifications.
- Interoperability requirements must also be satisfied for all interconnection control and monitoring systems from NJ TRANSIT and local utilities.
- Network and communication device time synchronization shall be implemented between all transacting parties within a reasonable degree of accuracy.
- Fiber optic communications shall be implemented for the bulk of the microgrid communications.
- Rather than simple logical isolation, all microgrid control system network communication shall be physically isolated from all other networks (as opposed to VLAN separation).
- Provisions for remote access shall be provided for troubleshooting, remote maintenance, and software updates.
- Controlled communication channels shall be established for data transfer between the microgrid network and all rail, bus and ferry operators as well as utility partners, including PSE&G, and PJM.
- Network architecture shall be hardened with redundant communication paths, uninterruptible power supplies, critical spares, and environmental controls.
- Critical network equipment shall be located above the DBT flood level and have adequate physical protection from tampering and unauthorized access.

Energy Management System/SCADA

- An EMS and SCADA system shall be installed for the NJ TRANSIT-DG separate of any existing information systems or rail operation systems currently in place.
- The EMS and SCADA system shall have an Human Machine Interface (HMI) to facilitate monitoring and man-in-the-loop control.
- Full backups of the EMS and SCADA systems shall exist in a geographically diverse location and located above the DBT flood level.
- EMS and SCADA systems shall monitor all critical parameters of the microgrid to manage frequency, voltage, energy/power production, load shedding, microgrid activation, generation asset optimization, and synchronization in accordance with ANSI/NEMA C84.1-2006 and IEEE 1547 standards.

- The EMS shall provide manual and automated start capabilities, including black start.
- Provisions for manual microgrid switchover (for testing or preventative measure purposes) shall be included to disconnect from utility during normal operations.
- Hierarchical controls shall be implemented so that the EMS can manage real and reactive power in a holistic fashion, maintain adequate reserve margins, and properly respond to load fluctuations.
- All parameters and measurements should be archived using data historian functionality.
- Data historians shall be complete with data filters based on time and value rate of change, configurable sampling rates, and shall either save all historical data in provisions for long term storage or have a round robin database with sufficient storage.
- Data acquisition equipment shall contain set, get, forced, and unforced capabilities.
- All EMS/SCADA field equipment shall be protected by environmentally hardened enclosures to protect against the elements, tampering and DBT conditions.
- The SCADA system shall extend to all isolated facilities for monitoring purposes and at minimum shall monitor generator real/reactive power output, building voltage and current draw, fuel levels, and state of renewable energy output (if any).
- Continuous, 24/7 monitoring shall be conducted by qualified operations personnel.
- A paging system shall be put in place to provide monitoring and alert capabilities via a paging system so operations and maintenance personnel can quickly respond to failures or potential problems.
- Remote access to the EMS/SCADA shall permit remote monitoring, diagnosis, troubleshooting, software/firmware updating and limited control during normal and emergency conditions.
- Remote access functionality must satisfy cyber security best practices and recommendations (reference cyber security section).
- Persistent remote access connections shall not be permitted and physically disconnected when not in use.
- Remote connections shall be controlled with connection timeouts and strong encryption and authentication methods.

Design plans, specifications and cost estimates shall be prepared for the necessary modifications to communications facilities affected by this project. Cable routing, communications, bungalow layouts, and typical details shall be shown. The work shall be performed in accordance with applicable Federal and State requirements, PJM and

PSE&G requirements as well as NJ TRANSIT standards as applicable and subject to review and approval by all agencies as applicable. Installation instructions and plans for the communication system configuration shall be provided.

Deliverables:

Performance Specification for Communications Backbone Power Management Infrastructure, Emergency Alarm Stations, Fire Alarm Systems. – draft and final.

Subtask 2.2.9 – Concept of Operations

The objective of this subtask is to assist NJ TRANSIT in developing an outline for baseline operations of the DG components of the microgrid.

Under normal conditions, when the grid is fully available, DG components of the microgrid shall be electrically connected to the grid. Such DG components shall deliver energy for example, to Newark Penn Station.

Under a scenario involving a regional or local blackout condition, DG components of the microgrid would become the primary source of power for affected Newark Penn Station. This would require preplanned switching coordination with the utility after it has been determined that utility power shall not be restored for an extended time period. If the outage affects the NJ TRANSIT system as well, then the tie points to the grid would also be opened. Interlocks and synchronizing relays would be required at each location where switching into an energized secondary source is needed. After a regional outage, it is likely that the microgrid DG components shall be designed to initially trip off line. For this reason, the DG components are required to have black-start capability.

(A more detailed discussion of these requirements is presented in the attached Operational Design Concept/SANDIA Phase I Report - Appendix 1.)

Equipment requirements shall be determined and corresponding capital funding needs identified. The Consultant shall provide an approximate schedule for equipment acquisitions, long lead procurement projections, if any, in terms of months prior to service commencement.

For the outline of the baseline operating plan, the Consultant shall work with NJ TRANSIT staff to determine and define physical aspects of the Newark Penn Station DG Project, hardware and software requirements to effectively support integration and interface of DG components of the microgrid with NJ TRANSIT and Ferry facilities when regional commercial grid operations are suspended.

The Consultant shall also assist NJ TRANSIT in developing and submitting, to the extent required, necessary registrations/certifications with appropriate energy regulatory agencies or bodies, as well as compliance with PJM interconnection requirements as applicable. The Consultant shall provide assistance to NJ TRANSIT in evaluating compliance requirements to Currently Enforceable Standards including but not limited to; FAC-002-1 Coordination of Plans for New generation, Transmission, and End-user Facilities; FAC-008-3 facility Ratings; PER-005-2 Operations Personnel Training; and PRC-005-2 Protection System Maintenance. The Consultant shall assist NJ TRANSIT in compliance activities when resultant findings require such action.

Deliverables:

Outline of Baseline Operations Model, including applicable drawings, specifications, graphs and diagrams as necessary in support of the concept operating plan (10 copies).
Registration analyses and applications as necessary and described above.

TASK 3 - COST ESTIMATING

Cost/performance estimates for various design options may be developed to aid in developing final design requirements and to help support approval and funding of the energy infrastructure improvements.

The Consultant shall develop quantity take-offs and cost estimates for each of the major items on all plans.

General Notes on Cost Estimating

The Consultant shall prepare three cost estimates during the PE phase. The first estimate shall *independently* validate the cost estimate established during the 20% baseline design. This estimate shall be completed within two (2) months of NTP and shall include a reconciliation report addressing major differences between the two estimates.

The second and final estimates shall be engineer's estimates based on the completed 60% and (100%) submittals. The final estimate shall be submitted upon completion of the Final submittal, and shall be an accurate and fully quantified estimate for all elements of the project, and shall be suitable for use to evaluate Construction Bids

The estimates shall be developed and formatted to comply with the FTA's Standard Cost Category (SCC) methodology. Up-to-Date unit prices shall be used in every version of the estimate.

As previously noted in this RFP, NJ TRANSIT has developed reporting formats and requirements for cost estimates to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program requirements. In order to maintain consistency, such requirements shall be available to the Contractor subsequent to Contract award.

Design Cost Considerations

The Consultant shall implement methods and procedures necessary to identify and incorporate cost savings into the final design.

After each interim design submission and the Final milestone, the Consultant shall be responsible for producing submittals for all design considerations that are consistent with the available budget. In the event that NJ TRANSIT determines that the expected Construction cost for any element exceeds or would potentially exceed the available budget, the Consultant shall provide at no additional cost to NJ TRANSIT:

- Alternatives to reduce the estimated construction cost, including substitution of materials or methods of construction, deletion of features, etc.;
- Other methods to mitigate the cost increases without minimizing safety or performance.

In presenting the cost control alternatives to NJ TRANSIT, the Consultant shall summarize the changes from previous submittals, including changes in quantities and prices.

The requirement that the Consultant's design be cost effective and does not exceed the Project Budget shall be demonstrated using a third party's independent estimate, thereby validating the Consultant's estimate (Third party not part of design team). The third party shall be independently selected by NJ TRANSIT.

Deliverables:

Independent Initial Cost Estimate
60% and 100% Cost Estimates

TASK 4 – RISK MANAGEMENT

The Consultant shall conduct a risk assessment and management process that shall as a minimum contain the following elements:

- **Preliminary Risk Identification** – The Consultant shall develop a preliminary list of all risks (threats or opportunities) that currently exist. The risks shall be entered into the Risk Register. The preliminary Risk Register shall be submitted to NJ TRANSIT for review.

- **Preliminary Workshop** – The Consultant and NJ TRANSIT shall meet and review the preliminary Risk Register. The Risk Register shall be refined to add or remove risks. Preliminary discussions shall include who should own the risk and possible mitigation strategies.
- **Draft Risk Register** – The draft Risk Register developed at the preliminary workshop with NJ TRANSIT shall be sent for review two (2) weeks before the Risk Workshop.
- **Risk Workshop** – A risk workshop shall be scheduled and include a facilitator supplied by the Consultants. Smaller working groups of four (4) to six (6) participants shall be established. Each working groups shall be assigned specific risks to review, evaluate, assign ownership, perform a qualitative analysis and develop mitigation strategies. Each working group shall present their risks and findings to the entire team.
- **Risk Register** – Following the meeting a composite Risk Register shall be developed that lists the risks in priority order, includes ownership and mitigation strategies.
- **Risk Management Plan** – The Consultant shall work with NJ TRANSIT to develop schedule and cost implications associated with each risk. The Risk Register shall be circulated for review and comments periodically or as requested, but updated monthly to address comments. Risk is a dynamic aspect of every project and quarterly meetings shall be held with NJ TRANSIT to update the Risk Register.

NJ TRANSIT has developed document formats and requirements for Programmatic submittals in conformance with reporting to be utilized in NJTRANSIT's Superstorm Sandy Recovery and Resilience Program. In order to maintain consistency, such requirements related to the Risk Assessment Reports and related submissions shall be available to the Contractor subsequent to Contract award.

Deliverable:

Risk Management Plan, associated meetings and workshop findings reports, updates of the Risk Register following Project Progress Meetings

TASK 5 - SYSTEM SAFETY AND SECURITY MANAGEMENT

This task requires the Consultant to include a Safety and Security Management Plan (SSMP) as an element of the Project Management Plan (PMP) submitted to NJ TRANSIT for review and approval.

The SSMP shall be prepared by the Consultant and included as part of the PMP to describe how the NJ TRANSIT-DG Project, DG components, shall address safety and

security in this major capital project from initial project planning through initiation into Project Operation and Revenue Service.

The information provided herein is provided as a baseline deliverable as well as guidance to the Consultant relative to the level of effort necessary for satisfaction of this task. NJ TRANSIT requires the Consultant to assist in the development of Safety and Security Management Plans (SSMPs) as part of the PMP. The SSMP must contain the 11 sections specified below.

- SECTION 1: MANAGEMENT COMMITMENT AND PHILOSOPHY. NJ TRANSIT requires the first section of the SSMP to include the following:

- o Safety and Security Policy Statement. The Consultant shall assist NJ TRANSIT in the development and execution of a signed statement, issued by NJ TRANSIT executive management, endorsing the SSMP and confirming the project's commitment to safety and security.
- o Purpose of SSMP. The Consultant shall assist NJ TRANSIT in the development of a description stating the SSMP is the document that shall guide the recipient's integration of safety and security into each phase of the project development process.
- o Applicability and Scope. The Consultant shall assist NJ TRANSIT in the development of a section categorizing the SSMP as the document for all safety and security activities that NJ TRANSIT performs during the project development process. Rail transit agencies, as defined in 49 CFR 659.5 and commuter rail agencies, must clarify that the applicability of the SSMP extends to ensuring their compliance with State oversight agency and the Federal Railroad Administration (FRA) regulations and requirements, as applicable. NJ TRANSIT must ensure that the applicability of their SSMP extends to the resolution of any restrictions to full safety and security certification, even after the Project has commenced revenue service and operations.
- o SSMP Goal. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that clarifies NJ TRANSIT's use of the SSMP to ensure that the final project commenced into revenue service and operation is safe and secure for passengers, employees, public safety personnel, and the general public.

- SECTION 2: INTEGRATION OF SAFETY AND SECURITY INTO PROJECT DEVELOPMENT PROCESS. NJ TRANSIT requires the second section of the SSMP to include the following:

- o Safety and Security Activities. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the safety and security tasks that NJ TRANSIT must perform for the project through all phases. This shall include both a text description of the activities and a matrix listing these activities and their corresponding project phases.
 - o Procedures and Resources. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the procedures and resources that shall support performance of safety and security activities throughout the project phases, including a project budget and schedule for safety and security activities, procedures for managing safety and security contractors, procedures for coordinating safety and security activities with other recipient staff and contractors, and procedures for managing sensitive security information (SSI).
 - o Interface with Management. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the process and lines of communication through which NJ TRANSIT/Project staff shall communicate safety and security issues to project leadership. This shall include an organization chart. In the organization chart or supporting text, the following information shall be included: 1) identify who among the project team leadership has ultimate decision-making responsibilities for safety and security issues, 2) identify these individuals by names, titles and departments or affiliations, 3) explain how these individuals interface with other project team functions regarding safety and security issues, and 4) identify the relationships from project leadership to construction contractors and subcontractors regarding safety and security issues.
- SECTION 3: ASSIGNMENT OF SAFETY AND SECURITY RESPONSIBILITIES.
NJ TRANSIT requires the third section of the SSMP to include the following items:
 - o Responsibility and Authority. The Consultant shall assist NJ TRANSIT in the development of organizational requirements to perform the safety and security tasks identified in Section 2 of the SSMP. In documenting this organization, the name, title, and department/affiliation, all staff and contractors assigned to this organization shall be identified. In addition, for committees established to support this organization, each committee member shall be identified by name, with membership provided by title and affiliation. An organization chart shall also be developed and provided.
 - o Committee Structure. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the organization and

responsibilities of the different committees that shall be used for the project, including the Safety and Security Review Committee; the Fire/Life Safety Committee; the Safety and Security Change Review Board; and the Safety and Security Operations Review Committee, or other comparable committees.

- o Safety and Security Responsibilities Matrix. The Consultant shall assist NJ TRANSIT in the development of a description of the SSMP that identifies the responsibilities and reporting relationships established for recipient staff, committees and contractors performing the safety and security tasks in Section 2 of the SSMP. For all contractors, NJ TRANSIT will identify a NJ TRANSIT staff member or committee responsible for overseeing the contractor.
- SECTION 4: SAFETY AND SECURITY ANALYSIS. NJ TRANSIT requires the fourth section of the SSMP to include the following:
 - o Approach to Safety and Security Analysis. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the Project's approach to the analysis of safety hazards and security vulnerabilities. This program shall: (1) identify known hazards and vulnerabilities, (2) categorize them as to their potential severity and probability of occurrence, (3) analyze them for potential impact, and (4) resolve them by design, engineered features, warning devices, procedures and training, or other methods. The Consultant shall assist NJ TRANSIT in the development of a description of the SSMP that identifies the level of hazards and vulnerabilities NJ TRANSIT project management finds acceptable.
 - o Requirements for Safety and Security Analysis. The Consultant shall assist NJ TRANSIT in the development of a description of the SSMP that specifies the distinct types of safety and security analyses that shall be performed during the project. Examples of analyses that may be identified include Preliminary Hazard Analysis (PHA), Threat and Vulnerability Analysis (TVA), Subsystem Hazard Analysis (SSHA), System Hazard Analysis (SHA), Failure Modes and Effects Analysis (FMEA), Failure Modes, Effects and Criticality Analysis (FMECA), Fault Tree Analysis (FTA), Terrorism Risk Assessment (TRA), Software Safety and Security Analysis (SSSA), Operations and Support Hazard Analysis (O&SHA), Health Hazard Assessment (HHA) and others. The Consultant shall assist NJ TRANSIT in the development of a description of the SSMP that identifies the types of analysis to be performed for the project, who shall be performing these analyses (i.e., contractor, committee, in-house personnel, other), and when

they shall be performed during the project. The Consultant shall also assist NJ TRANSIT in developing a description of how project personnel shall communicate the results of these analyses to other members of the project team, and the process that shall be used to assure resolution of identified hazards and vulnerabilities resulting from these analyses.

- **SECTION 5: DEVELOPMENT OF SAFETY AND SECURITY DESIGN CRITERIA.**

NJ TRANSIT requires the fifth section of the SSMP to include the following:

- o Approach to Development of Safety and Security Requirements and Design Criteria. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the project's approach to establishing safety and security requirements and design criteria. This description shall include the resources, including standards prepared by such organizations as the American Public Transportation Association (APTA), the National Fire Protection Association (NFPA), Underwriters Laboratories (UL), etc., that it shall use to develop Project safety and security requirements. This description shall also include how project personnel and contractors shall use the safety and security requirements to develop safety and security design criteria and to identify safety and security certifiable elements and items. In addition, this effort shall explain the Project approach for ensuring that safety and security requirements and design criteria are included in the process to develop final specifications and contract documents for the project. Finally, this section shall also describe how the project documents, including drawings, specifications and reports, shall be maintained in a secure manner while they are in the possession or control of the contractor(s).
- o Design Reviews. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies how the recipient shall address safety and security during design reviews to ensure that its project team incorporates the safety and security requirements into the final project design.
- o Deviations and Changes. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies procedures for ensuring that changes to safety and security design criteria are appropriately reviewed and approved by recipient personnel prior to adoption.

- **SECTION 6: PROCESS FOR ENSURING QUALIFIED OPERATIONS AND MAINTENANCE PERSONNEL.** NJ TRANSIT requires the sixth section of the SSMP to include the following:

- o Operations and Maintenance Personnel Requirements. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the number of personnel and their specific job classifications required to operate and maintain the project in revenue service. The relevant section shall also specify the qualifications and core competencies, required by job classification, for these personnel to ensure their abilities to provide safe and secure service and to respond to emergencies. Special emphasis on the requirements for front-line personnel (i.e., operators, supervisors, station attendants, and maintenance personnel) is required.
- o Plans, Rules and Procedures. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies, by name, the specific safety, security and emergency plans, rules, procedures, and manuals that the recipient shall develop or revise. This section shall also include an implementation schedule.
- o Training Program. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that lists the elements of training the Project shall provide to employees, by job classification, to ensure their capabilities to provide safe and secure service and to respond effectively to emergencies. In addition, the section shall include a schedule for the development and offering of this training and for the completion of any qualifications or certifications required for Project staff. The Consultant shall also assist NJ TRANSIT in the development of a section of the SSMP that details record keeping requirements and associated implementation relative to personnel training and qualifications/certifications.
- o Emergency Preparedness. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies any exercises, drills, tabletops, or other activities that shall be performed to ensure the readiness of the project. This shall include an explanation of how the Project shall assess and document the results (i.e., after action report or equivalent document).
- o Public Awareness. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies programs that support NJ TRANSIT's commitment to ongoing, comprehensive public awareness, for both security awareness (such as the Transit Watch Program) and emergency preparedness (such as emergency evacuation instructions to riders).

• SECTION 7: SAFETY AND SECURITY VERIFICATION PROCESS (INCLUDING FINAL SAFETY AND SECURITY CERTIFICATION). NJ TRANSIT requires the seventh section of the SSMP to include the following:

- o Design Criteria Verification Process. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the process that shall be used to verify that the technical specifications, drawings, and contract documents for the project conform to the Project's safety and security requirements and design criteria. This shall include an explanation of the Project approach to ensure that all required inspections and tests are incorporated into project test plans.
- o Construction Specification Conformance Process. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the process that shall be used to verify that elements of the project provided under construction, procurement, and installation contracts conform to the safety and security components of the Project's technical specifications, drawings, and contract documents.
- o Testing/Inspection Verification. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the process that shall be used to verify that the as-built (or delivered) configuration contains the safety and security related requirements identified in the Project technical specifications, drawings, and contract documents. This section shall also describe related programs for contractual testing, systems integration testing, and pre-revenue operations testing.
- o Hazard and Vulnerability Resolution Verification. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the process used to verify that project personnel and contractors have appropriately identified, categorized, and resolved hazards and vulnerabilities to a level acceptable by Project management.
- o Operational Readiness Verification. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the process that shall be used to verify that project personnel and contractors developed plans, rules, procedures, manuals, and training and qualification programs, in conformance with the Project safety and security requirements. Further, this description shall also detail associated processes for ensuring the qualification and readiness of operations and maintenance personnel.
- o Safety and Security Certification Requirements. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes

the process that shall be used to deliver final certification that the project is safe and secure for passengers, employees, public safety personnel, and the general public, including the individual certificates the Project shall issue for each of the specific elements to be verified.

- **SECTION 8: CONSTRUCTION SAFETY AND SECURITY.** NJ TRANSIT requires the eighth section of the SSMP to include the following:

- o **Construction Safety and Security Program Elements.** The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the Project's program for construction safety and security. This shall include requirements for contractors, including the plans and reports the contractor must submit to the NJ TRANSIT. The description shall also detail the activities the Project shall perform to track and manage contractor construction safety and security programs and plans.
- o **Construction Phase Hazard and Vulnerability Analysis.** The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes the Project's requirements for safety and security analysis at construction sites. This shall include a description of the Project approach for identifying and mitigating hazards or threats unique to the construction phase.
- o **Safety and Security Incentives.** The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that describes (as applicable) any incentives the Project may provide for the construction safety and security program.

- **SECTION 9: REQUIREMENTS FOR 49 CFR PART 659, RAIL FIXED GUIDEWAY SYSTEMS; STATE SAFETY OVERSIGHT.** NJ TRANSIT requires the ninth section of the SSMP to describe activities the recipient shall perform to coordinate with its State safety oversight agency throughout the project development process. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the specific State safety oversight agency requirements applicable to the Project and the activities necessary to address these requirements and coordinate with the NJ State safety oversight agency(ies). This shall include (as applicable) a schedule for the activities necessary to ensure compliance with State safety oversight agency requirements.

- **SECTION 10: FRA COORDINATION.** NJ TRANSIT requires the tenth section of the SSMP only for those recipients that propose to share track with one or more FRA-regulated railroads or that shall operate on the general railroad system. The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies activities necessary to comply with FRA regulations and provide a

schedule for the performance of these activities as applicable. This shall also include a description of the process for updating existing System Safety Program Plan(s) and submitting same to FRA for review and approval. The System Safety Program Plan shall conform to the American Public Transportation Association (APTA) "Guidelines for the Development of Commuter Rail System Safety Program Plans." In addition, the Consultant shall assist NJ TRANSIT in the compilation and submission of plans for the completion of a collision/derailment hazard analysis that conform to the hazard management process in the approved SSPP or the "Draft FRA Guide to Collision/ Derailment Hazard Analysis" for FRA review and approval as necessary.

- **SECTION 11: DHS COORDINATION.** NJ TRANSIT requires the eleventh section of the SSMP to address how the project shall meet Department of Homeland Security (DHS) requirements, including the applicable security directives issued by the Transportation Security Administration (TSA) and other programs managed by the Office of Grants and Training (OGT). The Consultant shall assist NJ TRANSIT in the development of a section of the SSMP that identifies the related compliance activities the Project shall perform and provide an implementation schedule. Any concerns regarding the potential for conflict between DHS/TSA/OGT and FTA/PMOCs, should be documented in this section.

Deliverable: SAFETY AND SECURITY MANAGEMENT PLAN as detailed above

TASK 6 – PUBLIC INVOLVEMENT AND AGENCY COORDINATION

Objective:

Assist NJ TRANSIT in targeted outreach efforts to seek input from relevant stakeholders, including the North Jersey Transportation Planning Authority, other regional planning and transportation organizations, municipalities and local government units, electric distribution companies, and other entities as necessary and appropriate.

The objective of this task is to support NJ TRANSIT's efforts regarding public information, stakeholder outreach and agency coordination. The Consultant shall provide assistance and technical support necessary for activities that shall focus upon dissemination of engineering detail status to interested parties including, but not limited to, preparation of graphics such as maps, schematics, physical design and layout sketches, written handouts, Power Point presentations, brochures, videos, and draft progress engineering/design packages and subsets thereof, etc. A second objective is to assist NJ TRANSIT's efforts to fulfill State and Federal regulatory requirements for public and/or agency participation where necessary and applicable. NJ TRANSIT shall lead targeted outreach efforts to seek input from relevant stakeholders, including the Federal and State Regulatory agencies, North Jersey Transportation Planning Authority, other regional planning and transportation organizations, municipalities and local government units, electric

distribution companies, and other entities as necessary and appropriate. As noted elsewhere in this RFP, the Consultant shall not communicate directly with any potential Agency or stakeholder unless otherwise directed by NJ TRANSIT. All such communications shall be solely through NJ TRANSIT.

Subtask 6.1 - Open Houses and Meetings

If needed, open houses shall be designed to encourage one-on-one discussions between the project staff and members of the public, rather than a large group discussion. Upon the direction of NJ TRANSIT, open houses may be held during milestone points in the engineering/design process. The Consultant shall determine the need for translators or special accommodations at open houses. Facilities selected to host open houses must be accessible to persons with disabilities.

When required by NJ TRANSIT, the Consultant shall assist in presentations to Federal, municipal, county and State representatives and other interested parties. All public outreach activities, including meetings or hearings with local, county and citizen groups shall be initiated and coordinated through NJ TRANSIT. The Consultant shall prepare graphics such as maps, schematics, physical design and layout sketches, written handouts, etc. for assistance and technical support when necessary for these activities as directed by NJ TRANSIT. The Consultant shall attend meetings and events, assisting NJ TRANSIT in accordance with a community information program as directed by NJ TRANSIT. The Consultant should anticipate a minimum of 10 meetings. Meetings with municipalities or private persons shall occur as needed as the work progresses.

TASK 7 - INTEGRATION AND INTERFACE

The Consultant shall be responsible for implementing an interface and integration process within its overall design process. This shall ensure that individual design elements of the Project interface properly among themselves, existing NJ TRANSIT facilities and infrastructure as applicable, and the NJ TRANSIT Corporate-wide SANDY Recovery and Resiliency Plan. As such, the Consultant shall also coordinate its activities as required with other consultants as well as governmental agencies, individuals and other entities that may be impacted by the Project through NJ TRANSIT.

The Consultant shall prepare and submit to NJ TRANSIT for its approval an Integration Management Plan (IMP). The IMP shall establish and maintain a comprehensive, systematic, documented, verifiable and continuous integration process throughout the duration of the Project in order to achieve NJ TRANSIT's objective as stated herein. At a minimum, the Consultant's interface and integration effort shall:

- Follow the Work Breakdown Structure (WBS) adopted for the Project, and allow capability for future WBS level expansion.
- Provide an integration design document that systematically identifies and formally documents all interfaces and establishes a process for addressing each interface.
- Define methods to confirm interface compatibility and demonstrate said compatibility through tests or other accepted verification methods.
- Coordinate all civil infrastructure, utility, electrical and mechanical interfaces to ensure that they are compatible with other applicable Project Area design elements.
- Allow NJ TRANSIT to independently assess the effectiveness of, and audit, the Consultant's integration process.

The Consultant shall develop and maintain an Interface Database that lists all physical elements and other interfaces it shall encounter on the Project. Data fields/tables to be included in the database shall include such items as:

- Type of interface with relevant characteristics
- Purpose of the interface
- Status
- Relevant safety standard, if any
- Primary responsibility for defining the interface
- Open issues /conflicts

The Interface Database shall be an integrated part of the Records Management System.

Approval of the Integration Management Plan by NJ TRANSIT shall not imply in any way that the Plan and Report shall be sufficient to enable the Consultant to meet its obligations under the Contract or that they meet requirements of the Contract.

Upon approval of the IMP, the Consultant shall prepare and submit an Interface Control Report that addresses all identified interfaces during design. At any time during the performance of the Contract, NJ TRANSIT may require the Consultant to modify or revise the Plan as NJ TRANSIT deems necessary.

It is the Consultant's responsibility to successfully achieve the interface and integration of the individual design elements of the Project as well with the design elements of other connected or impacted projects. Successful interface and integration shall have been achieved when the Consultant demonstrates that its design shall allow for progress beyond the preliminary engineering phase without the need for re-engineering or re-design of the individual design elements due to failure to identify or properly address required design interfaces.

Lastly, for all elements of PE design, the Consultant shall always take into consideration the operations and maintenance requirements developed by the consultant and approved by NJ TRANSIT for the Project, and ensure that design criteria does not conflict with O&M requirements for all facets of the completed Project.

Deliverables:

Integration Management Plan – draft and final
Interface Control Document (ICD)
Interface Database
Integration Report for Amtrak Sub-41

TASK 8 - CONSTRUCTABILITY REVIEWS

The Consultant shall participate in formal constructability reviews at the 60% and prior to 100% stages of Design, evaluating issues that affect the construction, adjacent properties and the public. The Consultant shall follow Construction Industry Institute (CII) guidelines, which defines constructability as “the optimum use of construction knowledge and experience in planning, design, procurement and field operations to achieve the overall project objectives.” The Consultant shall provide experienced construction personnel to be involved with the project from the earliest stages to ensure that the construction focus and their experience are properly communicated to the project’s planners and engineers. Constructability shall be used as a design consideration, by factoring in cost and schedule effectiveness.

Examples of project issues to be considered include:

- Ground Water Control and Containment – evaluation of containment systems, impact on adjacent structures, recharging the water table, construction of groundwater cut-off systems, dewatering needs which shall include provisions for construction monitoring and requirements for drawdown.
- Utilities – evaluate relocations and restorations as needed; minimize large magnitude relocations.
- Maintenance and Protection of Vehicular and Pedestrian Traffic
- Environmental Issues – sensitive areas, hazardous materials, high impact mitigations, compliance with conditions of permits and approvals, etc.
- Materials Handling and Disposal / Spoils Disposal
- Construction Equipment Clearance
- Underpinning of existing facilities/building as applicable.
- Temporary Support Structures - lateral support for excavations, design of proposed support systems, limits of such systems, easement takings, etc.
- Staging of work elements.

- Improvement of a Contractor's productivities.
- Temporary / construction power and other utility requirements.
- Signal, communication and electric traction modifications.

NJ TRANSIT may direct the Consultant or third parties to lead this exercise.

Deliverable:

Document findings of constructability reviews in a report to NJ TRANSIT.

TASK 9 - CONTRACT PACKAGING

The Consultant shall assess the various components, potential sub-projects, early action activities, constraints, and construction approaches and develop recommendations for contract packaging and procurement strategies that would produce the best overall value to NJ TRANSIT. The Consultant shall determine factors such as the size and types of contracts, project delivery approaches, and mitigation of constraints brought on by long-lead items. The Consultant shall advise NJ TRANSIT as to the efficacy of procurement methods such as "EPC", etc. and how they might be applied to the DG component phase of the NJ TRANSIT-DG Project. The Consultant shall consider and report on the benefits and drawbacks of each recommended approach, such as increased cost, level of risk, integration issues, and funding stream.

Deliverables:

Contract Packaging and Procurement Strategies' Plan

TASK 10 - PREPARATION AND SUBSEQUENT SUPPORT OF CONTRACT BID DOCUMENTS AND BIDDING PROCESS

The Consultant shall prepare documentation necessary for the procurement of the construction, commissioning, operation, and/or maintenance services to support operation of the Newark Penn Station component of the Distributed Generation services, in accordance with Federal, New Jersey State and NJ TRANSIT regulations, standards and requirements as applicable. In addition, the Consultant shall provide administrative and technical support to NJ TRANSIT in the solicitation, review and award of a successful bid.

The Consultant shall assist NJ TRANSIT in the preparation of bid documents, including the necessary bidding information, bidding forms and Special Provisions of the contract.

The Consultant shall assist in answering RFI's, producing Addenda, and preparation of Conformed Bid documents.

It is likely that any bid process shall involve at least a two-step process and the consultant shall assist NJ TRANSIT in the evaluation of bidders technical and cost proposals

TASK 11 – AS DIRECTED BY NJ TRANSIT

Whenever the Contract Item “As Directed Cost by NJ TRANSIT” appears in the Proposal, NJ TRANSIT has provided an allowance for additional or Supplemental Design and Engineering Consultant Services not specifically designated and defined in this RFP. Such an allowance is provided for NJ TRANSIT to augment design and engineering efforts as necessary. This allowance is provided for the sole convenience of NJ TRANSIT and can only be used for work authorized by NJ TRANSIT's Contracting Officer.

All additional or supplemental tasks authorized under this provision shall be issued by Directive Letter and periodically incorporated into the Contract by Change Order pursuant to Article 5-Modification of Agreement. The Change Order shall describe the additional or supplemental task(s) with any associated cost changes and shall reduce the as directed Cost allowance in the amount specified in the Change Order.

NJ TRANSIT anticipates an As Directed Contract Value equivalent to the cost associated with Resource Loading as detailed in the table below, “Estimated Effort Hours By Task and Job Classification”.

Estimated Effort Hours By Task and Job Classification												
Task	Task Description	Principal/Director	Project Manager	Senior Engineer	Staff Engineer Rail	Staff Engineer Power	Engineer	GIS/CADD Technician	Database Manager	Clerical	Non-DBE Subconsultants	DBE Subconsultants
<u>Task 15</u>	– As Directed by NJ TRANSIT	0	40	50	0	0	25	50	50	50	0	0

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EXHIBIT B
COST INFORMATION

COST PROPOSAL FOR

Final Design, Engineering and Other Technical Services Associated with the Newark Penn Station Distributed Generation (DG) Project

Request for Proposal No. 21-059 | April 27, 2022



SUBMITTED TO:



SUBMITTED BY:





April 27, 2022

Faith Blair - Acting Director, Contract Unit - Procurement Department
NJ TRANSIT
Procurement Department
One Penn Plaza East, 6th Floor
Newark, NJ 07105

Submitted electronically: fblair@njtransit.com

Re: Cost Proposal for RFP No 21-059 - Newark Penn Station Distributed Generation (DG) Project

Dear Ms. Blair:

WSP USA Inc. (WSP) has prepared our cost proposal for the Newark Penn Station Distributed Generation (DG) Project, which has been prepared in accordance with NJ TRANSIT's request for a cost proposal letter dated April 20th, 2022.

Enclosed in this package, you will find the following documentation:

- **Cost Proposal** (Exhibits 1 – 5)
- **Form A**
- **Form A1**
- **Form B** for our five DBE sub-consultants:
 - AmerCom Corporation
 - Mercer Planning Associates, LLC
 - Richard Grubb and Associates, Inc.
 - Sowinski Sullivan Architects, PC
 - Jersey Boring & Drilling Co., Inc.
- DBE Documentation / Certifications

Thank you for the opportunity to submit out cost proposal. WSP looks forward to working with NJ TRANSIT on this project. Should you have any questions regarding our cost proposal, please contact me at 609.512.3614 or andy.paluri@wsp.com.

Sincerely,

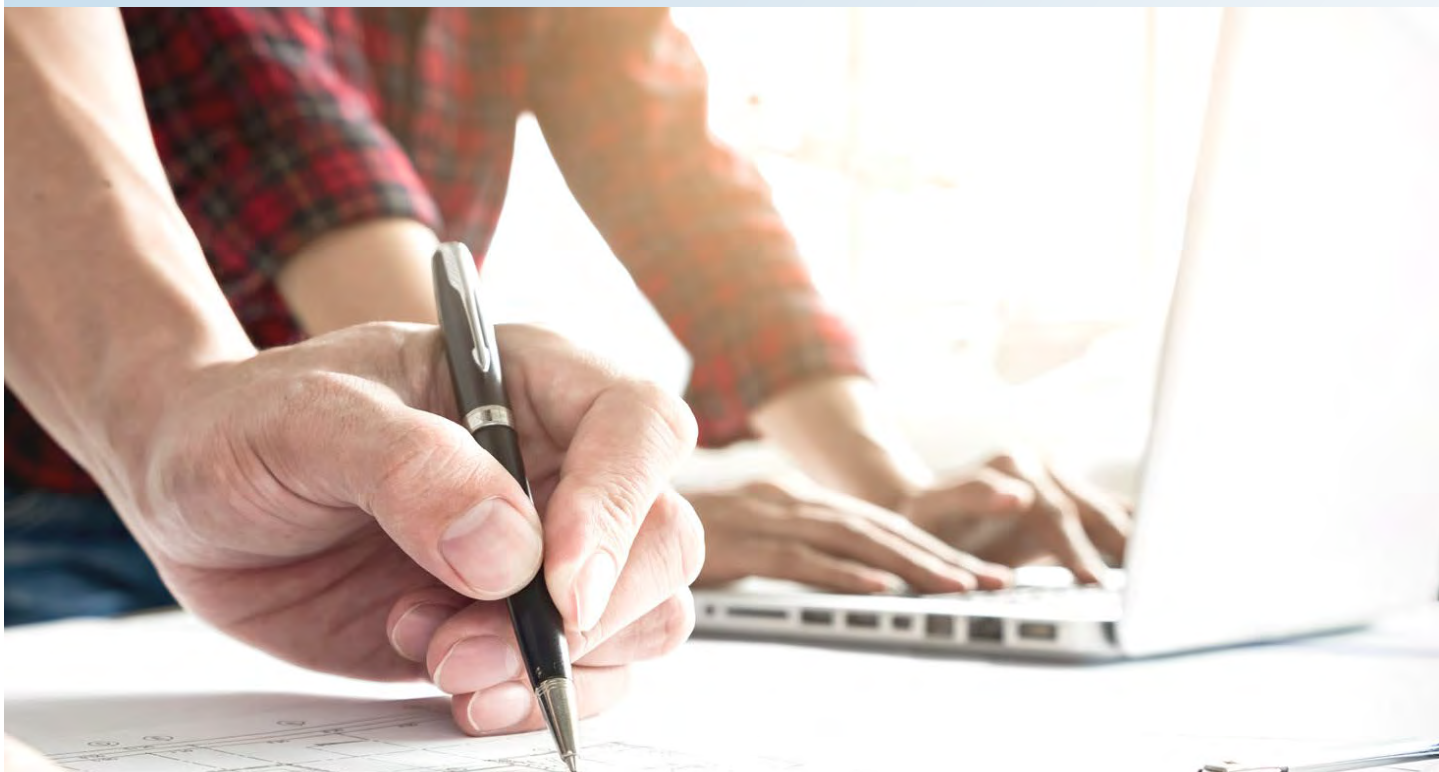
WSP USA Inc.

Andy Paluri, PE, PTOE
District Manager - Mid-Atlantic / Senior Vice President

WSP USA
Suite 1000
Two Gateway Center
Newark, NJ 07102

Tel.: +1 973 353-9100
wsp.com

Cost Proposal



COST AND FEE FIRM RECAP - TEAM SUMMARY

FIRM: WSP USA Inc.
(Prime Consultant Name)

	FIRM	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD)	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
Firm 1:	WSP USA Inc.	7,039	\$ 454,103.32	\$ 593,740.09	\$ 1,047,843.41	\$ 104,784.34	\$ 83,136.47	\$ 1,235,764.22
Firm 2:	Richard Grubb & Associates (DBE)	185	\$ 7,211.20	\$ 10,487.97	\$ 17,699.17	\$ 1,769.92	\$ 550.00	\$ 20,019.09
Firm 3:	AmerCom Corp. (DBE)	784	\$ 37,869.00	\$ 61,841.59	\$ 99,710.59	\$ 9,971.06	\$ 250.00	\$ 109,931.65
Firm 4:	Mercer Planning Assoc. (DBE)	336	\$ 17,419.00	\$ 17,593.19	\$ 35,012.19	\$ 3,501.22	\$ 4,750.00	\$ 43,263.41
Firm 5:	Sowinski Sullivan (DBE)	2,104	\$ 84,322.22	\$ 119,703.82	\$ 204,026.04	\$ 20,402.60	\$ 3,406.15	\$ 227,834.80
TOTAL (TEAM)		10,448	\$ 600,924.74	\$ 803,366.67	\$ 1,404,291.41	\$ 140,429.14	\$ 142,092.62	\$ 1,636,813.17

DBE PARTICIPATION

	% OF TOTAL COST
Firm 2: Richard Grubb & Associates (DBE)	1.22%
Firm 3: AmerCom Corp. (DBE)	6.72%
Firm 4: Mercer Planning Assoc. (DBE)	2.64%
Firm 5: Sowinski Sullivan (DBE)	13.92%
Jersey Boring & Drilling (DBE Vendor - 60% Counted)	1.83%
TOTAL (DBE)	26.33%

COST AND FEE TASK RECAP - TEAM SUMMARY

FIRM: WSP USA Inc. TEAM (ALL FIRMS)

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ ABC.DE%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	1,085	\$ 75,944.49	\$ 100,107.04	\$ 176,051.54	\$ 17,605.15	\$ 1,430.00	\$ 195,086.69
TASK 2	Engineering	7,199	\$ 390,184.62	\$ 518,974.84	\$ 909,159.46	\$ 90,915.95	\$ 133,833.87	\$ 1,133,909.27
TASK 3	Cost Estimating	566	\$ 29,304.72	\$ 45,590.63	\$ 74,895.35	\$ 7,489.54	\$ 250.00	\$ 82,634.89
TASK 4	Risk Management	248	\$ 17,652.36	\$ 24,429.50	\$ 42,081.87	\$ 4,208.19	\$ -	\$ 46,290.06
TASK 5	System Safety and Security Management	35	\$ 1,822.22	\$ 2,382.55	\$ 4,204.77	\$ 420.48	\$ -	\$ 4,625.25
TASK 6	Public Involvement and Agency Coordination	415	\$ 21,329.70	\$ 24,047.32	\$ 45,377.02	\$ 4,537.70	\$ 6,407.95	\$ 56,322.67
TASK 7	Integration and Interface	220	\$ 18,121.40	\$ 23,693.73	\$ 41,815.13	\$ 4,181.51	\$ -	\$ 45,996.65
TASK 8	Constructability Reviews	302	\$ 26,171.92	\$ 36,084.48	\$ 62,256.40	\$ 6,225.64	\$ -	\$ 68,482.04
TASK 9	Contract Packaging	134	\$ 7,546.35	\$ 10,584.77	\$ 18,131.12	\$ 1,813.11	\$ -	\$ 19,944.23
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	244	\$ 12,846.96	\$ 17,471.79	\$ 30,318.75	\$ 3,031.88	\$ 170.80	\$ 33,521.43
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL (TEAM)		10,448	\$ 600,924.74	\$ 803,366.67	\$ 1,404,291.41	\$ 140,429.14	\$ 142,092.62	\$ 1,686,813.17

COST AND FEE TASK RECAP BY FIRM

FIRM: WSP USA Inc.

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ 130.75%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	864	\$ 64,554.23	\$ 84,404.66	\$ 148,958.89	\$ 14,895.89	\$ 960.00	\$ 164,814.78
TASK 2	Engineering	5,256	\$ 313,846.50	\$ 410,354.29	\$ 724,200.79	\$ 72,420.08	\$ 82,176.47	\$ 878,797.34
TASK 3	Cost Estimating	86	\$ 6,958.12	\$ 9,097.74	\$ 16,055.86	\$ 1,605.59	\$ -	\$ 17,661.44
TASK 4	Risk Management	144	\$ 13,508.36	\$ 17,662.19	\$ 31,170.55	\$ 3,117.06	\$ -	\$ 34,287.61
TASK 5	System Safety and Security Management	35	\$ 1,822.22	\$ 2,382.55	\$ 4,204.77	\$ 420.48	\$ -	\$ 4,625.25
TASK 6	Public Involvement and Agency Coordination	40	\$ 3,184.90	\$ 4,164.26	\$ 7,349.16	\$ 734.92	\$ -	\$ 8,084.08
TASK 7	Integration and Interface	220	\$ 18,121.40	\$ 23,693.73	\$ 41,815.13	\$ 4,181.51	\$ -	\$ 45,996.65
TASK 8	Constructability Reviews	222	\$ 20,443.92	\$ 26,730.43	\$ 47,174.35	\$ 4,717.43	\$ -	\$ 51,891.78
TASK 9	Contract Packaging	64	\$ 4,832.75	\$ 6,318.82	\$ 11,151.56	\$ 1,115.16	\$ -	\$ 12,266.72
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	108	\$ 6,830.92	\$ 8,931.42	\$ 15,762.34	\$ 1,576.23	\$ -	\$ 17,338.58
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		7,039	\$ 454,103.32	\$ 593,740.09	\$ 1,047,843.41	\$ 104,784.34	\$ 83,136.47	\$ 1,235,764.22

COST AND FEE TASK RECAP BY FIRM

FIRM: Richard Grubb & Associates (DBE)

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ 141%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 2	Engineering	185	\$ 7,211.20	\$ 10,487.97	\$ 17,699.17	\$ 1,769.92	\$ 550.00	\$ 20,019.09
TASK 3	Cost Estimating	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 4	Risk Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 5	System Safety and Security Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 6	Public Involvement and Agency Coordination	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 7	Integration and Interface	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 8	Constructability Reviews	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 9	Contract Packaging	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		185	\$ 7,211.20	\$ 10,487.97	\$ 17,699.17	\$ 1,769.92	\$ 550.00	\$ 20,019.09

COST AND FEE TASK RECAP BY FIRM

FIRM: AmerCom Corp. (DBE)

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ 163.304%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	80	\$ 3,712.00	\$ 6,061.84	\$ 9,773.84	\$ 977.38	\$ -	\$ 10,751.23
TASK 2	Engineering	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 3	Cost Estimating	480	\$ 22,346.60	\$ 36,492.89	\$ 58,839.49	\$ 5,883.95	\$ 250.00	\$ 64,973.44
TASK 4	Risk Management	104	\$ 4,144.00	\$ 6,767.32	\$ 10,911.32	\$ 1,091.13	\$ -	\$ 12,002.45
TASK 5	System Safety and Security Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 6	Public Involvement and Agency Coordination	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 7	Integration and Interface	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 8	Constructability Reviews	80	\$ 5,728.00	\$ 9,354.05	\$ 15,082.05	\$ 1,508.21	\$ -	\$ 16,590.26
TASK 9	Contract Packaging	40	\$ 1,938.40	\$ 3,165.48	\$ 5,103.88	\$ 510.39	\$ -	\$ 5,614.27
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		784	\$ 37,869.00	\$ 61,841.59	\$ 99,710.59	\$ 9,971.06	\$ 250.00	\$ 109,931.65

COST AND FEE TASK RECAP BY FIRM

FIRM: Mercer Planning Assoc. (DBE)

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ 101%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	41	\$ 3,075.00	\$ 3,105.75	\$ 6,180.75	\$ 618.08	\$ 50.00	\$ 6,848.83
TASK 2	Engineering	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 3	Cost Estimating	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 4	Risk Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 5	System Safety and Security Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 6	Public Involvement and Agency Coordination	295	\$ 14,344.00	\$ 14,487.44	\$ 28,831.44	\$ 2,883.14	\$ 4,700.00	\$ 36,414.58
TASK 7	Integration and Interface	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 8	Constructability Reviews	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 9	Contract Packaging	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL	336	\$ 17,419.00	\$ 17,593.19	\$ 35,012.19	\$ 3,501.22	\$ 4,750.00	\$ 43,263.41

COST AND FEE TASK RECAP BY FIRM

FIRM: Sowinski Sullivan (DBE)

	TASK DESCRIPTION	PERSON HOURS	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @ 141.96%	SUBTOTAL	FIXED FEE (PROFIT) @ 10%	DIRECT EXPENSES	TOTAL COST
TASK 1	Project Management and Administration	100	\$ 4,603.26	\$ 6,534.79	\$ 11,138.05	\$ 1,113.80	\$ 420.00	\$ 12,671.85
TASK 2	Engineering	1,758	\$ 69,126.92	\$ 98,132.58	\$ 167,259.50	\$ 16,725.95	\$ 1,107.40	\$ 185,092.85
TASK 3	Cost Estimating	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 4	Risk Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 5	System Safety and Security Management	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 6	Public Involvement and Agency Coordination	80	\$ 3,800.80	\$ 5,395.62	\$ 9,196.42	\$ 919.64	\$ 1,707.95	\$ 11,824.01
TASK 7	Integration and Interface	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 8	Constructability Reviews	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TASK 9	Contract Packaging	30	\$ 775.20	\$ 1,100.47	\$ 1,875.67	\$ 187.57	\$ -	\$ 2,063.24
TASK 10	Prep. and Subsequent Contract Bid Doc. Support	136	\$ 6,016.04	\$ 8,540.37	\$ 14,556.41	\$ 1,455.64	\$ 170.80	\$ 16,182.85
TASK 11	As directed by NJT	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		2,104	\$ 84,322.22	\$ 119,703.82	\$ 204,026.04	\$ 20,402.60	\$ 3,406.15	\$ 227,834.80

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 1: Project Management and Administration

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer		\$ 55.40	\$ -
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA		\$ 68.15	\$ -
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer		\$ 60.99	\$ -
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)		\$ 72.57	\$ -
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	446	\$ 79.62	\$ 35,511.66
Paul Sullivan	Deputy Project Manager	86	\$ 136.88	\$ 11,771.57
Edrea Tan	QA/QC Manager	70	\$ 51.26	\$ 3,588.45
Jerry Portalatin	CADD Manager	80	\$ 67.59	\$ 5,406.84
Tara Simlick	Document Controls Manager	90	\$ 37.25	\$ 3,352.47
John Kalb	Scheduling Manager	60	\$ 54.09	\$ 3,245.35
Bob Bretz	Projectwise Manager	20	\$ 60.12	\$ 1,202.46
Patti Cormier	Contract Manager	12	\$ 39.62	\$ 475.44
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer		\$ 48.80	\$ -
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		864		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$ 64,554.23
OVERHEAD @	130.75% OF BARE COST	\$ 84,404.66
SUBTOTAL -- SALARY + OVERHEAD		\$ 148,958.89
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$ 14,895.89
TOTAL LABOR		\$ 163,854.78
DIRECT EXPENSES		\$
Itemize:	Travel	\$ 600.00
	Reproduction	\$ 360.00
	Mailing/Federal Express	
	Materials	
	Traffic Control	
	Police	
	Survey Crew OT	
	Geotechnical Laboratory	
	SUE	
TOTAL DIRECT EXPENSES		\$ 960.00
TOTAL THIS TASK		\$ 164,814.78

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 2: Engineering

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	164	\$ 55.40	\$ 9,086.18
Isabella Steiner	Assistant Civil Engineer	280	\$ 34.81	\$ 9,745.97
Rita Radzeviciene	CADD - Civil	112	\$ 51.45	\$ 5,762.38
Bruce Wattle	Air Quality Lead	32	\$ 58.41	\$ 1,868.96
Khamini Persaud	Air Quality Engineer	100	\$ 42.87	\$ 4,286.97
Erich Thalheimer	Lead Acoustical Engineer	92	\$ 94.14	\$ 8,661.21
Sam Pendyala	Senior Acoustical Engineer	40	\$ 47.63	\$ 1,905.23
Edward Tadross	Lead Environmental Scientist - Acoustics	44	\$ 78.64	\$ 3,460.13
Local Technician	Acoustical Field Assistant	28	\$ 46.58	\$ 1,304.10
Kevin Lim	Communications Lead	16	\$ 102.24	\$ 1,635.80
Shahid Mehmood	Senior Comms Engineer - SCADA	88	\$ 68.15	\$ 5,997.62
Amelia Ramnauth	Communications Engineer	144	\$ 35.83	\$ 5,159.76
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)	71	\$ 78.66	\$ 5,584.86
Brian Dastis	Lead Structural Engineer	184	\$ 60.99	\$ 11,222.63
Emanuele Morbidoni	Senior Structural Engineer	280	\$ 51.66	\$ 14,463.92
Isabel Weil	Assistant Structural Engineer	120	\$ 34.51	\$ 4,140.83
William Haggerty	Topo Survey Manager	58	\$ 79.62	\$ 4,618.11
Michael Beym	Topo Survey Coordinator	81	\$ 39.46	\$ 3,196.63
Antonio Stevens	Topo Surveyor	108	\$ 36.33	\$ 3,923.48
Arvind Kannan	Senior CAD Operator 2 - Topo	40	\$ 56.89	\$ 2,275.76
Rob Bury	Sr. Technical Manager (Mechanical)	104	\$ 97.69	\$ 10,160.14
Gordon Ng	Supervising Engineer (Mechanical)	160	\$ 72.57	\$ 11,611.87
Andrew Koch	Project Engineer II (Mechanical)	319	\$ 46.33	\$ 14,778.19
Melissa Poggi	Project Manager		\$ 79.62	\$ -
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical	151	\$ 105.53	\$ 15,934.82
Wanxing Liu	Engineer - Geotechnical	170	\$ 70.39	\$ 11,966.36
Jerry Chen	Engineer - Geotechnical	100	\$ 51.15	\$ 5,114.97
Harish Patel	Director - Mechanical Engineering	88	\$ 99.10	\$ 8,720.91
Michael Youssef	Mechanical Engineer	136	\$ 48.80	\$ 6,636.83
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection	56	\$ 80.42	\$ 4,503.49
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	116	\$ 68.98	\$ 8,002.00
John Bartell	WSP Engineer	120	\$ 48.65	\$ 5,837.40

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer	108	\$ 108.88	\$ 11,759.26
Kerrine Bryan	Electrical Engineer	498	\$ 68.94	\$ 34,332.79
Ross Krupnik	Lead Electrical Engineer	318	\$ 72.81	\$ 23,154.30
Joe Lewkowicz	Jr. Electrical Engineer	730	\$ 45.25	\$ 33,032.65
TOTAL ESTIMATED HOURS		5,256		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$ 313,846.50
OVERHEAD @	130.75% OF BARE COST	\$ 410,354.29
SUBTOTAL -- SALARY + OVERHEAD		\$ 724,200.79
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$ 72,420.08
TOTAL LABOR		\$ 796,620.87
DIRECT EXPENSES		\$
Itemize:	Travel	\$ 2,842.17
	Reproduction	\$ 173.50
	Mailing/Federal Express	
	Materials	
	Traffic Control	\$ 10,400.00
	Police	\$ 2,000.00
	Survey Crew OT	\$ 1,560.80
	Geotechnical Laboratory	\$ 3,500.00
	SUE	\$ 11,700.00
	Jersey Boring & Drilling	\$ 50,000.00
TOTAL DIRECT EXPENSES		\$ 82,176.47
TOTAL THIS TASK		\$ 878,797.34

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 3: Cost Estimating

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer		\$ 55.40	\$ -
Isabella Steiner	Assistant Civil Engineer	8	\$ 34.81	\$ 278.46
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA	8	\$ 68.15	\$ 545.24
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer	8	\$ 60.99	\$ 487.94
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)	8	\$ 72.57	\$ 580.59
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager		\$ 79.62	\$ -
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Kwang Ro	Senior Tech Principal - Geotechnical		\$ 114.81	\$ -
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical	8	\$ 70.39	\$ 563.12
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer	8	\$ 48.80	\$ 390.40
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer	8	\$ 48.65	\$ 389.16

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating	30	\$ 124.11	\$ 3,723.21
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		86		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$ 6,958.12
OVERHEAD @	130.75% OF BARE COST		\$ 9,097.74
SUBTOTAL -- SALARY + OVERHEAD			\$ 16,055.86
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$ 1,605.59
TOTAL LABOR			\$ 17,661.44
DIRECT EXPENSES			\$
Itemize:	Travel		
	Reproduction		
	Mailing/Federal Express		
	Materials		
	Traffic Control		
	Police		
	Survey Crew OT		
	Geotechnical Laboratory		
	SUE		
TOTAL DIRECT EXPENSES			\$ -
TOTAL THIS TASK			\$ 17,661.44

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 4: Risk Management

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	8	\$ 55.40	\$ 443.23
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead	4	\$ 58.41	\$ 233.62
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer	4	\$ 94.14	\$ 376.57
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA	4	\$ 68.15	\$ 272.62
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)	8	\$ 78.66	\$ 629.28
Brian Dastis	Lead Structural Engineer	4	\$ 60.99	\$ 243.97
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)	8	\$ 97.69	\$ 781.55
Gordon Ng	Supervising Engineer (Mechanical)	20	\$ 72.57	\$ 1,451.48
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	16	\$ 79.62	\$ 1,273.96
Paul Sullivan	Deputy Project Manager	40	\$ 136.88	\$ 5,475.15
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical	4	\$ 105.53	\$ 422.11
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer	8	\$ 48.80	\$ 390.40
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection	8	\$ 80.42	\$ 643.36
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer	8	\$ 108.88	\$ 871.06
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		144		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	13,508.36
OVERHEAD @	130.75% OF BARE COST		\$	17,662.19
SUBTOTAL -- SALARY + OVERHEAD			\$	31,170.55
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	3,117.06
TOTAL LABOR			\$	34,287.61
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
	Traffic Control			
	Police			
	Survey Crew OT			
	Geotechnical Library			
	SUE			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	34,287.61

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 5: System Safety and Security Management

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer		\$ 55.40	\$ -
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA		\$ 68.15	\$ -
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist	25	\$ 40.57	\$ 1,014.30
Stephanie Sprague	Safety and Security QA	10	\$ 80.79	\$ 807.92
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer		\$ 60.99	\$ -
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)		\$ 72.57	\$ -
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager		\$ 79.62	\$ -
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer		\$ 48.80	\$ -
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		35		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$ 1,822.22
OVERHEAD @	130.75% OF BARE COST	\$ 2,382.55
SUBTOTAL -- SALARY + OVERHEAD		\$ 4,204.77
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$ 420.48
TOTAL LABOR		\$ 4,625.25
DIRECT EXPENSES		\$
Itemize:	Travel	
	Reproduction	
	Mailing/Federal Express	
	Materials	
	Traffic Control	
	Police	
	Survey Crew OT	
	Geotechnical Laboratory	
	SUE	
TOTAL DIRECT EXPENSES		\$ -
TOTAL THIS TASK		\$ 4,625.25

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 6: Public Involvement and Agency Coordination

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer		\$ 55.40	\$ -
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA		\$ 68.15	\$ -
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer		\$ 60.99	\$ -
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)		\$ 72.57	\$ -
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	40	\$ 79.62	\$ 3,184.90
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer		\$ 48.80	\$ -
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		40		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$	3,184.90
OVERHEAD @	130.75% OF BARE COST	\$	4,164.26
SUBTOTAL -- SALARY + OVERHEAD		\$	7,349.16
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$	734.92
TOTAL LABOR		\$	8,084.08
DIRECT EXPENSES		\$	
Itemize:	Travel		
	Reproduction		
	Mailing/Federal Express		
	Materials		
	Traffic Control		
	Police		
	Survey Crew OT		
	Geotechnical Laboratory		
	SUE		
TOTAL DIRECT EXPENSES		\$	-
TOTAL THIS TASK		\$	8,084.08

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 7: Integration and Interface

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer		\$ 55.40	\$ -
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA		\$ 68.15	\$ -
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer	8	\$ 60.99	\$ 487.94
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)	8	\$ 72.57	\$ 580.59
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	40	\$ 79.62	\$ 3,184.90
Paul Sullivan	Deputy Project Manager	60	\$ 136.88	\$ 8,212.73
Edrea Tan	QA/QC Manager	80	\$ 51.26	\$ 4,101.08
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer		\$ 48.80	\$ -
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection		\$ 68.98	\$ -
John Bartell	WSP Engineer	8	\$ 48.65	\$ 389.16

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer	16	\$ 72.81	\$ 1,165.00
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		220		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$ 18,121.40
OVERHEAD @	130.75% OF BARE COST		\$ 23,693.73
SUBTOTAL -- SALARY + OVERHEAD			\$ 41,815.13
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$ 4,181.51
TOTAL LABOR			\$ 45,996.65
DIRECT EXPENSES		\$	
Itemize:	Travel		
	Reproduction		
	Mailing/Federal Express		
	Materials		
	Traffic Control		
	Police		
	Survey Crew OT		
	Geotechnical Support		
	SUE		
TOTAL DIRECT EXPENSES			\$ -
TOTAL THIS TASK			\$ 45,996.65

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 8: Constructability Reviews

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	8	\$ 55.40	\$ 443.23
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA	8	\$ 68.15	\$ 545.24
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Nadeem Sandhu	CADD - SCADA		\$ 62.64	\$ -
Christine Shaver	Safety and Security Manager		\$ 89.57	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)	8	\$ 78.66	\$ 629.28
Brian Dastis	Lead Structural Engineer		\$ 60.99	\$ -
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)	8	\$ 72.57	\$ 580.59
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	4	\$ 79.62	\$ 318.49
Paul Sullivan	Deputy Project Manager	4	\$ 136.88	\$ 547.52
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical	8	\$ 105.53	\$ 844.23
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer	8	\$ 48.80	\$ 390.40
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	8	\$ 68.98	\$ 551.86
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager	120	\$ 94.32	\$ 11,318.35
Shamoun Mahgerefth	Sr. Director - Estimating	30	\$ 124.11	\$ 3,723.21
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer	8	\$ 68.94	\$ 551.53
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		222		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	20,443.92
OVERHEAD @	130.75% OF BARE COST		\$	26,730.43
SUBTOTAL -- SALARY + OVERHEAD			\$	47,174.35
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	4,717.43
TOTAL LABOR			\$	51,891.78
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
	Traffic Control			
	Police			
	Survey Crew OT			
	Geotechnical Laboratory			
	SUE			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	51,891.78

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 9: Contract Packaging

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	4	\$ 55.40	\$ 221.61
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer		\$ 42.87	\$ -
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA	4	\$ 68.15	\$ 272.62
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer	4	\$ 60.99	\$ 243.97
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)	8	\$ 97.69	\$ 781.55
Gordon Ng	Supervising Engineer (Mechanical)		\$ 72.57	\$ -
Andrew Koch	Project Engineer II (Mechanical)		\$ 46.33	\$ -
Melissa Poggi	Project Manager	20	\$ 79.62	\$ 1,592.45
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager		\$ 37.25	\$ -
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical	4	\$ 105.53	\$ 422.11
Wanxing Liu	Engineer - Geotechnical		\$ 70.39	\$ -
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer	4	\$ 48.80	\$ 195.20
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	4	\$ 68.98	\$ 275.93
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer	12	\$ 68.94	\$ 827.30
Ross Krupnik	Lead Electrical Engineer		\$ 72.81	\$ -
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		64		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	4,832.75
OVERHEAD @	130.75% OF BARE COST		\$	6,318.82
SUBTOTAL -- SALARY + OVERHEAD			\$	11,151.56
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	1,115.16
TOTAL LABOR			\$	12,266.72
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
	Traffic Control			
	Police			
	Survey Crew OT			
	Geotechnical Laboratory			
	SUE			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	12,266.72

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 10: Prep. and Subsequent Contract Bid Doc. Support

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	8	\$ 55.40	\$ 443.23
Isabella Steiner	Assistant Civil Engineer		\$ 34.81	\$ -
Rita Radzeviciene	CADD - Civil		\$ 51.45	\$ -
Bruce Wattle	Air Quality Lead		\$ 58.41	\$ -
Khamini Persaud	Air Quality Engineer	4	\$ 42.87	\$ 171.48
Erich Thalheimer	Lead Acoustical Engineer		\$ 94.14	\$ -
Sam Pendyala	Senior Acoustical Engineer		\$ 47.63	\$ -
Edward Tadross	Lead Environmental Scientist - Acoustics		\$ 78.64	\$ -
Local Technician	Acoustical Field Assistant		\$ 46.58	\$ -
Kevin Lim	Communications Lead		\$ 102.24	\$ -
Shahid Mehmood	Senior Comms Engineer - SCADA	4	\$ 68.15	\$ 272.62
Amelia Ramnauth	Communications Engineer		\$ 35.83	\$ -
Brittany Johnson	Safety and Security Specialist		\$ 40.57	\$ -
Stephanie Sprague	Safety and Security QA		\$ 80.79	\$ -
Claudio Vescio	Supervising Engineer (Structural)		\$ 78.66	\$ -
Brian Dastis	Lead Structural Engineer	8	\$ 60.99	\$ 487.94
Emanuele Morbidoni	Senior Structural Engineer		\$ 51.66	\$ -
Isabel Weil	Assistant Structural Engineer		\$ 34.51	\$ -
William Haggerty	Topo Survey Manager		\$ 79.62	\$ -
Michael Beym	Topo Survey Coordinator		\$ 39.46	\$ -
Antonio Stevens	Topo Surveyor		\$ 36.33	\$ -
Arvind Kannan	Senior CAD Operator 2 - Topo		\$ 56.89	\$ -
Rob Bury	Sr. Technical Manager (Mechanical)		\$ 97.69	\$ -
Gordon Ng	Supervising Engineer (Mechanical)	16	\$ 72.57	\$ 1,161.19
Andrew Koch	Project Engineer II (Mechanical)	8	\$ 46.33	\$ 370.61
Melissa Poggi	Project Manager	12	\$ 79.62	\$ 955.47
Paul Sullivan	Deputy Project Manager		\$ 136.88	\$ -
Edrea Tan	QA/QC Manager		\$ 51.26	\$ -
Jerry Portalatin	CADD Manager		\$ 67.59	\$ -
Tara Simlick	Document Controls Manager	8	\$ 37.25	\$ 298.00
John Kalb	Scheduling Manager		\$ 54.09	\$ -
Bob Bretz	Projectwise Manager		\$ 60.12	\$ -
Patti Cormier	Contract Manager		\$ 39.62	\$ -
Ragui Fahmy	Senior Director - Geotechnical		\$ 105.53	\$ -
Wanxing Liu	Engineer - Geotechnical	8	\$ 70.39	\$ 563.12
Jerry Chen	Engineer - Geotechnical		\$ 51.15	\$ -
Harish Patel	Director - Mechanical Engineering		\$ 99.10	\$ -
Michael Youssef	Mechanical Engineer	8	\$ 48.80	\$ 390.40
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection		\$ 80.42	\$ -
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	8	\$ 68.98	\$ 551.86
John Bartell	WSP Engineer		\$ 48.65	\$ -

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager		\$ 94.32	\$ -
Shamoun Mahgerefth	Sr. Director - Estimating		\$ 124.11	\$ -
Ambrish Desai	Supervising Electrical Engineer		\$ 108.88	\$ -
Kerrine Bryan	Electrical Engineer		\$ 68.94	\$ -
Ross Krupnik	Lead Electrical Engineer	16	\$ 72.81	\$ 1,165.00
Joe Lewkowicz	Jr. Electrical Engineer		\$ 45.25	\$ -
TOTAL ESTIMATED HOURS		108		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$ 6,830.92
OVERHEAD @	130.75% OF BARE COST		\$ 8,931.42
SUBTOTAL -- SALARY + OVERHEAD			\$ 15,762.34
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$ 1,576.23
TOTAL LABOR			\$ 17,338.58
DIRECT EXPENSES		\$	
Itemize:	Travel		
	Reproduction		
	Mailing/Federal Express		
	Materials		
	Traffic Control		
	Police		
	Survey Crew OT		
	Geotechnical Laboratory		
	SUE		
TOTAL DIRECT EXPENSES			\$ -
TOTAL THIS TASK			\$ 17,338.58

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TOTAL SUMMARY

FIRM: WSP USA Inc.

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Athanasios Georgiadis	Senior Civil Engineer	192	\$ 55.40	\$ 10,637.48
Isabella Steiner	Assistant Civil Engineer	288	\$ 34.81	\$ 10,024.43
Rita Radzeviciene	CADD - Civil	112	\$ 51.45	\$ 5,762.38
Bruce Wattle	Air Quality Lead	36	\$ 58.41	\$ 2,102.58
Khamini Persaud	Air Quality Engineer	104	\$ 42.87	\$ 4,458.45
Erich Thalheimer	Lead Acoustical Engineer	96	\$ 94.14	\$ 9,037.79
Sam Pendyala	Senior Acoustical Engineer	40	\$ 47.63	\$ 1,905.23
Edward Tadross	Lead Environmental Scientist - Acoustics	44	\$ 78.64	\$ 3,460.13
Local Technician	Acoustical Field Assistant	28	\$ 46.58	\$ 1,304.10
Kevin Lim	Communications Lead	16	\$ 102.24	\$ 1,635.80
Shahid Mehmood	Senior Comms Engineer - SCADA	116	\$ 68.15	\$ 7,905.95
Amelia Ramnauth	Communications Engineer	144	\$ 35.83	\$ 5,159.76
Brittany Johnson	Safety and Security Specialist	25	\$ 40.57	\$ 1,014.30
Stephanie Sprague	Safety and Security QA	10	\$ 80.79	\$ 807.92
Claudio Vescio	Supervising Engineer (Structural)	87	\$ 78.66	\$ 6,843.42
Brian Dastis	Lead Structural Engineer	216	\$ 60.99	\$ 13,174.39
Emanuele Morbidoni	Senior Structural Engineer	280	\$ 51.66	\$ 14,463.92
Isabel Weil	Assistant Structural Engineer	120	\$ 34.51	\$ 4,140.83
William Haggerty	Topo Survey Manager	58	\$ 79.62	\$ 4,618.11
Michael Beym	Topo Survey Coordinator	81	\$ 39.46	\$ 3,196.63
Antonio Stevens	Topo Surveyor	108	\$ 36.33	\$ 3,923.48
Arvind Kannan	Senior CAD Operator 2 - Topo	40	\$ 56.89	\$ 2,275.76
Rob Bury	Sr. Technical Manager (Mechanical)	120	\$ 97.69	\$ 11,723.24
Gordon Ng	Supervising Engineer (Mechanical)	220	\$ 72.57	\$ 15,966.32
Andrew Koch	Project Engineer II (Mechanical)	327	\$ 46.33	\$ 15,148.80
Melissa Poggi	Project Manager	578	\$ 79.62	\$ 46,021.83
Paul Sullivan	Deputy Project Manager	190	\$ 136.88	\$ 26,006.96
Edrea Tan	QA/QC Manager	150	\$ 51.26	\$ 7,689.53
Jerry Portalatin	CADD Manager	80	\$ 67.59	\$ 5,406.84
Tara Simlick	Document Controls Manager	98	\$ 37.25	\$ 3,650.47
John Kalb	Scheduling Manager	60	\$ 54.09	\$ 3,245.35
Bob Bretz	Projectwise Manager	20	\$ 60.12	\$ 1,202.46
Patti Cormier	Contract Manager	12	\$ 39.62	\$ 475.44
Ragui Fahmy	Senior Director - Geotechnical	167	\$ 105.53	\$ 17,623.28
Wanxing Liu	Engineer - Geotechnical	186	\$ 70.39	\$ 13,092.61
Jerry Chen	Engineer - Geotechnical	100	\$ 51.15	\$ 5,114.97
Harish Patel	Director - Mechanical Engineering	88	\$ 99.10	\$ 8,720.91
Michael Youssef	Mechanical Engineer	172	\$ 48.80	\$ 8,393.64
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection	64	\$ 80.42	\$ 5,146.85
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	136	\$ 68.98	\$ 9,381.65
John Bartell	WSP Engineer	136	\$ 48.65	\$ 6,615.72

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

Tom Marko	Construction Manager	120	\$ 94.32	\$ 11,318.35
Shamoun Mahgerefth	Sr. Director - Estimating	60	\$ 124.11	\$ 7,446.41
Ambrish Desai	Supervising Electrical Engineer	116	\$ 108.88	\$ 12,630.31
Kerrine Bryan	Electrical Engineer	518	\$ 68.94	\$ 35,711.62
Ross Krupnik	Lead Electrical Engineer	350	\$ 72.81	\$ 25,484.29
Joe Lewkowicz	Jr. Electrical Engineer	730	\$ 45.25	\$ 33,032.65
TOTAL ESTIMATED HOURS		7,039		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$ 454,103.32
OVERHEAD @	130.75% OF BARE COST	\$ 593,740.09
SUBTOTAL -- SALARY + OVERHEAD		\$ 1,047,843.41
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$ 104,784.34
TOTAL LABOR		\$ 1,152,627.75
DIRECT EXPENSES		\$
Itemize:	Travel	\$ 3,442.17
	Reproduction	\$ 533.50
	Mailing/Federal Express	\$ -
	Materials	\$ -
	Traffic Control	\$ 10,400.00
	Police	\$ 2,000.00
	Survey Crew OT	\$ 1,560.80
	Geotechnical Laboratory	\$ 3,500.00
	SUE	\$ 11,700.00
	Jersey Boring & Drilling	\$ 50,000.00
TOTAL DIRECT EXPENSES		\$ 83,136.47
TOTAL SUMMARY		\$ 1,235,764.22

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 2: Engineering

FIRM: Richard Grubb & Associates (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Richard Grubb	Director	1	\$ 62.00	\$ 62.00
Paul McEachen	Principal Sr. Archaeologist	8	\$ 50.00	\$ 400.00
Allison McGovern	Sr. Archaeologist	76	\$ 38.00	\$ 2,888.00
Alison Gall	Archaeologist	12	\$ 27.00	\$ 324.00
Patricia McEachen	Drafter	16	\$ 26.70	\$ 427.20
Cathy Smyrski	Editor	8	\$ 28.75	\$ 230.00
John Stiteler	Geomorphologist	64	\$ 45.00	\$ 2,880.00
TOTAL ESTIMATED HOURS		185		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$	7,211.20
OVERHEAD @	145.44% OF BARE COST	\$	10,487.97
SUBTOTAL -- SALARY + OVERHEAD		\$	17,699.17
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$	1,769.92
TOTAL LABOR		\$	19,469.09
DIRECT EXPENSES		\$	
Itemize:	Travel	\$	500.00
	Reproduction		
	Mailing/Federal Express	\$	50.00
	Materials		
TOTAL DIRECT EXPENSES		\$	550.00
TOTAL THIS TASK		\$	20,019.09

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TOTAL SUMMARY

FIRM: Richard Grubb & Associates (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Richard Grubb	Director	1	\$ 62.00	\$ 62.00
Paul McEachen	Principal Sr. Archaeologist	8	\$ 50.00	\$ 400.00
Allison McGovern	Sr. Archaeologist	76	\$ 38.00	\$ 2,888.00
Alison Gall	Archaeologist	12	\$ 27.00	\$ 324.00
Patricia McEachen	Drafter	16	\$ 26.70	\$ 427.20
Cathy Smyrski	Editor	8	\$ 28.75	\$ 230.00
John Stiteler	Geomorphologist	64	\$ 45.00	\$ 2,880.00
TOTAL ESTIMATED HOURS		185		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	7,211.20
OVERHEAD @	145.44% OF BARE COST		\$	10,487.97
SUBTOTAL -- SALARY + OVERHEAD			\$	17,699.17
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	1,769.92
TOTAL LABOR			\$	19,469.09
DIRECT EXPENSES			\$	
Itemize:	Travel		\$	500.00
	Reproduction		\$	-
	Mailing/Federal Express		\$	50.00
	Materials		\$	-
TOTAL DIRECT EXPENSES			\$	550.00
TOTAL SUMMARY			\$	20,019.09

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 1: Project Management and Administration

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII		\$ 50.80	\$ -
Mike Marino	Senior Engineer - PIII		\$ 48.46	\$ -
Dan Chiang	Junior Engineer - PI		\$ 33.00	\$ -
John Accetta	Senior Engineer - PIII	80	\$ 46.40	\$ 3,712.00
Robert Brazer	Resident Engineer/Project Engineer- PV		\$ 71.60	\$ -
TOTAL ESTIMATED HOURS		80		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	3,712.00
OVERHEAD @	163.30% OF BARE COST		\$	6,061.84
SUBTOTAL -- SALARY + OVERHEAD			\$	9,773.84
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	977.38
TOTAL LABOR			\$	10,751.23
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	10,751.23

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 3: Cost Estimating

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII	270	\$ 50.80	\$ 13,716.00
Mike Marino	Senior Engineer - PIII	110	\$ 48.46	\$ 5,330.60
Dan Chiang	Junior Engineer - PI	100	\$ 33.00	\$ 3,300.00
John Accetta	Senior Engineer - PIII		\$ 46.40	\$ -
Robert Brazer	Resident Engineer/Project Engineer- PV		\$ 71.60	\$ -
TOTAL ESTIMATED HOURS		480		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	22,346.60
OVERHEAD @	163.30% OF BARE COST		\$	36,492.89
SUBTOTAL -- SALARY + OVERHEAD			\$	58,839.49
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	5,883.95
TOTAL LABOR			\$	64,723.44
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express		\$ 250.00	
	Materials			
TOTAL DIRECT EXPENSES			\$	250.00
TOTAL THIS TASK			\$	64,973.44

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 4: Risk Management

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII	40	\$ 50.80	\$ 2,032.00
Mike Marino	Senior Engineer - PIII		\$ 48.46	\$ -
Dan Chiang	Junior Engineer - PI	64	\$ 33.00	\$ 2,112.00
John Accetta	Senior Engineer - PIII		\$ 46.40	\$ -
Robert Brazer	Resident Engineer/Project Engineer- PV		\$ 71.60	\$ -
TOTAL ESTIMATED HOURS		104		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	4,144.00
OVERHEAD @	163.30% OF BARE COST		\$	6,767.32
SUBTOTAL -- SALARY + OVERHEAD			\$	10,911.32
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	1,091.13
TOTAL LABOR			\$	12,002.45
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	12,002.45

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 8: Constructability Reviews

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII		\$ 50.80	\$ -
Mike Marino	Senior Engineer - PIII		\$ 48.46	\$ -
Dan Chiang	Junior Engineer - PI		\$ 33.00	\$ -
John Accetta	Senior Engineer - PIII		\$ 46.40	\$ -
Robert Brazer	Resident Engineer/Project Engineer- PV	80	\$ 71.60	\$ 5,728.00
TOTAL ESTIMATED HOURS		80		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	5,728.00
OVERHEAD @	163.30% OF BARE COST		\$	9,354.05
SUBTOTAL -- SALARY + OVERHEAD			\$	15,082.05
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	1,508.21
TOTAL LABOR			\$	16,590.26
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	16,590.26

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 9: Contract Packaging

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII		\$ 50.80	\$ -
Mike Marino	Senior Engineer - PIII	40	\$ 48.46	\$ 1,938.40
Dan Chiang	Junior Engineer - PI		\$ 33.00	\$ -
John Accetta	Senior Engineer - PIII		\$ 46.40	\$ -
Robert Brazer	Resident Engineer/Project Engineer- PV		\$ 71.60	\$ -
TOTAL ESTIMATED HOURS		40		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	1,938.40
OVERHEAD @	163.30% OF BARE COST		\$	3,165.48
SUBTOTAL -- SALARY + OVERHEAD			\$	5,103.88
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	510.39
TOTAL LABOR			\$	5,614.27
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	5,614.27

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TOTAL SUMMARY

FIRM: AmerCom Corp. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Chris Bacchus	Senior Engineer - PIII	310	\$ 50.80	\$ 15,748.00
Mike Marino	Senior Engineer - PIII	150	\$ 48.46	\$ 7,269.00
Dan Chiang	Junior Engineer - PI	164	\$ 33.00	\$ 5,412.00
John Accetta	Senior Engineer - PIII	80	\$ 46.40	\$ 3,712.00
Robert Brazer	Resident Engineer/Project Engineer- PV	80	\$ 71.60	\$ 5,728.00
TOTAL ESTIMATED HOURS		784		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	37,869.00
OVERHEAD @	163.30% OF BARE COST		\$	61,841.59
SUBTOTAL -- SALARY + OVERHEAD			\$	99,710.59
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	9,971.06
TOTAL LABOR			\$	109,681.65
DIRECT EXPENSES			\$	
Itemize:	Travel		\$	-
	Reproduction		\$	-
	Mailing/Federal Express		\$	250.00
	Materials: Renderings		\$	-
TOTAL DIRECT EXPENSES			\$	250.00
TOTAL SUMMARY			\$	109,931.65

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 1: Project Management and Administration

FIRM: Mercer Planning Assoc. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Courtenay Mercer	Principal-In-Charge	41	\$ 75.00	\$ 3,075.00
Cailean Kok	Senior Planner	0	\$ 45.00	\$ -
Nieves Pimienta	Senior Communications Associate	0	\$ 42.00	\$ -
TBD	Intern	0	\$ 17.50	\$ -
TOTAL ESTIMATED HOURS		41		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$	3,075.00
OVERHEAD @	101.00% OF BARE COST	\$	3,105.75
SUBTOTAL -- SALARY + OVERHEAD		\$	6,180.75
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$	618.08
TOTAL LABOR		\$	6,798.83
DIRECT EXPENSES		\$	
Itemize:	Travel	\$	50.00
	Reproduction		
	Mailing/Federal Express		
	Materials		
TOTAL DIRECT EXPENSES		\$	50.00
TOTAL THIS TASK		\$	6,848.83

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 6: Public Involvement and Agency Coordination

FIRM: Mercer Planning Assoc. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Courtenay Mercer	Principal-In-Charge	67	\$ 75.00	\$ 5,025.00
Cailean Kok	Senior Planner	143	\$ 45.00	\$ 6,435.00
Nieves Pimienta	Senior Communications Associate	57	\$ 42.00	\$ 2,394.00
TBD	Intern	28	\$ 17.50	\$ 490.00
TOTAL ESTIMATED HOURS		295		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	14,344.00
OVERHEAD @	101.00% OF BARE COST		\$	14,487.44
SUBTOTAL -- SALARY + OVERHEAD			\$	28,831.44
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	2,883.14
TOTAL LABOR			\$	31,714.58
DIRECT EXPENSES			\$	
Itemize:	Travel		\$ 200.00	
	Reproduction		\$ 1,000.00	
	Mailing/Federal Express		\$ -	
	Materials (Translation Services)		\$ 3,500.00	
TOTAL DIRECT EXPENSES			\$	4,700.00
TOTAL THIS TASK			\$	36,414.58

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TOTAL SUMMARY

FIRM: Mercer Planning Assoc. (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Courtenay Mercer	Principal-In-Charge	108	\$ 75.00	\$ 8,100.00
Cailean Kok	Senior Planner	143	\$ 45.00	\$ 6,435.00
Nieves Pimienta	Senior Communications Associate	57	\$ 42.00	\$ 2,394.00
TBD	Intern	28	\$ 17.50	\$ 490.00
TOTAL ESTIMATED HOURS		336		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	17,419.00
OVERHEAD @	101.00% OF BARE COST		\$	17,593.19
SUBTOTAL -- SALARY + OVERHEAD			\$	35,012.19
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	3,501.22
TOTAL LABOR			\$	38,513.41
DIRECT EXPENSES			\$	
Itemize:	Travel		\$ 250.00	
	Reproduction		\$ 1,000.00	
	Mailing/Federal Express		\$ -	
	Materials		\$ 3,500.00	
TOTAL DIRECT EXPENSES			\$	4,750.00
TOTAL SUMMARY			\$	43,263.41

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 1: Project Management and Administration

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I		\$ 23.02	\$ -
Marc Giangreco	Architect II	10	\$ 25.84	\$ 258.40
Jeffrey Sroka	Architect III	24	\$ 33.60	\$ 806.40
Adrienne Arthur	Architect IV	28	\$ 38.39	\$ 1,074.92
Alexander Carlson	Architect V	32	\$ 50.31	\$ 1,609.92
Lee Boyce	Architect VI		\$ 62.68	\$ -
Brandon Coles	Architect VII		\$ 73.62	\$ -
Richard Sullivan	Architect VIII	6	\$ 142.27	\$ 853.62
TOTAL ESTIMATED HOURS		100		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)		\$	4,603.26
OVERHEAD @	141.96% OF BARE COST	\$	6,534.79
SUBTOTAL -- SALARY + OVERHEAD		\$	11,138.05
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$	1,113.80
TOTAL LABOR		\$	12,251.85
DIRECT EXPENSES		\$	
Itemize:	Travel	\$	420.00
	Reproduction		
	Mailing/Federal Express		
	Materials		
TOTAL DIRECT EXPENSES		\$	420.00
TOTAL THIS TASK		\$	12,671.85

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 2: Engineering

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I	252	\$ 23.02	\$ 5,801.04
Marc Giangreco	Architect II	370	\$ 25.84	\$ 9,560.80
Jeffrey Sroka	Architect III	432	\$ 33.60	\$ 14,515.20
Adrienne Arthur	Architect IV	328	\$ 38.39	\$ 12,591.92
Alexander Carlson	Architect V	216	\$ 50.31	\$ 10,866.96
Lee Boyce	Architect VI	60	\$ 62.68	\$ 3,760.80
Brandon Coles	Architect VII	32	\$ 73.62	\$ 2,355.84
Richard Sullivan	Architect VIII	68	\$ 142.27	\$ 9,674.36
TOTAL ESTIMATED HOURS		1,758		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	69,126.92
OVERHEAD @	141.96% OF BARE COST		\$	98,132.58
SUBTOTAL -- SALARY + OVERHEAD			\$	167,259.50
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	16,725.95
TOTAL LABOR			\$	183,985.45
DIRECT EXPENSES			\$	
Itemize:	Travel		\$ 341.59	
	Reproduction		\$ 765.81	
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	1,107.40
TOTAL THIS TASK			\$	185,092.85

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 6: Public Involvement and Agency Coordination

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I	12	\$ 23.02	\$ 276.24
Marc Giangreco	Architect II		\$ 25.84	\$ -
Jeffrey Sroka	Architect III		\$ 33.60	\$ -
Adrienne Arthur	Architect IV	30	\$ 38.39	\$ 1,151.70
Alexander Carlson	Architect V	30	\$ 50.31	\$ 1,509.30
Lee Boyce	Architect VI		\$ 62.68	\$ -
Brandon Coles	Architect VII	4	\$ 73.62	\$ 294.48
Richard Sullivan	Architect VIII	4	\$ 142.27	\$ 569.08
TOTAL ESTIMATED HOURS		80		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY

TOTAL SALARY (BARE COST)		\$	3,800.80
OVERHEAD @	141.96% OF BARE COST	\$	5,395.62
SUBTOTAL -- SALARY + OVERHEAD		\$	9,196.42
FIXED FEE @	10% OF BARE COST + OVERHEAD	\$	919.64
TOTAL LABOR		\$	10,116.06
DIRECT EXPENSES		\$	
Itemize:	Travel	\$	1,707.95
	Reproduction		
	Mailing/Federal Express		
	Materials		
TOTAL DIRECT EXPENSES		\$	1,707.95
TOTAL THIS TASK		\$	11,824.01

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 9: Contract Packaging

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I		\$ 23.02	\$ -
Marc Giangreco	Architect II	30	\$ 25.84	\$ 775.20
Jeffrey Sroka	Architect III		\$ 33.60	\$ -
Adrienne Arthur	Architect IV		\$ 38.39	\$ -
Alexander Carlson	Architect V		\$ 50.31	\$ -
Lee Boyce	Architect VI		\$ 62.68	\$ -
Brandon Coles	Architect VII		\$ 73.62	\$ -
Richard Sullivan	Architect VIII		\$ 142.27	\$ -
TOTAL ESTIMATED HOURS		30		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	775.20
OVERHEAD @	141.96% OF BARE COST		\$	1,100.47
SUBTOTAL -- SALARY + OVERHEAD			\$	1,875.67
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	187.57
TOTAL LABOR			\$	2,063.24
DIRECT EXPENSES			\$	
Itemize:	Travel			
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	-
TOTAL THIS TASK			\$	2,063.24

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TASK 10: Prep. and Subsequent Contract Bid Doc. Support

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I	0	\$ 23.02	\$ -
Marc Giangreco	Architect II	0	\$ 25.84	\$ -
Jeffrey Sroka	Architect III	60	\$ 33.60	\$ 2,016.00
Adrienne Arthur	Architect IV	40	\$ 38.39	\$ 1,535.60
Alexander Carlson	Architect V	16	\$ 50.31	\$ 804.96
Lee Boyce	Architect VI	8	\$ 62.68	\$ 501.44
Brandon Coles	Architect VII	8	\$ 73.62	\$ 588.96
Richard Sullivan	Architect VIII	4	\$ 142.27	\$ 569.08
TOTAL ESTIMATED HOURS		136		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	6,016.04
OVERHEAD @	141.96% OF BARE COST		\$	8,540.37
SUBTOTAL -- SALARY + OVERHEAD			\$	14,556.41
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	1,455.64
TOTAL LABOR			\$	16,012.05
DIRECT EXPENSES			\$	
Itemize:	Travel		\$ 170.80	
	Reproduction			
	Mailing/Federal Express			
	Materials			
TOTAL DIRECT EXPENSES			\$	170.80
TOTAL THIS TASK			\$	16,182.85

COST PROPOSAL
EXHIBIT 4
PERSONNEL TEAM DETAIL

TOTAL SUMMARY

FIRM: Sowinski Sullivan (DBE)

TECHNICAL STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
Malik Basnight	Architect I	264	\$ 23.02	\$ 6,077.28
Marc Giangreco	Architect II	410	\$ 25.84	\$ 10,594.40
Jeffrey Sroka	Architect III	516	\$ 33.60	\$ 17,337.60
Adrienne Arthur	Architect IV	426	\$ 38.39	\$ 16,354.14
Alexander Carlson	Architect V	294	\$ 50.31	\$ 14,791.14
Lee Boyce	Architect VI	68	\$ 62.68	\$ 4,262.24
Brandon Coles	Architect VII	44	\$ 73.62	\$ 3,239.28
Richard Sullivan	Architect VIII	82	\$ 142.27	\$ 11,666.14
TOTAL ESTIMATED HOURS		2,104		

SUPPORT STAFF				
STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	ESTIMATED HOURS	HOURLY RATE	TOTAL SALARY
TOTAL ESTIMATED HOURS		0		

TOTAL SALARY (BARE COST)			\$	84,322.22
OVERHEAD @	141.96% OF BARE COST		\$	119,703.82
SUBTOTAL -- SALARY + OVERHEAD			\$	204,026.04
FIXED FEE @	10% OF BARE COST + OVERHEAD		\$	20,402.60
TOTAL LABOR			\$	224,428.65
DIRECT EXPENSES			\$	
Itemize:	Travel		\$	2,640.34
	Reproduction		\$	765.81
	Mailing/Federal Express		\$	-
	Materials		\$	-
TOTAL DIRECT EXPENSES			\$	3,406.15
TOTAL SUMMARY			\$	227,834.80

STAFFING SCHEDULE BY FIRM

FIRM: WSP USA, Inc. TEAM (ALL FIRMS)

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	ABC.DE%	8.00%	\$
Athanasios Georgiadis	Senior Civil Engineer	\$ 55.40	-	164	-	8	-	-	-	8	4	8	-	192	\$ 10,637.48	\$ 13,908.51	\$ 2,454.60	\$ 27,000.59
Isabella Steiner	Assistant Civil Engineer	\$ 34.81	-	280	8	-	-	-	-	-	-	-	-	288	\$ 10,024.43	\$ 13,106.94	\$ 2,313.14	\$ 25,444.51
Rita Radzeviciene	CADD - Civil	\$ 51.45	-	112	-	-	-	-	-	-	-	-	-	112	\$ 5,762.38	\$ 7,534.32	\$ 1,329.67	\$ 14,626.37
Bruce Wattle	Air Quality Lead	\$ 58.41	-	32	-	4	-	-	-	-	-	-	-	36	\$ 2,102.58	\$ 2,749.13	\$ 485.17	\$ 5,336.88
Khamini Persaud	Air Quality Engineer	\$ 42.87	-	100	-	-	-	-	-	-	-	4	-	104	\$ 4,458.45	\$ 5,829.42	\$ 1,028.79	\$ 11,316.66
Erich Thalheimer	Lead Acoustical Engineer	\$ 94.14	-	92	-	4	-	-	-	-	-	-	-	96	\$ 9,037.79	\$ 11,816.90	\$ 2,085.47	\$ 22,940.16
Sam Pendyala	Senior Acoustical Engineer	\$ 47.63	-	40	-	-	-	-	-	-	-	-	-	40	\$ 1,905.23	\$ 2,491.09	\$ 439.63	\$ 4,835.94
Edward Tadross	Lead Environmental Scientist - Acoustics	\$ 78.64	-	44	-	-	-	-	-	-	-	-	-	44	\$ 3,460.13	\$ 4,524.12	\$ 798.42	\$ 8,782.67
Local Technician	Acoustical Field Assistant	\$ 46.58	-	28	-	-	-	-	-	-	-	-	-	28	\$ 1,304.10	\$ 1,705.11	\$ 300.92	\$ 3,310.13
Kevin Lim	Communications Lead	\$ 102.24	-	16	-	-	-	-	-	-	-	-	-	16	\$ 1,635.80	\$ 2,138.80	\$ 377.46	\$ 4,152.06
Shahid Mehmood	Senior Comms Engineer - SCADA	\$ 68.15	-	88	8	4	-	-	-	8	4	4	-	116	\$ 7,905.95	\$ 10,337.03	\$ 1,824.30	\$ 20,067.28
Amelia Ramnauth	Communications Engineer	\$ 35.83	-	144	-	-	-	-	-	-	-	-	-	144	\$ 5,159.76	\$ 6,746.39	\$ 1,190.62	\$ 13,096.77
Brittany Johnson	Safety and Security Specialist	\$ 40.57	-	-	-	-	25	-	-	-	-	-	-	25	\$ 1,014.30	\$ 1,326.20	\$ 234.05	\$ 2,574.55
Stephanie Sprague	Safety and Security QA	\$ 80.79	-	-	-	-	10	-	-	-	-	-	-	10	\$ 807.92	\$ 1,056.36	\$ 186.43	\$ 2,050.71
Claudio Vescio	Supervising Engineer (Structural)	\$ 78.66	-	71	-	8	-	-	-	8	-	-	-	87	\$ 6,843.42	\$ 8,947.77	\$ 1,579.12	\$ 17,370.31
Brian Dastis	Lead Structural Engineer	\$ 60.99	-	184	8	4	-	-	8	-	4	8	-	216	\$ 13,174.39	\$ 17,225.52	\$ 3,039.99	\$ 33,439.90
Emanuele Morbidoni	Senior Structural Engineer	\$ 51.66	-	280	-	-	-	-	-	-	-	-	-	280	\$ 14,463.92	\$ 18,911.57	\$ 3,337.55	\$ 36,713.04
Isabel Weil	Assistant Structural Engineer	\$ 34.51	-	120	-	-	-	-	-	-	-	-	-	120	\$ 4,140.83	\$ 5,414.13	\$ 955.50	\$ 10,510.46
William Haggerty	Topo Survey Manager	\$ 79.62	-	58	-	-	-	-	-	-	-	-	-	58	\$ 4,618.11	\$ 6,038.18	\$ 1,065.63	\$ 11,721.91
Michael Beym	Topo Survey Coordinator	\$ 39.46	-	81	-	-	-	-	-	-	-	-	-	81	\$ 3,196.63	\$ 4,179.59	\$ 737.62	\$ 8,113.84
Antonio Stevens	Topo Surveyor	\$ 36.33	-	108	-	-	-	-	-	-	-	-	-	108	\$ 3,923.48	\$ 5,129.95	\$ 905.34	\$ 9,958.77
Arvind Kannan	Senior CAD Operator 2 - Topo	\$ 56.89	-	40	-	-	-	-	-	-	-	-	-	40	\$ 2,275.76	\$ 2,975.55	\$ 525.13	\$ 5,776.44
Rob Bury	Sr. Technical Manager (Mechanical)	\$ 97.69	-	104	-	8	-	-	-	-	8	-	-	120	\$ 11,723.24	\$ 15,328.13	\$ 2,705.14	\$ 29,756.51
Gordon Ng	Supervising Engineer (Mechanical)	\$ 72.57	-	160	8	20	-	-	8	8	-	16	-	220	\$ 15,966.32	\$ 20,875.97	\$ 3,684.23	\$ 40,526.52
Andrew Koch	Project Engineer II (Mechanical)	\$ 46.33	-	319	-	-	-	-	-	-	-	8	-	327	\$ 15,148.80	\$ 19,807.05	\$ 3,495.59	\$ 38,451.44
Melissa Poggi	Project Manager	\$ 79.62	446	-	-	16	-	40	40	4	20	12	-	578	\$ 46,021.83	\$ 60,173.55	\$ 10,619.54	\$ 116,814.92
Paul Sullivan	Deputy Project Manager	\$ 136.88	86	-	-	40	-	-	60	4	-	-	-	190	\$ 26,006.96	\$ 34,004.10	\$ 6,001.11	\$ 66,012.17
Edrea Tan	QA/QC Manager	\$ 51.26	70	-	-	-	-	-	80	-	-	-	-	150	\$ 7,689.53	\$ 10,054.06	\$ 1,774.36	\$ 19,517.96
Jerry Portalatin	CADD Manager	\$ 67.59	80	-	-	-	-	-	-	-	-	-	-	80	\$ 5,406.84	\$ 7,069.44	\$ 1,247.63	\$ 13,723.91
Tara Simlick	Document Controls Manager	\$ 37.25	90	-	-	-	-	-	-	-	-	8	-	98	\$ 3,650.47	\$ 4,772.98	\$ 842.34	\$ 9,265.79
John Kalb	Scheduling Manager	\$ 54.09	60	-	-	-	-	-	-	-	-	-	-	60	\$ 3,245.35	\$ 4,243.29	\$ 748.86	\$ 8,237.50
Bob Bretz	Projectwise Manager	\$ 60.12	20	-	-	-	-	-	-	-	-	-	-	20	\$ 1,202.46	\$ 1,572.22	\$ 277.47	\$ 3,052.15
Patti Cormier	Contract Manager	\$ 39.62	12	-	-	-	-	-	-	-	-	-	-	12	\$ 475.44	\$ 621.63	\$ 109.71	\$ 1,206.78
Ragui Fahmy	Senior Director - Geotechnical	\$ 105.53	-	151	-	4	-	-	-	8	4	-	-	167	\$ 17,623.28	\$ 23,042.43	\$ 4,066.57	\$ 44,732.28
Wanxing Liu	Engineer - Geotechnical	\$ 70.39	-	170	8	-	-	-	-	-	-	8	-	186	\$ 13,092.61	\$ 17,118.58	\$ 3,021.12	\$ 33,232.30
Jerry Chen	Engineer - Geotechnical	\$ 51.15	-	100	-	-	-	-	-	-	-	-	-	100	\$ 5,114.97	\$ 6,687.82	\$ 1,180.28	\$ 12,983.07
Harish Patel	Director - Mechanical Engineering	\$ 99.10	-	88	-	-	-	-	-	-	-	-	-	88	\$ 8,720.91	\$ 11,402.59	\$ 2,012.35	\$ 22,135.85
Michael Youssef	Mechanical Engineer	\$ 48.80	-	136	8	8	-	-	-	8	4	8	-	172	\$ 8,393.64	\$ 10,974.69	\$ 1,936.83	\$ 21,305.16



STAFFING SCHEDULE BY FIRM

Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection	\$ 80.42	-	56	-	8	-	-	-	-	-	-	-	64	\$ 5,146.85	\$ 6,729.50	\$ 1,187.64	\$ 13,063.99
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	\$ 68.98	-	116	-	-	-	-	-	8	4	8	-	136	\$ 9,381.65	\$ 12,266.51	\$ 2,164.82	\$ 23,812.98
John Bartell	WSP Engineer	\$ 48.65	-	120	8	-	-	-	8	-	-	-	-	136	\$ 6,615.72	\$ 8,650.05	\$ 1,526.58	\$ 16,792.35
Tom Marko	Construction Manager	\$ 94.32	-	-	-	-	-	-	-	120	-	-	-	120	\$ 11,318.35	\$ 14,798.74	\$ 2,611.71	\$ 28,728.79
Shamoun Mahgerefth	Sr. Director - Estimating	\$ 124.11	-	-	30	-	-	-	-	30	-	-	-	60	\$ 7,446.41	\$ 9,736.18	\$ 1,718.26	\$ 18,900.85
Ambrish Desai	Supervising Electrical Engineer	\$ 108.88	-	108	-	8	-	-	-	-	-	-	-	116	\$ 12,630.31	\$ 16,514.13	\$ 2,914.44	\$ 32,058.89
Kerrine Bryan	Electrical Engineer	\$ 68.94	-	498	-	-	-	-	-	8	12	-	-	518	\$ 35,711.62	\$ 46,692.94	\$ 8,240.46	\$ 90,645.02
Ross Krupnik	Lead Electrical Engineer	\$ 72.81	-	318	-	-	-	-	16	-	-	16	-	350	\$ 25,484.29	\$ 33,320.71	\$ 5,880.50	\$ 64,685.49
Joe Lewkowicz	Jr. Electrical Engineer	\$ 45.25	-	730	-	-	-	-	-	-	-	-	-	730	\$ 33,032.65	\$ 43,190.18	\$ 7,622.28	\$ 83,845.11
Richard Grubb	Director	\$ 62.00	-	1	-	-	-	-	-	-	-	-	-	1	\$ 62.00	\$ 90.17	\$ 15.22	\$ 167.39
Paul McEachen	Principal Sr. Archaeologist	\$ 50.00	-	8	-	-	-	-	-	-	-	-	-	8	\$ 400.00	\$ 581.76	\$ 98.18	\$ 1,079.94
Allison McGovern	Sr. Archaeologist	\$ 38.00	-	76	-	-	-	-	-	-	-	-	-	76	\$ 2,888.00	\$ 4,200.31	\$ 708.83	\$ 7,797.14
Alison Gall	Archaeologist	\$ 27.00	-	12	-	-	-	-	-	-	-	-	-	12	\$ 324.00	\$ 471.23	\$ 79.52	\$ 874.75
Patricia McEachen	Drafter	\$ 26.70	-	16	-	-	-	-	-	-	-	-	-	16	\$ 427.20	\$ 621.32	\$ 104.85	\$ 1,153.37
Cathy Smyrski	Editor	\$ 28.75	-	8	-	-	-	-	-	-	-	-	-	8	\$ 230.00	\$ 334.51	\$ 56.45	\$ 620.96
John Stiteler	Geomorphologist	\$ 45.00	-	64	-	-	-	-	-	-	-	-	-	64	\$ 2,880.00	\$ 4,188.67	\$ 706.87	\$ 7,775.54
Chris Bacchus	Senior Engineer - PIII	\$ 50.80	-	-	270	40	-	-	-	-	-	-	-	310	\$ 15,748.00	\$ 25,717.11	\$ 4,146.51	\$ 45,611.63
Mike Marino	Senior Engineer - PIII	\$ 48.46	-	-	110	-	-	-	-	-	40	-	-	150	\$ 7,269.00	\$ 11,870.57	\$ 1,913.96	\$ 21,053.52
Dan Chiang	Junior Engineer - PI	\$ 33.00	-	-	100	64	-	-	-	-	-	-	-	164	\$ 5,412.00	\$ 8,838.01	\$ 1,425.00	\$ 15,675.01
John Accetta	Senior Engineer - PIII	\$ 46.40	80	-	-	-	-	-	-	-	-	-	-	80	\$ 3,712.00	\$ 6,061.84	\$ 977.38	\$ 10,751.23
Robert Brazer	Resident Engineer/Project Engineer- PV	\$ 71.60	-	-	-	-	-	-	-	80	-	-	-	80	\$ 5,728.00	\$ 9,354.05	\$ 1,508.21	\$ 16,590.26
Malik Basnight	Architect I	\$ 23.02	-	252	-	-	-	12	-	-	-	-	-	264	\$ 6,077.28	\$ 8,627.31	\$ 1,470.46	\$ 16,175.05
Marc Giangreco	Architect II	\$ 25.84	10	370	-	-	-	-	-	-	30	-	-	410	\$ 10,594.40	\$ 15,039.81	\$ 2,563.42	\$ 28,197.63
Jeffrey Sroka	Architect III	\$ 33.60	24	432	-	-	-	-	-	-	-	60	-	516	\$ 17,337.60	\$ 24,612.46	\$ 4,195.01	\$ 46,145.06
Adrienne Arthur	Architect IV	\$ 38.39	28	328	-	-	-	30	-	-	-	40	-	426	\$ 16,354.14	\$ 23,216.34	\$ 3,957.05	\$ 43,527.52
Alexander Carlson	Architect V	\$ 50.31	32	216	-	-	-	30	-	-	-	16	-	294	\$ 14,791.14	\$ 20,997.50	\$ 3,578.86	\$ 39,367.51
Lee Boyce	Architect VI	\$ 62.68	-	60	-	-	-	-	-	-	-	8	-	68	\$ 4,262.24	\$ 6,050.68	\$ 1,031.29	\$ 11,344.21
Brandon Coles	Architect VII	\$ 73.62	-	32	-	-	-	4	-	-	-	8	-	44	\$ 3,239.28	\$ 4,598.48	\$ 783.78	\$ 8,621.54
Richard Sullivan	Architect VIII	\$ 142.27	6	68	-	-	-	4	-	-	-	4	-	82	\$ 11,666.14	\$ 16,561.25	\$ 2,822.74	\$ 31,050.13
Courtenay Mercer	Principal-In-Charge	\$ 75.00	41	-	-	-	-	67	-	-	-	-	-	108	\$ 8,100.00	\$ 8,181.00	\$ 1,628.10	\$ 17,909.10
Cailean Kok	Senior Planner	\$ 45.00	-	-	-	-	-	143	-	-	-	-	-	143	\$ 6,435.00	\$ 6,499.35	\$ 1,293.44	\$ 14,227.79
Nieves Pimienta	Senior Communications Associate	\$ 42.00	-	-	-	-	-	57	-	-	-	-	-	57	\$ 2,394.00	\$ 2,417.94	\$ 481.19	\$ 5,293.13
TBD	Intern	\$ 17.50	-	-	-	-	-	28	-	-	-	-	-	28	\$ 490.00	\$ 494.90	\$ 98.49	\$ 1,083.39
TOTAL (ALL FIRMS)			1,085	7,199	566	248	35	415	220	302	134	244	-	10,448	\$ 600,924.74	\$ 803,366.67	\$ 140,429.14	\$ 1,544,720.55



STAFFING SCHEDULE BY FIRM

FIRM: WSP USA Inc.

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	130.75%	10.00%	\$
Athanasios Georgiadis	Senior Civil Engineer	\$ 55.40	-	164	-	8	-	-	-	8	4	8	-	192	\$ 10,637.48	\$ 13,908.51	\$ 2,454.60	\$ 27,000.59
Isabella Steiner	Assistant Civil Engineer	\$ 34.81	-	280	8	-	-	-	-	-	-	-	-	288	\$ 10,024.43	\$ 13,106.94	\$ 2,313.14	\$ 25,444.51
Rita Radzeviciene	CADD - Civil	\$ 51.45	-	112	-	-	-	-	-	-	-	-	-	112	\$ 5,762.38	\$ 7,534.32	\$ 1,329.67	\$ 14,626.37
Bruce Wattle	Air Quality Lead	\$ 58.41	-	32	-	4	-	-	-	-	-	-	-	36	\$ 2,102.58	\$ 2,749.13	\$ 485.17	\$ 5,336.88
Khamini Persaud	Air Quality Engineer	\$ 42.87	-	100	-	-	-	-	-	-	-	4	-	104	\$ 4,458.45	\$ 5,829.42	\$ 1,028.79	\$ 11,316.66
Erich Thalheimer	Lead Acoustical Engineer	\$ 94.14	-	92	-	4	-	-	-	-	-	-	-	96	\$ 9,037.79	\$ 11,816.90	\$ 2,085.47	\$ 22,940.16
Sam Pendyala	Senior Acoustical Engineer	\$ 47.63	-	40	-	-	-	-	-	-	-	-	-	40	\$ 1,905.23	\$ 2,491.09	\$ 439.63	\$ 4,835.94
Edward Tadross	Lead Environmental Scientist - Acoustics	\$ 78.64	-	44	-	-	-	-	-	-	-	-	-	44	\$ 3,460.13	\$ 4,524.12	\$ 798.42	\$ 8,782.67
Local Technician	Acoustical Field Assistant	\$ 46.58	-	28	-	-	-	-	-	-	-	-	-	28	\$ 1,304.10	\$ 1,705.11	\$ 300.92	\$ 3,310.13
Kevin Lim	Communications Lead	\$ 102.24	-	16	-	-	-	-	-	-	-	-	-	16	\$ 1,635.80	\$ 2,138.80	\$ 377.46	\$ 4,152.06
Shahid Mehmood	Senior Comms Engineer - SCADA	\$ 68.15	-	88	8	4	-	-	-	8	4	4	-	116	\$ 7,905.95	\$ 10,337.03	\$ 1,824.30	\$ 20,067.28
Amelia Ramnauth	Communications Engineer	\$ 35.83	-	144	-	-	-	-	-	-	-	-	-	144	\$ 5,159.76	\$ 6,746.39	\$ 1,190.62	\$ 13,096.77
Brittany Johnson	Safety and Security Specialist	\$ 40.57	-	-	-	-	25	-	-	-	-	-	-	25	\$ 1,014.30	\$ 1,326.20	\$ 234.05	\$ 2,574.55
Stephanie Sprague	Safety and Security QA	\$ 80.79	-	-	-	-	10	-	-	-	-	-	-	10	\$ 807.92	\$ 1,056.36	\$ 186.43	\$ 2,050.71
Claudio Vescio	Supervising Engineer (Structural)	\$ 78.66	-	71	-	8	-	-	-	8	-	-	-	87	\$ 6,843.42	\$ 8,947.77	\$ 1,579.12	\$ 17,370.31
Brian Dastis	Lead Structural Engineer	\$ 60.99	-	184	8	4	-	-	8	-	4	8	-	216	\$ 13,174.39	\$ 17,225.52	\$ 3,039.99	\$ 33,439.90
Emanuele Morbidoni	Senior Structural Engineer	\$ 51.66	-	280	-	-	-	-	-	-	-	-	-	280	\$ 14,463.92	\$ 18,911.57	\$ 3,337.55	\$ 36,713.04
Isabel Weil	Assistant Structural Engineer	\$ 34.51	-	120	-	-	-	-	-	-	-	-	-	120	\$ 4,140.83	\$ 5,414.13	\$ 955.50	\$ 10,510.46
William Haggerty	Topo Survey Manager	\$ 79.62	-	58	-	-	-	-	-	-	-	-	-	58	\$ 4,618.11	\$ 6,038.18	\$ 1,065.63	\$ 11,721.91
Michael Beym	Topo Survey Coordinator	\$ 39.46	-	81	-	-	-	-	-	-	-	-	-	81	\$ 3,196.63	\$ 4,179.59	\$ 737.62	\$ 8,113.84
Antonio Stevens	Topo Surveyor	\$ 36.33	-	108	-	-	-	-	-	-	-	-	-	108	\$ 3,923.48	\$ 5,129.95	\$ 905.34	\$ 9,958.77
Arvind Kannan	Senior CAD Operator 2 - Topo	\$ 56.89	-	40	-	-	-	-	-	-	-	-	-	40	\$ 2,275.76	\$ 2,975.55	\$ 525.13	\$ 5,776.44
Rob Bury	Sr. Technical Manager (Mechanical)	\$ 97.69	-	104	-	8	-	-	-	-	8	-	-	120	\$ 11,723.24	\$ 15,328.13	\$ 2,705.14	\$ 29,756.51
Gordon Ng	Supervising Engineer (Mechanical)	\$ 72.57	-	160	8	20	-	-	8	8	-	16	-	220	\$ 15,966.32	\$ 20,875.97	\$ 3,684.23	\$ 40,526.52
Andrew Koch	Project Engineer II (Mechanical)	\$ 46.33	-	319	-	-	-	-	-	-	-	8	-	327	\$ 15,148.80	\$ 19,807.05	\$ 3,495.59	\$ 38,451.44
Melissa Poggi	Project Manager	\$ 79.62	446	-	-	16	-	40	40	4	20	12	-	578	\$ 46,021.83	\$ 60,173.55	\$ 10,619.54	\$ 116,814.92
Paul Sullivan	Deputy Project Manager	\$ 136.88	86	-	-	40	-	-	60	4	-	-	-	190	\$ 26,006.96	\$ 34,004.10	\$ 6,001.11	\$ 66,012.17
Edrea Tan	QA/QC Manager	\$ 51.26	70	-	-	-	-	-	80	-	-	-	-	150	\$ 7,689.53	\$ 10,054.06	\$ 1,774.36	\$ 19,517.96
Jerry Portalatin	CADD Manager	\$ 67.59	80	-	-	-	-	-	-	-	-	-	-	80	\$ 5,406.84	\$ 7,069.44	\$ 1,247.63	\$ 13,723.91



STAFFING SCHEDULE BY FIRM																		
Tara Simlick	Document Controls Manager	\$ 37.25	90	-	-	-	-	-	-	-	-	8	-	98	\$ 3,650.47	\$ 4,772.98	\$ 842.34	\$ 9,265.79
John Kalb	Scheduling Manager	\$ 54.09	60	-	-	-	-	-	-	-	-	-	-	60	\$ 3,245.35	\$ 4,243.29	\$ 748.86	\$ 8,237.50
Bob Bretz	Projectwise Manager	\$ 60.12	20	-	-	-	-	-	-	-	-	-	-	20	\$ 1,202.46	\$ 1,572.22	\$ 277.47	\$ 3,052.15
Patti Cormier	Contract Manager	\$ 39.62	12	-	-	-	-	-	-	-	-	-	-	12	\$ 475.44	\$ 621.63	\$ 109.71	\$ 1,206.78
Ragui Fahmy	Senior Director - Geotechnical	\$ 105.53	-	151	-	4	-	-	-	8	4	-	-	167	\$ 17,623.28	\$ 23,042.43	\$ 4,066.57	\$ 44,732.28
Wanxing Liu	Engineer - Geotechnical	\$ 70.39	-	170	8	-	-	-	-	-	-	8	-	186	\$ 13,092.61	\$ 17,118.58	\$ 3,021.12	\$ 33,232.30
Jerry Chen	Engineer - Geotechnical	\$ 51.15	-	100	-	-	-	-	-	-	-	-	-	100	\$ 5,114.97	\$ 6,687.82	\$ 1,180.28	\$ 12,983.07
Harish Patel	Director - Mechanical Engineering	\$ 99.10	-	88	-	-	-	-	-	-	-	-	-	88	\$ 8,720.91	\$ 11,402.59	\$ 2,012.35	\$ 22,135.85
Michael Youssef	Mechanical Engineer	\$ 48.80	-	136	8	8	-	-	-	8	4	8	-	172	\$ 8,393.64	\$ 10,974.69	\$ 1,936.83	\$ 21,305.16
Damien Lau	WSP Supervising Engineer Plumbing & Fire Protection	\$ 80.42	-	56	-	8	-	-	-	-	-	-	-	64	\$ 5,146.85	\$ 6,729.50	\$ 1,187.64	\$ 13,063.99
Paulo Roldan	WSP Senior Engineer Plumbing & Fire Protection	\$ 68.98	-	116	-	-	-	-	-	8	4	8	-	136	\$ 9,381.65	\$ 12,266.51	\$ 2,164.82	\$ 23,812.98
John Bartell	WSP Engineer	\$ 48.65	-	120	8	-	-	-	8	-	-	-	-	136	\$ 6,615.72	\$ 8,650.05	\$ 1,526.58	\$ 16,792.35
Tom Marko	Construction Manager	\$ 94.32	-	-	-	-	-	-	-	120	-	-	-	120	\$ 11,318.35	\$ 14,798.74	\$ 2,611.71	\$ 28,728.79
Shamoun Mahgerefth	Sr. Director - Estimating	\$ 124.11	-	-	30	-	-	-	-	30	-	-	-	60	\$ 7,446.41	\$ 9,736.18	\$ 1,718.26	\$ 18,900.85
Ambrish Desai	Supervising Electrical Engineer	\$ 108.88	-	108	-	8	-	-	-	-	-	-	-	116	\$ 12,630.31	\$ 16,514.13	\$ 2,914.44	\$ 32,058.89
Kerrine Bryan	Electrical Engineer	\$ 68.94	-	498	-	-	-	-	-	8	12	-	-	518	\$ 35,711.62	\$ 46,692.94	\$ 8,240.46	\$ 90,645.02
Ross Krupnik	Lead Electrical Engineer	\$ 72.81	-	318	-	-	-	-	16	-	-	16	-	350	\$ 25,484.29	\$ 33,320.71	\$ 5,880.50	\$ 64,685.49
Joe Lewkowicz	Jr. Electrical Engineer	\$ 45.25	-	730	-	-	-	-	-	-	-	-	-	730	\$ 33,032.65	\$ 43,190.18	\$ 7,622.28	\$ 83,845.11
TOTAL			864	5,256	86	144	35	40	220	222	64	108	-	7,039	454,103	593,740	104,784	1,152,628

STAFFING SCHEDULE BY FIRM

FIRM: Richard Grubb & Associates (DBE)

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	145.44%	10.00%	\$
Richard Grubb	Director	\$ 62.00	-	1	-	-	-	-	-	-	-	-	-	1	\$ 62.00	\$ 90.17	\$ 15.22	\$ 167.39
Paul McEachen	Principal Sr. Archaeologist	\$ 50.00	-	8	-	-	-	-	-	-	-	-	-	8	\$ 400.00	\$ 581.76	\$ 98.18	\$ 1,079.94
Allison McGovern	Sr. Archaeologist	\$ 38.00	-	76	-	-	-	-	-	-	-	-	-	76	\$ 2,888.00	\$ 4,200.31	\$ 708.83	\$ 7,797.14
Alison Gall	Archaeologist	\$ 27.00	-	12	-	-	-	-	-	-	-	-	-	12	\$ 324.00	\$ 471.23	\$ 79.52	\$ 874.75
Patricia McEachen	Drafter	\$ 26.70	-	16	-	-	-	-	-	-	-	-	-	16	\$ 427.20	\$ 621.32	\$ 104.85	\$ 1,153.37
Cathy Smyrski	Editor	\$ 28.75	-	8	-	-	-	-	-	-	-	-	-	8	\$ 230.00	\$ 334.51	\$ 56.45	\$ 620.96
John Stiteler	Geomorphologist	\$ 45.00	-	64	-	-	-	-	-	-	-	-	-	64	\$ 2,880.00	\$ 4,188.67	\$ 706.87	\$ 7,775.54
TOTAL			-	185	-	-	-	-	-	-	-	-	-	185	\$ 7,211.20	\$ 10,487.97	\$ 1,769.92	\$ 19,469.09

STAFFING SCHEDULE BY FIRM

FIRM: AmerCom Corp. (DBE)

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	163.30%	10.00%	\$
Chris Bacchus	Senior Engineer - PIII	\$ 50.80	-	-	270	40	-	-	-	-	-	-	-	310	\$ 15,748.00	\$ 25,717.11	\$ 4,146.51	\$ 45,611.63
Mike Marino	Senior Engineer - PIII	\$ 48.46	-	-	110	-	-	-	-	-	40	-	-	150	\$ 7,269.00	\$ 11,870.57	\$ 1,913.96	\$ 21,053.52
Dan Chiang	Junior Engineer - PI	\$ 33.00	-	-	100	64	-	-	-	-	-	-	-	164	\$ 5,412.00	\$ 8,838.01	\$ 1,425.00	\$ 15,675.01
John Accetta	Senior Engineer - PIII	\$ 46.40	80	-	-	-	-	-	-	-	-	-	-	80	\$ 3,712.00	\$ 6,061.84	\$ 977.38	\$ 10,751.23
Robert Brazier	Resident Engineer/Project Engineer- PV	\$ 71.60	-	-	-	-	-	-	-	80	-	-	-	80	\$ 5,728.00	\$ 9,354.05	\$ 1,508.21	\$ 16,590.26
TOTAL			80	-	480	104	-	-	-	80	40	-	-	784	\$ 37,869.00	\$ 61,841.59	\$ 9,971.06	\$ 109,681.65

STAFFING SCHEDULE BY FIRM

FIRM: Mercer Planning Assoc. (DBE)

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	101.00%	10.00%	\$
Courtenay Mercer	Principal-In-Charge	\$ 75.00	41	-	-	-	-	67	-	-	-	-	-	108	\$ 8,100.00	\$ 8,181.00	\$ 1,628.10	\$ 17,909.10
Cailean Kok	Senior Planner	\$ 45.00	-	-	-	-	-	143	-	-	-	-	-	143	\$ 6,435.00	\$ 6,499.35	\$ 1,293.44	\$ 14,227.79
Nieves Pimienta	Senior Communications Associate	\$ 42.00	-	-	-	-	-	57	-	-	-	-	-	57	\$ 2,394.00	\$ 2,417.94	\$ 481.19	\$ 5,293.13
TBD	Intern	\$ 17.50	-	-	-	-	-	28	-	-	-	-	-	28	\$ 490.00	\$ 494.90	\$ 98.49	\$ 1,083.39
TOTAL			41	-	-	-	-	295	-	-	-	-	-	336	\$ 17,419.00	\$ 17,593.19	\$ 3,501.22	\$ 38,513.41

STAFFING SCHEDULE BY FIRM

FIRM: Sowinski Sullivan (DBE)

STAFF PERSON/ CLASSIFICATION	PROJECT TITLE OR DISCIPLINE	HOURLY RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TASK 10	TASK 11	TOTAL	TOTAL DIRECT LABOR COST	INDIRECT LABOR COST (OVERHEAD) @	FIXED FEE (PROFIT) @	TOTAL LABOR COST
		\$	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	HRS	\$	141.96%	10.00%	\$
Malik Basnight	Architect I	\$ 23.02	-	252	-	-	-	12	-	-	-	-	-	264	\$ 6,077.28	\$ 8,627.31	\$ 1,470.46	\$ 16,175.05
Marc Giangreco	Architect II	\$ 25.84	10	370	-	-	-	-	-	-	30	-	-	410	\$ 10,594.40	\$ 15,039.81	\$ 2,563.42	\$ 28,197.63
Jeffrey Sroka	Architect III	\$ 33.60	24	432	-	-	-	-	-	-	-	60	-	516	\$ 17,337.60	\$ 24,612.46	\$ 4,195.01	\$ 46,145.06
Adrienne Arthur	Architect IV	\$ 38.39	28	328	-	-	-	30	-	-	-	40	-	426	\$ 16,354.14	\$ 23,216.34	\$ 3,957.05	\$ 43,527.52
Alexander Carlson	Architect V	\$ 50.31	32	216	-	-	-	30	-	-	-	16	-	294	\$ 14,791.14	\$ 20,997.50	\$ 3,578.86	\$ 39,367.51
Lee Boyce	Architect VI	\$ 62.68	-	60	-	-	-	-	-	-	-	8	-	68	\$ 4,262.24	\$ 6,050.68	\$ 1,031.29	\$ 11,344.21
Brandon Coles	Architect VII	\$ 73.62	-	32	-	-	-	4	-	-	-	8	-	44	\$ 3,239.28	\$ 4,598.48	\$ 783.78	\$ 8,621.54
Richard Sullivan	Architect VIII	\$ 142.27	6	68	-	-	-	4	-	-	-	4	-	82	\$ 11,666.14	\$ 16,561.25	\$ 2,822.74	\$ 31,050.13
TOTAL			100	1,758	-	-	-	80	-	-	30	136	-	2,104	\$ 84,322.22	\$ 119,703.82	\$ 20,402.60	\$ 224,428.65

WSP USA • 2 GATEWAY CENTER, 10TH FLOOR, NEWARK NJ 07102 • WWW.WSP.COM



NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EXHIBIT C
NJ TRANSIT TRAVEL AND BUSINESS REIMBURSEMENT
GUIDELINES

Effective October 1, 2022

* \$59 Standard Meal Rate applies to all destinations not specifically listed

Average Per Diem Rates are listed below

A full listing of domestic Per Diem Rates can be found online at www.gsa.gov

Current foreign Per Diem Rates can be found at

https://aoprals.state.gov/web920/per_diem.asp

**NJ TRANSIT
TRAVEL & BUSINESS REIMBURSEMENT GUIDELINES
FOR CONTRACTORS AND VENDORS**

GENERAL:

All overnight travel must be authorized in writing by the Project Manager. Overnight lodging expenses for New York City are prohibited.

These guidelines are subject to periodic review and adjustment by NJ TRANSIT.

1. Meals: NJ TRANSIT has adopted the IRS-established "Major Cities" method for meal and incidental travel expenses within the continental United States.

The following table shows the average per diem rates for meals and incidental expenses while on travel. The M&IE rates differ by travel location. View the per diem rates for your destination to determine which M&IE rates apply.

M&IE Total	\$59.00	\$64.00	\$69.00	\$74.00	\$79.00
Breakfast	\$13.00	\$14.00	\$16.00	\$17.00	\$18.00
Lunch	\$15.00	\$16.00	\$17.00	\$18.00	\$20.00
Dinner	\$26.00	\$29.00	\$31.00	\$34.00	\$36.00
Incidentals	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00

"Incidentals" as defined by the IRS include "fees and tips given to porters, baggage carriers, hotel staff, and staff on ships".

2. Conveyances: Travel expenses will be reimbursed subject to their reasonableness and subject to the following maximums (receipts required):
 1. Air-Fare: When authorized in writing and only at the prevailing coach rates. First class travel costs are not reimbursable.
 2. Rail or Bus: Only regular coach fares are reimbursable.
 3. Automobile: Mileage will be reimbursed at a rate of \$0.62 cents per mile if use of privately owned automobiles is authorized or if no government-furnished automobile is available. Mileage will be reimbursed at a rate of \$0.22 cents per mile if a government-furnished automobile is available. These rates are effective July 1, 2022. Mileage claims in excess of 30 miles one-way must be supported with documentation from a reputable online service (e.g. Map Quest). Gas, tolls and parking fees will be reimbursed only when validated by receipt.
3. Lodging: Reimbursed for single occupancy rates at reasonable, actual costs for the location. Lodging costs exceeding \$161.00 per night require prior approval of the Project Manager. The standard rate of \$98.00 per night applies for all locations without specified rates.

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EXHIBIT D
DBE REQUIREMENTS AND FORMS

Procurement Checklist (Federal Contracts)

Upon completion of the Required and/or Supplemental Forms packet(s), please be sure that the completed checklist and the forms listed below are included for each DBE subcontractor listed on the Form A and submitted to the Office of Business Development (OBD) for review.

Note: Failure to complete and submit the forms below will delay the OBD from issuing approval to move forward in the contract award process.

Required Forms

- ☐ Form A - First Tier DBE Utilization
- ☐ Form A1 - Bidder/Proposer Solicitation and Contractor Information
- ☐ Form A2 - Non-DBE Sub Utilization
- ☐ Form B - Intent to Perform as a DBE Sub
- ☐ Form D - DBE Good Faith Effort Form
- ☐ Trucking Commitment Agreement (if applicable)
- ☐ Copy of NJUCP DBE and NAICS Code Certification

Supplemental Forms (if applicable)

- ☐ Form AA - Second Tier DBE Utilization
- ☐ Form AA1 - Second Tier Bidder/Proposer Solicitation and Contractor Information
- ☐ Form AA2 - Second Tier Non-DBE Sub Utilization
- ☐ Form BB - Intent to Perform as a Second Tier DBE Sub
- ☐ Trucking Commitment Agreement (if applicable)
- ☐ Copy of NJUCP DBE and NAICS Code Certification

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, Executive Director



One Penn Plaza East
Newark, NJ 07105-2246
973-491-7000

NJ TRANSIT'S DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM POLICY STATEMENT

TO ALL NJ TRANSIT EMPLOYEES AND THE CONTRACTING COMMUNITY:

The NEW JERSEY TRANSIT CORPORATION (NJ TRANSIT) administers its Disadvantaged Business Enterprise (DBE) program in accordance with the U.S. Department of Transportation (USDOT) regulation 49 CFR Part 26, and hereby reaffirms and formalizes its commitment to the DBE Program and its objective: to create a "level playing field" in NJ TRANSIT's procurement activities.

As a major provider of public transportation with thousands of employees who have extensive daily contact with the public, NJ TRANSIT recognizes its responsibility to the diverse communities that it serves. It is the policy and commitment of NJ TRANSIT not to discriminate based on race, color, national origin, or sex in the award and performance of any NJ TRANSIT contract, or in the administration of its DBE program. It is also the policy of NJ TRANSIT to ensure that DBE's have a fair opportunity to be informed about, compete for, and participate in USDOT-assisted contracts.

In keeping with this commitment and this agency's obligations under 49 CFR Part 26, NJ TRANSIT will make every effort to achieve the following objectives:

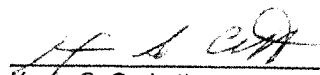
- Ensure that only firms that fully meet eligibility standards of 49 CFR Part 26 are permitted to participate as DBE's on NJ TRANSIT contracts.
- Remove barriers that may prevent some DBE's from being able to participate on NJ TRANSIT contracts; and,
- Support the development of DBE firms, so they can compete successfully in the marketplace outside of the DBE Program.

Implementation of the DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Contractors/Consultants shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts. Failure by the contractor/consultant to carry out these requirements shall constitute a breach of the contract, which could result in the termination of the contract or other such remedy, as NJ TRANSIT deems appropriate.

Leotis Sanders, NJ TRANSIT's Chief Civil Rights & Diversity Officer, is the corporation's DBE Liaison Officer (DBELO) to the Federal Transit Administration (FTA), and is responsible for implementing all aspects of NJ TRANSIT's DBE program while ensuring appropriate DBE participation in NJ TRANSIT's procurement activities.

NJ TRANSIT's Board of Directors is committed to the DBE Program as are all Assistant Executive Directors, General Managers, Chiefs, and their staffs. NJ TRANSIT's employees and all DBE and non-DBE business community members that participate in USDOT-assisted contracts, share in the responsibility for making NJ TRANSIT's DBE program a success. This policy is disseminated to all tiers of our organization, and to the DBE and non-DBE business communities that participate in our USDOT-assisted contracts.

Date: August 7, 2018


Kevin S. Corbett
Executive Director

**NEW JERSEY TRANSIT CORPORATION
DBE REQUIREMENTS FOR
FEDERAL PROCUREMENT ACTIVITIES**

Race Conscious

TABLE OF CONTENTS

TITLE OF ARTICLE	PAGE
1.1 POLICY.....	2
1.2 ASSURANCE.....	2
1.3 DBE GOAL FOR THIS PROJECT.....	3
1.4 GUIDANCE TO BIDDER/PROPOSERS/PRIMES.....	3
1.5 TRANSIT VEHICLE MANUFACTURERS (TVM).....	4
1.6 RESPONSIBLE BID/PROPOSAL CRITERIA.....	4
2.0 GUIDANCE ON A GOOD FAITH	5
2.2 A GOOD FAITH EFFORT.....	5-6
2.3 REQUIRED FORMS.....	7
2.4 SUPPLEMENTAL REQUIRED FORMS (IF APPLICABLE).....	7-8
2.5 INSTRUCTIONS FOR COMPLETING REQUIRED FORMS.....	8-11
2.6 INSTRUCTIONS FOR COMPLETING SUPPLEMENTAL REQUIRED FORMS.....	11-12
3.0 GUIDANCE ON COUNTING DBE PARTICIPATION	12
3.2 COUNTING DBE PARTICIPATION.....	12
3.3 DBE PRIME CONTRACTOR GUIDANCE.....	12-13
3.4 DBE TRUCKING FIRM GUIDANCE.....	13
3.5 LEASING TRUCKS.....	13-14
3.6 COUNTING MATERIALS AND SUPPLIES.....	14
4.0 TERMINATION OF DBE(s).....	14-15
4.2 ADDITION OF DBE(s).....	15-16
4.3 REPLACEMENT OR REMOVAL OF DBE(s).....	16-17
4.4 WITHDRAWN DBE(s).....	17
4.5 DECERTIFIED DBE(s).....	17-18
5.0 AWARD OBLIGATIONS.....	18
5.2 POST AWARD DELIVERABLES.....	18-19
5.3 PROMPT PAYMENT OF INVOICES TO SUBCONTRACTORS.....	19-20
5.4 SUBCONTRACT PAYMENT DISPUTE RESOLUTION.....	20
5.5 PROMPT PAYMENT OF SUBCONTRACTOR RETAINAGE.....	20-21
5.6 AUDIT AND SANCTIONS.....	21
5.7 LIQUIDATED DAMAGES.....	21-22
APPENDIX 1 (GLOSSARY).....	23-24

NEW JERSEY TRANSIT CORPORATION

DBE REQUIREMENTS FOR FEDERAL PROCUREMENT ACTIVITIES

The following pages provide Bidders/Proposers/Primes on federal contracts with New Jersey Transit (NJT), information about NJT's Disadvantaged Business Enterprise (DBE) Program, administered by the Office of Business Development (OBD). Prospective Bidders/Proposers/Primes will have an opportunity to ask questions regarding the directives contained in the DBE specifications at the pre-bid/pre-proposal conference(s). Further clarification of the DBE specifications, along with assistance in completing the forms, can be obtained by calling (973) 491-7593.

A list of certified DBE firms may be found in the NJ Unified Certification Program (NJUCP) Directory at <https://njucp.dbesystem.com>. **Note: Use of this list does not relieve the Bidder/Proposer/Prime contractor/consultant of responsibility to seek DBE participation from other sources. The list is updated daily and must be checked periodically, as firms are certified and decertified daily.**

These DBE specifications are a part of the Contract and shall be binding upon the successful Bidder/Proposer and Prime in the pre and post-award stages of NJT professional services, construction, and goods and services contracts. These specifications shall be binding upon sub-recipients and imposed on their contractors.

1.1 POLICY

As defined in the U.S. Department of Transportation (USDOT) Regulation 49 CFR Part 26, it is the policy of NJT that Disadvantaged Business Enterprises shall have the opportunity to compete for and participate in the performance of contracts financed in whole or in part with federal funds. Each subcontract a Prime signs with a subcontractor/subconsultant must include the following assurance referenced in **article 1.2**.

1.2 ASSURANCE

- 1.2.1 The Bidder/Proposer, Prime Contractor/Consultant, or subcontractor/subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the award or performance of this contract. The Prime contractor/consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. The Bidder/Proposer, Prime Contractor/Consultant, or subcontractor/subconsultant shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure nondiscrimination in the award and administration of DOT assisted contracts. Failure by the contractor/consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate

Race Conscious

(49 CFR 26.13).

- 1.2.2 This language is included to comply with relevant Federal law and to ensure that all persons who enter into any direct or indirect form of contractual agreement with NJT are aware of their responsibilities and the commitment of NJT to see that NJT's DBE Policy is carried out in all instances.

1.3 DBE GOAL FOR THIS PROJECT

As an aid in meeting the commitment of its DBE Program, NJT is setting a *race conscious* goal of awarding _____ percent of the gross sum bid/proposal to certified NJUCP DBE firms. Should the actual contract amount increase or decrease, through approved change order(s), the assigned goal may remain. The OBD will determine if the change orders and/or contract phases will result in an adjustment to the DBE participation goal.

1.4 GUIDANCE TO BIDDER/PROPOSERS/PRIMES

- 1.4.1 Failure by a Bidder/Proposer/Prime to comply with any of the requirements contained herein shall result in breach of contract and it shall be subject to the appropriate penalties, remedies, or liquidated damage(s). **Refer to articles 5.6-5.7**
- 1.4.2 All required forms, including the supplemental section (**see articles 2.3-2.4**) must be submitted in accordance with the requirements. **Firms must be certified under the NJUCP at the time of contract award in order to obtain DBE credit toward the goal.** Firms pending certification will not count toward meeting the contract goal.
- 1.4.3 Price alone is not an acceptable basis for rejecting a DBE subcontractor/subconsultant's bid.
- 1.4.4 The Bidder/Proposer/Prime shall, at a minimum, seek DBEs in the same geographic area in which it generally seeks subcontractors/subconsultants. However, the Bidder/Proposer/Prime may be required to expand its search under specific circumstances as determined by OBD. **Refer to article 2.0**
- 1.4.5 Agreements between a Bidder/Proposer/Prime and a DBE in which the DBE promises not to provide subcontracting quotations to other Bidder/Proposers are prohibited.
- 1.4.6 The desire of a Bidder/Proposer/Prime to self-perform the work of a contract with its own organization is not an acceptable basis to not meet the goal or demonstrate a good faith effort to do so.
- 1.4.7 The Bidder/Proposer/Prime is responsible for verifying that the DBE is certified under the appropriate NAICS code for the scope of work identified. DBE credit shall be given only for work performed in the NAICS code(s) under which the DBE is certified.
- 1.4.8 A DBE firm listed on the First-Tier DBE Utilization Form (Form A) and Second-Tier DBE Utilization (Form AA) shall constitute a binding representation to NJT, by the Bidder/Proposer/Prime, that the DBE firm is qualified, available, and certified under the appropriate and required NAICS code to perform the scope of work identified. **Refer to article 2.5a**

1.5 TRANSIT VEHICLE MANUFACTURERS (TVM)

- 1.5.1 As a transit vehicle manufacturer, you must establish and submit for FTA's approval an annual overall DBE percentage goal. A TVM must certify that it submitted the annual DBE goal required by 49 CFR 26.49 and FTA has approved it or not disapproved it.
- (a) As a condition of being authorized to bid or propose on FTA assisted transit vehicle procurements, the Bidder/Proposer must complete and submit the TVM Certification form with the bid/proposal certifying that it has complied with the requirements of 49 CFR 26.49.
- 1.5.2 NJT may, with FTA approval, establish project-specific goals for DBE participation in the procurement of transit vehicles in lieu of complying with the procedures of this section.

1.6 RESPONSIBLE BID/PROPOSAL CRITERIA

- 1.6.1 As a matter of responsibility, the two lowest Bidders or two highest ranked Proposers must submit the required forms, including the supplemental section (if applicable), with the bid/proposal or within five (5) calendar days after the bid opening or proposal/cost due date. Notwithstanding the date of submission of the mandatory DBE forms, **all negotiations between a Bidder and any potential DBE subcontractor, subconsultant, or supplier shall be completed prior to the bid opening or proposal/cost due date.** Bidders/Proposers shall identify all DBE and non-DBE subcontractors, subconsultants, and suppliers proposed to participate in and those solicited for this Contract, and shall complete and submit the mandatory DBE Forms A, A1, A2, and B. The two lowest Bidders or two highest ranked Proposers shall also print and submit the DBE firm's current DBE Certification Profile from the NJUCP DBE Business Directory at njucp.dbesystem.com. Additionally, the two lowest Bidders or two highest ranked Proposers shall submit all applicable supplemental forms (AA, AA1, AA2, BB, DBE Certification Profile and D). All required DBE forms and Certification Profiles shall be submitted with the Bid or within five (5) calendar days of the bid opening or final cost due date. However, Bidders are strongly encouraged to submit all mandatory documents with the Bid to prevent delay of the Contract award.
- 1.6.2 Bidders are requested to review carefully and complete the forms entirely, with no blank fields. Failure to satisfactorily complete or submit all required documentation and/or demonstrate documented evidence of good faith effort within **five (5) calendar days after the bid opening or proposal/cost due date** shall result in rejection of a Bid as non-responsible.
- 1.6.3 If the two lowest Bidders/highest ranked Proposers submit the DBE forms, but fail to meet the DBE goal, the OCR/OBD will consider the efforts made to determine if a Bidder/Proposer/Prime has in fact demonstrated a good faith effort. **See article 2.0**
- 1.6.4 If it is determined that satisfactory good faith efforts were not made to include DBE participation on the contract, NJT shall consider awarding the contract to the next lowest bidder or highest ranked proposer who offers a reasonable price, meets the DBE goal and other bid requirements or requirements of 49

CFR Part 26 and/or satisfactorily demonstrates documented evidence of good faith effort.

2. GUIDANCE ON A GOOD FAITH EFFORT

- 2.1 To demonstrate a good faith effort to meet the DBE goal, a Bidder/Proposer/Prime shall provide written documentation in addition to Form D (article 2.3e), of the steps it has taken, prior to the bid opening/proposal due date, or during the life of the contract to obtain DBE participation. **The Bidder/Proposer/Prime can meet this requirement in either of two ways:**

- (1) The Bidder/ Proposer/Prime can meet the goal.
 - (2) The Bidder/Proposer/Prime shall exhaust the available options referenced in **article 2.2** in making a continuous good faith effort to meet the assigned contract goal for the life of the contract.
- (a) The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.
 - (b) In determining a good faith effort, the OBD will consider the **quality, quantity, and intensity** of the different kinds of efforts that the Bidder/Proposer/Prime has made. Mere *pro forma* efforts will not be considered as demonstration of good faith effort to meet the DBE contract requirements.
 - (c) The Bidder/Proposer/Prime shall use good business judgment and consider a number of factors in negotiating with subcontractors/subconsultants, including DBE subcontractors/ subconsultants, and should take a firm's price and capabilities as well as contract goals into consideration. **The fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a Bidder's/Proposer's failure to meet the contract DBE goal, as long as such costs are reasonable as determined by NJT. Primes are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.**
 - (d) The Bidder/Proposer/Prime's **ability or desire to perform the work of a contract with its own organization (self-performance) does not relieve the Bidder/Proposer/Prime of the responsibility to meet the goal or demonstrate a good faith effort.**
 - (e) The Bidder/Proposer/Prime shall not reject DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Bidder/Proposer/Prime's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Bidder/Proposer/Prime's efforts to meet the assigned project goal.
 - (f) The OBD will support the Bidder/Proposer/Prime in indentifying ways to meet the assigned contract goal.

2.2 A GOOD FAITH EFFORT

The following is a list of actions that NJT will consider as evidence of a Bidder/Proposer/Prime's good DBE Requirements for RC Federal Procurement Activities Sept 15, 2010 updd 11.22.19

Race Conscious

faith effort to obtain DBE participation. While exhausting the available options in this list may count as a good faith effort, this list is not intended to be a mandatory checklist, nor is this list intended to be exclusive or exhaustive of all the efforts a Bidder/Proposer/Prime might make to achieve the assigned DBE goal. NJT may require a Bidder/Proposer/Prime to take action above and beyond those listed below to meet the assigned DBE goal.

- (a) The Bidder/Proposer/Prime shall solicit through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capacity to perform the work of the contract.
 - (1) The Bidder/Proposer/Prime must solicit this interest within sufficient time to allow the DBE to respond to the solicitation.
 - (2) The Bidder/Proposer/Prime must take appropriate steps to follow up on initial solicitations in order to determine with certainty if the DBE firms are interested.
- (b) The Bidder/Proposer/Prime shall select portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Prime might otherwise prefer to perform these work items with its own forces.
- (c) The Bidder/Proposer/Prime shall provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (d) The Bidder/Proposer/Prime shall negotiate with a DBE(s) with the intent to enter into a contract. It is the Bidder/Proposer's responsibility to make a portion of the work available to DBE subcontractors/subconsultants and suppliers and to select those portions of the work or material needs consistent with the available DBE Primes and suppliers, so as to facilitate DBE participation.
 - (1) **Evidence of such negotiation includes:** the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
- (e) The Bidder/Proposer/Prime shall make efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by NJT or the Prime contractor.
- (f) The Bidder/Proposer/Prime shall make efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (g) The Bidder/Proposer/Prime shall effectively use the services of available minority/women community organizations; minority/women Prime contractors groups; local, State and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

2.3 REQUIRED FORMS

- (a) **Form A - First Tier DBE Utilization:** Lists all First Tier DBE firms scheduled to participate on this contract.
- (b) **Form A1 - Bidder/Proposer Solicitation and Contractor Information:** Lists all DBE and Non-DBE sub contractor/subconsultants, including suppliers, solicited for, and participating on this contract.
- (c) **Form A2- Non-DBE Sub Utilization:** Lists all **DBE and Non-DBE** subcontractors/ subconsultants, including suppliers, participating on this contract.
- (d) **Form B - Intent to Perform as a DBE Sub:** Identifies the work the 1st Tier DBE intends to perform including scope of work, subcontract dollar value, etc.
- (e) **DBE Good Faith Effort Form (if applicable):** Identifies any DBE subcontractor invited to quote, but declined to do so for any reason.
- (f) **Trucking Commitment Agreement (if applicable):** Identifies all trucking firms (DBE and Non-DBE) participating on this contract, at any tier.
- (g) **NJ UCP DBE Certification Profile & NAICS Code Verification:** Confirms the DBE status, name, address, contact information, business description and NAICS code(s) of each First Tier DBE subcontractor/subconsultant.
- (h) ***Form E - Contractor's Monthly DBE Payment Report & Payment Certification Voucher (Post-Award):** Records monthly payments issued to each DBE subcontractor/subconsultant/supplier and monthly payments issued by NJ TRANSIT to the Prime. Certifies that DBE subs have been paid for previous month's invoices.
- (i) **Form E2 – DBE's Monthly Payment Report (Post-Award):** Records monthly invoices submitted by the DBE, payments owed to the DBE on past due invoices and payments received from the prime by each DBE subcontractor/subconsultant.
- (j) **Form E1- DBE Prime's Monthly Payment Report (For DBE Prime Only):** Records monthly payments issued to each DBE Prime by NJ TRANSIT to.

**This form is due from the Prime in each month following the notice to proceed issued by NJ TRANSIT. Refer to article 5.2.4*

2.4 SUPPLEMENTAL FORMS (REQUIRED IF APPLICABLE)

- (a) **Form AA – Second Tier DBE Utilization:** Lists all Second Tier DBE firms scheduled to participate on the DBE sub-Prime's contract.
- (b) **Form AA1 – Second Tier Bidder/Proposer Solicitation and Contractor Information:** Lists all Second Tier DBE firms participating on this contract as indicated on Form AA and Form AA2.

- (c) **Form AA2- Second Tier Non-DBE Sub Utilization:** Lists all **DBE and Non-DBE firms** including suppliers participating on the DBE sub-Prime's contract.
- (d) **Form BB - Intent to Perform as a Second Tier DBE Sub:** Identifies the work the 2nd Tier DBE intends to perform including scope of work, subcontract dollar value, etc.
- (e) **NJ UCP DBE Certification Profile & NAICS Code Verification:** Confirms the DBE status, name, address, contact information, business description and NAICS code(s) of each Second Tier DBE subcontractor/subconsultant.

2.5 INSTRUCTIONS FOR COMPLETING REQUIRED FORMS (see glossary for definition of terms)

(a) **Form A - First Tier DBE Utilization:**

Form A is a formal agreement between the Bidder/Proposer and the DBE(s). Replacement/removal of DBE subcontractors/subconsultants/supplier identified on Form A is prohibited after the bid or proposal is submitted to NJT. **Refer to article 4.3.** A DBE Bidder/Proposer, which lists itself on Form A, is committed to performing the work indicated with its own personnel.

DBEs performing as second tier sub(s) to a **non-DBE sub Prime** should be listed with the name of the non-DBE sub Prime's firm name in parenthesis next to the DBE sub's name. *{Ex: DBE Electric Co. (Prime Contractor, Inc.)}*

(1) A first Tier DBE is required to perform at least 51% of its subcontract value with its own forces. Bidders/Proposers/Primes will not receive any credit for DBEs performing less than 51% and therefore must not be listed on this form.

(2) **For DBE suppliers**, identify all manufacturers, regular dealers, and brokers. If a DBE supplier is a **manufacturer**, indicate the full value of its subcontract. If a DBE supplier is a **regular dealer**, show its total contract value multiplied by 60% (Ex. \$100K x 60%= \$60K). If a DBE supplier is **neither a manufacturer nor a dealer**, indicate the fee/commission only, **not the cost of materials or supplies**. See **article 3.0** for direction on determining credit toward the goal.

(3) **A detailed scope of work must be provided; one-word descriptions are not acceptable.** *(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).*

(b) **Form A1 - Bidder/Proposer/Prime Solicitation and Contractor Information:**

The Bidder/Proposer must complete and submit **page one** (1). The DBE and non-DBE subcontractors/subconsultants, including suppliers, solicited for, participating on, or expressed interest in this contract must complete **page two** (2).

(c) **Form A2- Non-DBE Sub Utilization:**

Race Conscious

Bidders/Proposers are required to report and submit all dollars committed to non-DBE subcontractors/subconsultants/suppliers. The non-DBE portion of work is **not** counted toward the assigned DBE goal. **See article 3.0**

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

(d) Form B - Intent to Perform as a First Tier DBE Sub:

Each DBE subcontractor/subconsultant/supplier listed on Form A must complete and sign Form B. **Note:** **The Bidder/Proposer/Prime is prohibited from completing any portion of the form and from directing DBE(s) to sign a blank form.**

(1) The Bidder/Proposer/Prime must provide interested DBEs with a copy of appropriate plans, specifications, and requirements of the contract in a timely manner to allow the DBE to prepare an appropriate price quote and submit on time.

(2) First Tier DBEs must perform at least 51% of the total dollar value of its subcontract, with its own forces. The firm must indicate the percentage of the total portion of work to be subcontracted to DBE and non-DBE firms. The non-DBE percentage of work is not counted toward the assigned goal.

(3) The OBD encourages DBE-to-DBE subcontracting in order to preserve DBE participation credit. **See article 3.0**

(4) The DBE must provide a detailed scope of work; one-word descriptions are not acceptable. Descriptions should include: *type of services provided, total number of units, price per unit, total cost, etc.*

(e) DBE Good Faith Effort: (If Applicable)

Form D applies to any Bidder/Proposer/Prime who failed to meet the assigned DBE goal. This form will assist the Bidder/Proposer/Prime in demonstrating a good faith effort.

If the DBE(s) solicited declines to sign this form, the completed form should be submitted with the Bidder/Proposer's signature only and the OBD will verify the information provided with the firm. **Refer to articles 2.0-2.2** for guidance.

(f) Trucking Commitment Agreement: (If Applicable)

DBEs must provide information for all DBE and non-DBE trucking firms it will lease from or subcontract to. Subcontracting to a non-DBE trucker means that the non-DBE will perform a portion of the DBE firm's subcontract. **Refer to article 3.4**

Race Conscious

The following documents must be attached for all trucks owned: copy of title(s)/finance agreement(s), registration card(s), insurance card(s), apportioned cab card(s) and/or hazardous material license(s) if applicable. A copy of the title or finance agreement is the only acceptable proof of ownership.

The following documents must be attached for all trucks leased: copy of lease agreement(s) established between both firms, title(s), registration card(s), insurance card(s), lease agreement(s), apportioned cab card(s) and/or hazardous material license(s) if applicable.

(g) NJ UCP DBE Certification Profile and NAICS Code Verification:

All DBEs listed on Form A must be certified at the time of contract award. It is the Bidder/ Proposer's responsibility to ensure that DBEs are certified and that their NAICS code(s) match the scope of work to be performed on this contract. Credit will not be given for any work to be performed without the appropriate NAICS code. DBE status and profile can be verified and printed through <https://njucp.dbesystem.com> and NAICS codes descriptions can be verified through www.census.gov/eos/www/naics/.

(h) Form E - Contractor's Monthly DBE Payment Report & Payment Certification Voucher:

Beginning the month following the contract's notice to proceed, the Prime must report monthly payment activity for each DBE subcontractor/subconsultant/supplier; certifies each DBE sub has been paid any amounts due from previous or current progress payments paid to the Prime. **(article 5.2.4)**

All invoices 30 days past due from NJT must be listed in the appropriate field.

This report is due even if there is no payment activity. This form must be completed and submitted to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

(i) Form E1- DBE Prime's Monthly Payment Report (For DBE Prime Only)

Beginning the subsequent month following the contract's execution date, the DBE Prime must report its monthly payments received by NJT. **Refer to article 5.2.5.**

All invoices 30 days past due from NJT must be listed in the appropriate field.

This report is due even if there is no payment activity. This form must be completed and submitted to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

(j) Form E2 – DBE's Monthly Payment Report:

The Prime must provide a copy of the Form E2 to each DBE subcontractor/subconsultant/supplier(s).

Beginning the subsequent month following the DBE's execution date, the DBE firm must report its monthly payment activity.

Race Conscious

This report is due even if there is no payment activity. **This form must be completed and submitted by the DBE only** to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

All invoices 30 days past due must be listed in the appropriate field. Identify concerns or issues in the comments section to be addressed by the OBD. (Refer to article 5.2.6)

2.6 INSTRUCTIONS FOR COMPLETING SUPPLEMENTAL REQUIRED FORMS:

- (a) **Form AA – Second Tier DBE Utilization:** The Second Tier DBE **must perform 100%** of its subcontract with its own forces. A formal request to waive this requirement may be granted, solely at the discretion of the OBD; however, approval is required.

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

- (b) **Form AA1 – Second Tier Bidder/Proposer Solicitation and Contractor Information:**

The DBE sub-Prime must submit and complete **page one** (1). Second Tier DBE(s) solicited for and participating on this contract must complete **page two** (2).

- (c) **Form AA2- Second Tier Non-DBE Subcontractor Utilization:**

DBE sub-Primes are required to report and submit all dollars committed to non-DBEs. The non-DBE portion of work is not counted toward DBE participation credit. **Refer to article 3.0**

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

- (d) **Form BB - Intent to Perform as a Second Tier DBE Subcontractor:**

Each DBE firm listed on Form AA, must complete, and sign. **Only Second Tier DBE(s) must complete and sign this form.**

The Second Tier DBE must provide a detailed scope of work; one-word descriptions are not acceptable. Descriptions should include: type of services provided, total number of units, price per unit, total cost, etc

- (e) **NJ UCP DBE Certification Profile & NAICS Code Verification:**

All DBEs listed on Form AA must be certified at the time of contract award. It is the Bidder/Proposer/Prime's responsibility to ensure that DBEs are certified and that their NAICS code(s) match the scope of work to be performed on this contract. Credit will not be given for any work to be

performed without the appropriate NAICS code. DBE status and profile can be verified and printed through <https://njucp.dbesystem.com> and NAICS codes descriptions can be verified through www.census.gov/eos/www/naics/.

3.0 GUIDANCE ON COUNTING DBE PARTICIPATION

- 3.1 If a firm is not currently certified as a DBE in accordance with 49 CFR part 26 at the time of the execution of the contract, the firm's participation will not count toward the DBE goal.
- 3.1.1 A DBE performing less than 51% of its subcontract will not count toward the assigned goal and should not be listed on any forms.
- 3.1.2 When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor/subconsultant is a DBE.
 - (a) Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE contract goal.
 - (b) When a DBE performs as a participant in a **joint venture with a Non-DBE**, count the portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
 - (c) A DBE performs a *commercially useful function* when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing and supervising the work involved.

A DBE does not perform a *commercially useful function* if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

3.2 COUNTING DBE PARTICIPATION

- 3.2.1 When a DBE participates in a contract, only the value of the work actually performed by the DBE is counted toward DBE goals.
 - (a) The entire amount of that portion of a contract that is performed by the DBE's own forces is counted. This includes the cost of supplies and materials obtained by the DBE for the work of the contract, as well as supplies purchased, or equipment leased by the DBE (*except supplies and equipment the DBE subcontractor/subconsultant purchases or leases from the Prime contractor or its affiliate*).
- 3.2.2 The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a contract, is counted toward DBE goals, provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services by a DBE.

3.3 DBE PRIME CONTRACTOR GUIDANCE

- 3.3.1 If a **DBE Prime**, expenditures are counted toward DBE goals only if the DBE is performing a commercially useful function on that contract.

Race Conscious

3.3.2 A DBE Prime must perform or be responsible at least 30% of the total cost of its contract with its own workforce.

3.3.3 **If a DBE Prime does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce** or subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, NJT will consider that it is not performing a commercially useful function and the DBE Prime shall be in breach of the contract and subject to the appropriate remedies and penalties. **Refer to Articles 5.6-5.7**

3.4 DBE TRUCKING FIRMS GUIDANCE

3.4.1 A DBE trucking firm is performing a commercially useful function if:

- (a) The DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there is not a contrived arrangement for the purpose of meeting DBE goals.
- (b) The DBE itself owns and operates at least one fully licensed, insured, and operational truck to be used on the contract.

3.4.2 The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

3.5 LEASING TRUCKS

3.5.1 Leased trucks must display the name and identification number of the DBE.

3.5.2 The DBE may lease trucks from another DBE firm, including an owner-operator that is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

3.5.3 The DBE may also lease trucks from a **non-DBE firm**, including an owner-operator.

- (a) The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers.
- (b) The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services

3.5.4 For the purposes of this section (Leasing), a lease must indicate that the DBE has exclusive use of and control over the truck.

- (a) This does not preclude the leased truck from working for others during the term of the lease with the

consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck.

3.6 COUNTING MATERIALS AND SUPPLIES

3.6.1 Expenditures with DBEs for materials or supplies are counted toward DBE goals as provided in the following:

- (a) If the materials or supplies are obtained from a **DBE manufacturer**, 100% of the cost of the materials or supplies are counted toward DBE goals.
 - (1) For purposes of this paragraph 3.6.1(a), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the material, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (b) If the materials or supplies are purchased from a **DBE regular dealer**, sixty percent (60%) of the cost of the materials or supplies is counted toward DBE goals.
 - (1) For purposes of this paragraph 3.6.1(b), a regular dealer is a firm that owns, operates, maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
 - (2) The firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - (3) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided above if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.
 - (4) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph 3.6.1(b).
- (c) With respect to materials or supplies purchased from a **DBE, which is neither a manufacturer nor a regular dealer**, only the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, is counted toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar service. **However, any portion of the cost of the materials and supplies themselves do not count toward DBE goals.**

4.0 TERMINATION OF DBE(s) 26.53

In addition to post-award terminations, the provisions of this section apply to pre-award deletions of or substitutions for DBE firms put forward by bidders, and offerors in negotiated procurements.

4.1 The Bidder/Proposer/Prime shall not terminate a DBE sub listed in response to Article 1.6 (or an approved substitute DBE firm) for convenience, or any other reason without NJT/OBD's prior written consent. This includes, but is not limited to, instances in which a Bidder/Proposer/Prime seeks to perform work originally designated for a DBE sub with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. **See Article 4.3.**

(A) The Bidder/Proposer/ Prime shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless you obtain OBD's written consent as provided in this paragraph (4.1); and

(B) That, unless (OBD's) consent is provided under this paragraph (4.1), the Bidder/Proposer/Prime shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

(C) Before transmitting to you OBD its request to terminate and/or substitute a DBE sub, the Bidder/Proposer/Prime must give notice in writing to the DBE sub, with a copy to OBD, of its intent to request to terminate and/or substitute, and the reason for the request.

(D) The prime contractor must give the DBE five (5) days to respond to the prime contractor's notice and advise OBD and the Prime of the reasons, if any, why it objects to the proposed termination of its subcontract and why OBD should not approve the Prime's action.

(E) When a DBE subcontractor is terminated as provided in paragraph Article 4.1, or fails to complete its work on the contract for any reason, the Bidder/Proposer/Prime is required to make good faith efforts to find another DBE subcontractor to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal established for the procurement. The good faith efforts shall be documented by the Bidder/Proposer/Prime and submitted within seven (7) days of NJT's request, which may be extended for an additional seven (7) days if necessary at the request of the contractor, and OBD shall provide a written determination to the contractor stating whether or not good faith efforts have been demonstrated.

Submission of all REQUIRED FORMS is mandatory for the following Articles 4.2 through 4.5

4.2 ADDITION OF DBE(s)

4.2.1 Should the Bidder/Proposer/Prime wish to add a DBE not listed on Form A, a written request for the addition of a DBE(s) must be submitted by the Bidder/Proposer/Prime.

Race Conscious

4.2.2 The Bidder/Proposer/Prime must receive written approval of the OBD **prior to** the addition of the DBE subcontractor/subconsultant in order for the addition to be credited toward the goal.

4.3 REPLACEMENT OR REMOVAL OF DBE(s)

4.3.1 When a Prime is considering replacing or removing a DBE due to performance issues, the OBD must be contacted as soon as possible.

4.3.2 Request for DBE replacement or removal may be made under the following conditions:

1) The DBE materially fails to successfully perform the contract tasks.

2) Under unusual situations referenced in article 4.3.8.

4.3.3 A written request for replacement or removal of a DBE(s) listed on Form A, must be submitted by the Bidder/Proposer/Prime to the OBD with complete justification for the request. The process to follow such requests is as follows:

- (a) Written communications (over a period) from the Prime and NJT's project manager to the DBE, notifying the DBE of its poor performance and the Prime's intent to terminate must be provided to the OBD. The prime contractor must give the DBE five (5) days to respond to the prime contractor's notice and advise NJT/OBD and the Prime of the reasons, if any, why it objects to the proposed termination of its subcontract and why NJT/OBD should not approve the Prime's action.
- (b) **The OBD will arrange a meeting with the DBE, the Prime, and a representative from Procurement and project management to discuss the specifics of the performance issue.**
- (c) The DBE must provide a written plan identifying the efforts it will make to correct the deficiencies.
- (d) The Prime must provide the DBE with a minimum of 30 calendar days from acceptance of its plan to improve its performance. Throughout the 30-day window, the Prime and/or NJT PM/CM team must provide written communication to the DBE of any additional/continued performance issues, with a copy to the OBD.

4.3.4 The Bidder/Proposer/Prime must receive written approval of the OBD **prior to** replacement or removal of the DBE subcontractor/subconsultant can be made, regardless of the reason for the replacement or removal.

4.3.5 If the OBD issues written approval for the removal of a DBE(s), NJT will require a Bidder/Proposer/Prime to continue to demonstrate a good faith effort to replace the removed DBE to the extent needed to meet the contract goal established by NJT for the procurement. See Article 4.1(E)

These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the removed DBE to the extent necessary to meet the established contract goal.

4.3.6 Failure to obtain approval from the OBD **prior to** replacing or removing a DBE shall result in the Bidder/Proposer/Prime being found in breach of the contract and subject to the appropriate remedies,

Race Conscious

audits and penalties. **Articles 5.6-5.7**

4.3.7 If NJT finds that the Bidder/Proposer/Prime upon submission of its bid/proposal committed itself to the goal in good faith, the Bidder/Proposer/Prime may, in “unusual situations”, be permitted to substitute a DBE subcontractor(s)/subconsultant(s).

4.3.8 The term “*unusual situations*”, includes, but is not limited to, the following circumstances:

- (a) Failure to qualify as a DBE, or maintain DBE certification status.
- (b) Death or physical disability of a key individual.
- (c) Dissolution, if a corporation or partnership.
- (d) Bankruptcy of the subcontractor/subconsultant, subject to applicable bankruptcy law, and only in instances where the bankruptcy affects the subcontractor/subconsultant’s ability to perform.
- (e) Inability to obtain, or loss of, a license necessary for the performance of the particular category of work.
- (f) Failure or inability to comply with a requirement of law applicable to Primes or, subcontractors/subconsultants.

4.4 WITHDRAWN DBE(s)

4.4.1 When a DBE is unable to complete a subcontract (withdraws), for any reason, NJT will require a Bidder/Proposer/Prime to make a good faith effort to replace a withdrawn DBE at least to the extent needed to ensure that the Prime contractor is able to meet the contract goal established by NJT for the procurement. **These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the removed DBE.**

4.4.2 The Bidder/Proposer/Prime is required to make a good faith effort to seek other DBE subcontractors/subconsultants in substitution of the original DBE. The good faith efforts described in **article 2** are required in finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal established for the procurement.

4.5 DECERTIFIED DBE(S)

4.5.1 If the Prime has reason to doubt that a proposed DBE is still eligible due to change in ownership, management, or size, the Prime shall, within 10 days of learning this information, notify NJT of that fact in writing.

4.5.2 If the subcontract has not been executed before the DBE’s ineligibility occurs, the Prime will not receive credit toward the contract goal for the ineligible DBE. The Prime may continue to use the ineligible DBE, however, DBE participation credit will not be granted.

- (a) To the extent necessary to meet the assigned contract goal, the Prime will make a good faith effort to replace the ineligible DBE within 10 days after notification by the OBD. The OBD will support the Prime in its efforts to replace with an eligible DBE firm in order to meet the contract goal.

Race Conscious

4.5.3 If the contract has been executed before the firm has been notified of its ineligibility, the Prime may continue to use the firm on the contract and receive credit toward its DBE goal for the duration of that particular phase of or option in the contract. This may not apply to future phases or options, which will be handled on a case-by-case basis at the sole discretion of the OBD.

4.5.4 **Exception:** If the DBEs ineligibility is caused solely by its having exceeded the size standard during the performance of the contract the Prime may continue to count its participation on that contract only toward the contract goals. This may not apply to future phases or options and will be subject to determination by the OBD.

5.0 AWARD OBLIGATIONS

5.1 The Prime must designate a **DBE Liaison Officer**. The liaison officer will be responsible to NJT regarding DBE subcontract matters.

5.1.1 If at any point during the contract's life, the Prime's DBE participation falls below the assigned goal, the Prime must identify additional work or new work items for which it will subcontract to DBEs to the extent necessary to meet the assigned goal. Any new scope of work issued to the Prime shall still be subject to the assigned goal.

5.1.2 The OBD will support the Prime in identifying current/future opportunities in the contract to meet the assigned contract goal.

5.1.3 Should the Prime seek a change that addresses the DBE's performance, or affects the work scope and/or compensation, the OBD must be notified, prior to implementation, for its review and approval of the changes as soon as possible. No change will be allowed without prior review and approval by the OBD. Failure to notify the office and obtain approval prior to a change shall result in breach of the contract and may be subject to the appropriate remedies, audits, and penalties.

5.1.4 Whenever NJT issues project change orders the goal may still apply; the OBD will determine if increased DBE participation will be required.

5.1.5 To ensure that all obligations under subcontracts awarded to DBEs are met NJT shall review the Prime's DBE involvement efforts during the performance of the contract.

5.2 POST AWARD DELIVERABLES

5.2.1 After the execution of a contract with NJT, **signed copies** of subcontractor/subconsultant agreements between the Prime and DBE subcontractors must be submitted to the OBD no later than 10 business days after the Prime's contract execution date. The agreement between the Prime and DBE subcontractor shall remain firm for the duration of the contract.

5.2.2 The Prime shall provide a list of the anticipated job start date for all DBE subcontractors/subconsultants **no later than two days** after the initial pre-construction meeting.

5.2.3 **Certification of DBE(s) Payments** – submit monthly with the Form E to the Manager of the OBD and with

Race Conscious

its monthly invoice submittal to NJT project manager of this project. **Refer to article 5.3.2**

- (a) The Prime will certify, prior to the issuance of each progress payment by NJT, that all DBE subs have been paid any amounts due on past due invoices from previous or current progress payments.

5.2.4 Form E (Contractor's Monthly DBE Payment Report & DBE Payment Certification Voucher) - submit monthly to the Manager of the OBD. **Refer to articles 2.5h and 5.3.2.**

Failure to submit this report on a monthly basis may result in breach of the contract and be subject to the appropriate remedies, penalties or liquidated damages as indicated in articles 5.6-5.7.

5.2.5 Form E1 (DBE Prime's Monthly Payment Report) *(For DBE Prime Only)* - submit monthly to the Manager of the OBD.

5.2.6 Form E2 (DBE's Monthly Payment Report) – Refer to article 2.5j

- (a) Forms E/E1 and E2 will be reviewed monthly to determine compliance with the assigned DBE goal, the subcontractor prompt payment regulation, and the DBE Program.

- (b) Attainment of goals will be monitored and based upon actual payments received by the DBE.

Failure to submit Form E/E1 may result in suspension of payments or such other remedies as provided in **article 5.6**. *If at any time, NJT has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements, it shall refer the matter to the USDOT for inquiry.*

5.3 PROMPT PAYMENT OF INVOICES TO SUBCONTRACTORS

5.3.1 The Prime must pay each subcontractor under this contract for satisfactory performance of its work **no later than ten (10) days** from the receipt of each payment the Prime receives from NJT for the subcontractor's work. Failure to comply with this requirement shall result in breach of the contract and shall be subject to the appropriate remedies as determined by OBD.

5.3.2 In accordance with 49 CFR 26.29, the Prime shall certify, prior to the issuance of a progress payment by NJT that all subcontractors have been paid any amounts due on past due invoices (greater than 30 days) from previous or current progress payments. **The Prime must submit the Certification of DBE(s) Payments with its monthly invoice submittals to NJT project manager, and with its Form E to the OBD.**

5.3.3 The Prime will not be reimbursed for work performed by subcontractors/subconsultants unless and until the Prime ensures that the subs are promptly paid for the work performed. Alternatively, the Prime shall certify that a valid basis exists under the terms of the subcontractor's/subconsultant's or supplier's contract to withhold payment from the subcontractor/subconsultant and therefore payment is withheld.

5.3.4 If the Prime withholds payment from the subcontractor/subconsultant, the Prime shall provide to the subcontractor/subconsultant or supplier written notice thereof. The notice shall detail the reason for withholding payment and state the amount of the payment withheld. If a performance/payment bond has been provided under this contract, the Prime shall send a copy of the notice to the surety providing the

Race Conscious

bond for the Prime. A copy of the notice shall also be submitted to NJT with the certification that payments are being withheld.

5.3.5 If withholding payment is due to the Prime's failure to promptly pay the DBE in accordance with the prompt payment of invoices and/or retainage clauses, the OBD may request proof of payment to DBE(s) for delinquent invoices and/or retainage in order to issue release of payment to Prime.

5.3.6 Failure to comply with the above shall result in breach of the contract and may be subject to the appropriate penalties. **See article 5.6**

5.4 SUBCONTRACTOR PAYMENT DISPUTE RESOLUTION

5.4.1 The Prime is required to notify the OBD of its intention to withhold payment from a DBE as soon as possible and in advance of taking action. Should the Prime provide notice and proceed to withhold payment from any subcontractor/subconsultant or supplier due to a performance issue or unapproved work performed, an OBD representative shall make an effort to resolve the dispute.

- (a) OBD's efforts shall be limited to meeting with the Prime and the subcontractor/ subconsultant, and reviewing the relevant facts with both parties.
- (b) OBD will not act as a decider of fact nor will OBD direct a settlement to the dispute.
- (c) Any OBD effort is solely intended to assist the parties in understanding their respective positions and to encourage a reasonable resolution of the dispute. The Prime is required to send written notification of the above to the OBD immediately.

5.4.2 Should payments be withheld that are not related to the previous items mentioned, and/or a determination can be made that the withholding of payments violates the prompt payment clause, NJT may execute the appropriate remedies in accordance with article 5.6.

5.5 PROMPT PAYMENT OF SUBCONTRACTOR RETAINAGE (FOR CONSTRUCTION CONTRACTS ONLY)

5.5.1 **The Prime must include a contract clause in the subcontractor agreement obligating the Prime to pay all retainage owed to the subcontractor/subconsultant for satisfactory completion of the accepted scope of work no later than 15 days after the DBE subcontractor's/subconsultant's work is satisfactorily completed.**

5.5.2 Only subcontractors/subconsultants whose work has been 100% completed, including all punch list work or remaining work, and who have supplied closeout documents shall be eligible for release of retainage. *Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of NJT.*

5.5.3 NJT may agree to release an equivalent amount of Prime retainage provided that:

- (a) There is no offsetting claims from NJT (including, but not limited to, liquidated damages), other subcontractors/subconsultants, material men, or workers;
- (b) None of the other reasons to withhold payments specified under the Prime contract exists.

Race Conscious

5.5.4 Prior to release of the Prime's retainage, the Prime shall provide to NJT executed copies of the following subcontractor closeout documents, (shown in Appendix A of the contract) as appropriate:

- (a) Consent of Surety to Final Payment to the Subcontractor
- (b) Certificate of Amounts Due and Owing to Subcontractor Employees
- (c) Subcontractor Release of Claims
- (d) Subcontractor Release of Liens and a Certificate of Final Acceptance of Subcontractor Work

5.5.5 Notwithstanding NJT's release or partial release of retainage, nothing in this clause shall be deemed to constitute NJT's partial or final acceptance of the work, or any portion thereof, unless either a Certificate of Partial Acceptance or a Certificate of Final Acceptance has been executed by NJT, in the form(s).

5.6 Audit and Sanctions

During the performance of any contract and for a period of up to three (3) years following completion of the contract work, NJ TRANSIT may conduct reviews for compliance with the requirements of the DBE Program. Such reviews may include, but not be limited to, the evaluation of monthly reports, desk audits, and site visitations.

5.6.1 Where a Prime is found to be in breach of the requirements of the DBE Program during the performance of the contract, and does not promptly take corrective action, the following sanctions may be instituted (singularly, in any combination, and in addition to any other contractual remedies or otherwise provided by law):

- (a) The Prime may be ordered to stop work without penalty to NJT.
- (b) The contract may be terminated for breach.
- (c) Suspension or debarment proceedings may be commenced in accordance with New Jersey law.
- (d) The relevant performance bond may be enforced.
- (e) NJT may withhold payment of specific invoices.

5.7 LIQUIDATED DAMAGES

5.7.1 Liquidated damages (LD) may be assessed when the Prime fails to meet the established DBE goal on the contract.

5.7.2 If the DBE goal is not met, and the Prime has not demonstrated a good faith effort to do so, NJT may elect to subtract from the Prime's payment, as liquidated damages and not a penalty, the following:

The amount equal to the difference (in dollars) between the total contract value multiplied by the assigned DBE goal percentage, (originally established or as subsequently modified) and the actual DBE participation percentage (total dollars paid to DBEs divided by total dollars paid to the Prime).

5.7.3 This may be withheld from a series of payments or from the Prime's final payment, depending on the size of the liquidated damage.

5.7.4 If the Prime's final payment is not sufficient to satisfy the LD in full, the balance shall be due and owing from the Prime and subject to repayment terms as determined by NJT. NJT shall waive liquidated

Race Conscious

damages where good cause is shown for the deficiency in DBE participation upon determination by the OBD.

APPENDIX I

GLOSSARY

A Good Faith Effort-the efforts employed by the bidder, which should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

Certification - means the process by which a business is determined to be a bona fide DBE. Any business applying for DBE certification must complete the appropriate NJ Unified Certification Program Application. Certification Applications are available at the OBD.

Disadvantaged Business Enterprise or DBE - means a small business concern:

Which is at least 51 percent owned by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and where one or more of the socially and economically disadvantaged owners controls management and daily business operations. A DBE shall not include a small business concern where that concern or a group of concerns controlled by the same socially and economically disadvantaged individual or individuals has annual average gross receipts in excess of **\$23.98M** over the previous three fiscal years or is not otherwise eligible as a small business as defined by the Small Business Administration in 13 CFR Part 121.

DBE Goal - means numerically expressed objectives for DBE participation on federal contracts Prime contractors are required to make a good faith effort to achieve to the extent necessary to meet the assigned DBE goal.

DBE Sub-Prime - means any 1st Tier DBE subcontractor/subconsultant listed on the Form A that will subcontract any portion of its subcontract/scope of work to a DBE(s) and/or non-DBE(s) firm(s).

DBE Ineligibility – means a firm’s DBE status changes or ceases due to change in ownership, management, or size, etc.

DBE Prime – means the successful Bidder is a DBE firm and has a direct contract with NJT.

DBE Trucking Firm – owns and operates at least one fully licensed, insured, and operational truck used on the contract. Is responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract.

First Tier DBE - refers to any DBE listed on the Bidder/Proposer/Prime’s Form A and having a direct contract with the Prime.

Joint Venture—means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Prime - means any contractor or consultant, including a DBE contractor/consultant, who enters into a direct

Race Conscious

contractual relationship with NJT.

Race-conscious Measure or Program - is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral Measure or Program- is one that is focused specifically on assisting all small businesses equally, including DBEs. Such activities include bonding, insurance, and technical assistance. For the purposes of this part, race-neutral includes gender-neutrality.

Reasonable Bid Price - means a price that shall be considered reasonable if the Bidder/Proposer/Prime would have been awarded the contract had the firm submitted the only bid.

Regular Dealer - means a firm that owns, operates, or maintains an establishment in which the materials or supplies required for the performance of a contract are bought, kept in stock and regularly sold to the public in the usual course of business.

The firm must engage in, as its principal business, and in its own name, the purchase and sale of products in question.

Bulk items such as steel, cement and petroleum products need not be stocked, if the dealer owns or operates distribution equipment.

Note: Brokers and packagers are not regarded as regular dealers.

Second Tier DBE - refers to any DBE listed on the DBE Sub-Prime's Form AA.

Subcontractor/ Subconsultant - means any contractor/consultant, including suppliers, who enters into a contract issued by a Prime contractor.

Transit Vehicle Manufacturer (TVM) - is a manufacturer of vehicles used by NJT for the primary program purpose of public mass transportation (e.g., buses, railcars, vans). The term does not apply to firms, which rehabilitate old vehicles, or to manufacturers of locomotives or ferryboats. The term refers to distributors of or dealers in transit vehicles with respect to the requirements of 49 CFR Section 26.49.

U.S. DOT – means the U.S. Department of Transportation, including the Office of the Secretary, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA).

Withdrawn DBE – a DBE withdraws, drops out of its contract, or fails to complete its work on the contract for any reason.

Updtd p.3, 1.48; p.4, 1.6.1; pg.7, 2.3(g); p.8, 2.4, 2.4(e); p.9, 2.5(g); pg.10(g);2.3; p.11, 2.6(e) on 11.22.19 lmc
Updtd Table of Contents – removed RN from Title; Changed to RN Project from Goal Updtd 1.6.1 remvd certif/replac with Cert Profile 10.25.19
Updated 3.53(a)(b); (4.1(a-e) & \$23.98m LMC 8/1/18
Updated 1.6.1 JGold 7/10/17
Rev 9/15/10

REQUIRED FORMS

ENCLOSED FOR COMPLETION (MANDATORY):

- **Form A; A1; A2; B; D & Trucking Commitment Schedule**

TO BE OBTAINED AND SUBMITTED (MANDATORY):

- **Copy of NJUCP DBE and NAICS Code Certification**

Consult DBE Program Requirements for further guidance.

Bidders Checklist (Federal Contracts)

Upon completion of the Required and/or Supplemental Forms packet(s), please be sure that the completed checklist and the forms listed below are included for each DBE subcontractor listed on the Form A and submitted to the Office of Business Development (OBD) for review.

Note: Failure to complete and submit the forms below will delay the OBD from issuing approval to move forward in the contract award process.

Required Forms

- ☐ Form A - First Tier DBE Utilization
- ☐ Form A1 - Bidder/Proposer Solicitation and Contractor Information
- ☐ Form A2 - Non-DBE Sub Utilization
- ☐ Form B - Intent to Perform as a DBE Sub
- ☐ Form D - DBE Good Faith Effort Form
- ☐ Trucking Commitment Agreement (if applicable)
- ☐ Copy of NJUCP DBE and NAICS Code Certification

Supplemental Forms (if applicable)

- ☐ Form AA - Second Tier DBE Utilization
- ☐ Form AA1 - Second Tier Bidder/Proposer Solicitation and Contractor Information
- ☐ Form AA2 - Second Tier Non-DBE Sub Utilization
- ☐ Form BB - Intent to Perform as a Second Tier DBE Sub
- ☐ Trucking Commitment Agreement (if applicable)
- ☐ Copy of NJUCP DBE and NAICS Code Certification

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Acting Commissioner
Kevin S. Corbett, Executive Director



One Penn Plaza East
Newark, NJ 07105-2246
973-491-7000

The New Jersey Unified Certification Program (NJUCP) DBE

Directory is getting an Upgrade!

As of July 1, 2017 the NJUCP DBE Directory can be found

at <https://njucp.dbesystem.com>

Please update your bookmarks

The certifying partners of the New Jersey Unified Certification Program (NJUCP), New Jersey Transit (NJT), the New Jersey Department of Transportation (NJDOT), and The Port Authority of New York and New Jersey (PANYNJ), are pleased to announce that we are improving service for our user community. A new web-based platform has been developed that will allow improved functionality, new communication tools, and real time updates to information.

The new address for the NJUCP directory of certified DBE firms will be <https://njucp.dbesystem.com>. The change to this address will take effect on July 1, 2017. **Please be sure to update your DBE directory bookmark and inform others who use this directory in your organization.**

Attention certified DBE firms: Please review the data shown in the directory for your firm and advise your certifying agency if any changes or updates are needed. An account has been created for all DBEs in the system. If you are certified with PANYNJ or also certified with the New York State Contract System (NYSCS) or the New York State Unified Certification Program (NYSUCP), you can log into your account in the system with the same username and password you use to access your account with those entities. If this is your first time logging into this system and/or you don't know your username and password click on "Log-in" to use the Account Lookup to find your information and log into your account. **All certified DBEs in the NJUCP have accounts in the system.** Contact customer support via any of the system links if you have any questions while attempting to access your account.

The NJUCP is committed to improving the service and support we provide to our DBEs and the greater contracting community. This new web site and underlying platform is provided by B2Gnow, which currently provides support for Port Authority's Diversity Management Program, NYSCS, and NYSUCP, as well as many other certifying entities and agencies across the country. You may already be familiar with the look and versatile search capability of the system. If it is brand new to you, support links are provided, as mentioned above.

Stay tuned for further announcements on improvements to this system and NJUCP services.

First Tier DBE UTILIZATION - FORM A

Project Name: Final Design, Engineering and Other Technical Services for the Newark Penn
Station Distributed Generation (DG) Project

NJT Contract No: 21-059

Assigned DBE Goal 22% NJT Procurement Specialist: Faith Blair

Contract Value (\$): 1,636,813.17

First Tier DBE must perform at least 51% of its subcontract value if subcontracting to a Second -Tier DBE or Non-DBE. Do not count Non-DBE portion toward the goal.

Name, Address and Telephone # of DBE Subcontractor/Subconsultant	Provide <u>Detailed</u> Scope of Work to be Performed (Identify all suppliers)	Dollar Value of Subcontract/Sub-consultant Work (\$) Awarded	Percentage of Subcontract Work (%)
AmerCom Corporation 1259 Route 46 East, Bldg. #2 Parsippany, NJ 07054	Capital cost estimating and project scheduling, project controls support, constructability reviews, and CADD support	\$109,931.65	6.72%
Mercer Planning Associates, LLC 344 Grove Street, Ste 256 Jersey City, NJ 07302	Community outreach	\$43,263.41	2.64%
Richard Grubb and Associates, Inc. 259 Prospect Plains Road, Building D Cranbury, NJ 08512	Archeology	\$20,019.09	1.22%
Sowinski Sullivan Architects, PC 25 Mohawk Avenue Sparta, NJ 07870	Architecture	\$227,834.80	13.92%
Jersey Boring & Drilling Co., Inc. 36 Pier Lane West Fairfield, New Jersey 07004	Soil Borings	\$50,000.00 * 60% = \$30,000	1.83%
For DBE suppliers, show original subcontract value multiplied by 60% (\$2,000*60%=\$1200). For DBE portion of work, subtract Non-DBE portion of work from original subcontract value.	TOTALS	\$431,048.95	26.33%

The undersigned will enter into a formal agreement with the DBE(s) listed in this schedule conditioned upon execution of a contract with NJ TRANSIT for the above referenced project. The undersigned understands that removal/replacement of the DBE(s) listed is NOT PERMISSIBLE for any reason (pre or post-award), without submitting a written request to the Office of Business Development and receiving WRITTEN APPROVAL from the Office of Business Development. Failure to obtain written approval shall result in the breach of contract and subject to corrective action to be determined by NJ TRANSIT.

Company Name: WSP USA Inc.

Authorized Signature: 

Company Address: Two Gateway Center, Suite 1000

Print Name: Anand Paluri, PE, PTOE

Newark, NJ 07102

Title: District Manager – Mid Atlantic / Senior Vice President

Federal Tax ID #: 11-1531569

Prime Contractor's DBE Liaison Officer: Laura Unger (203)382-5282

Company Tel #: 973-353-9100

Date Signed: August 30, 2022

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

NJT Contract No: 21-059Project Title: Final Design, Engineering and Other Technical Services for the NewarkPrime Contractor: WSP USA Inc.Penn Station Distributed Generation (DG) ProjectDate: May 16, 2022Telephone #: (609) 512-3500

Complete the information below for Bidder/Proposer/Prime(s) working on the project. Use Page 2 for all subcontractors/subconsultants participating on or solicited for this project.

	Bidder/Proposer/Prime	Bidder/Proposer/Prime	Bidder/Proposer/Prime
Company's Full Name	WSP USA Inc.		
Address	2000 Lenox Drive, 3rd Floor		
City	Lawrenceville		
Zip	08648		
County	Mercer		
Phone	(609) 512-3500		
Fax	(609) 512-3600		
E-mail	complianceusa@wsp.com		
Owner	Parsons Brinckerhoff Holdings Inc.		
Date Established	10/5/1933		
Date Certified	Not certified		
Ethnicity	multiple		
Gender	multiple		
Certification Status: DBE or Non-DBE	Non-DBE		
Federal Tax ID # / SSN #	11-1531569		
Annual Gross Receipts: A – Less than \$500K B - \$500K to \$1M C - \$1M to \$2M D - \$2M to \$5M E - \$5M and over indicate the letter that applies	E		
Primary NAICS Code:	541330		

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

NJT Contract No: 21-059Project Title: Final Design, Engineering and Other Technical Services for the NewarkPrime Contractor: WSP USA Inc.Penn Station Distributed Generation (DG) ProjectDate: May 16, 2022Telephone #: (609) 512-3500**Complete the information below for "all" subcontractors/subconsultants solicited for or participating on this project.**

	Subcontractor/Subconsultant	Subcontractor/Subconsultant	Subcontractor/Subconsultant
Company's Full Name	AmerCom Corporation	Mercer Planning Associates, LLC	Richard Grubb and Associates, Inc.
Address	1259 Route 46 East Bldg. #2	344 Grove Street, Ste 256	259 Prospect Plains Road, Building D
City	Parsippany	Jersey City	Cranbury
Zip	07054	07302	08512
County	Morris	Hudson	Middlesex
Phone	973-402-6111	732-354-1316	609-655-0692
Fax	973-588-7020	N/A	609-655-3050
E-mail	abotas@amercom.org	info@mercplan.com	adomm@rgaincorporated.com
Owner	Corporation	Courtenay D. Mercer	Alice Domm
Date Established	July 1980	11/2007	5/3/1988
Date Certified	July 1980	10/2011	9/21/2010
Ethnicity	Asian Pacific Islander/Latino	Non-Hispanic	Caucasian
Gender	Male	Female	Woman
Certification Status: DBE or Non-DBE	DBE	DBE	DBE
Federal Tax ID # / SSN #	22-3045444	26-1482700	22-2892560
Annual Gross Receipts: A – Less than \$500K B - \$500K to \$1M C - \$1M to \$2M D - \$2M to \$5M E - \$5M and over indicate the letter that applies	E	A	D
Primary NAICS Code:	541330	541320	541620;541690;541720

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

NJT Contract No: 21-059Project Title: Final Design, Engineering and Other Technical Services for the NewarkPrime Contractor: WSP USA Inc.Penn Station Distributed Generation (DG) ProjectDate: May 16, 2022Telephone #: (609) 512-3500*Complete the information below for "all" subcontractors/subconsultants solicited for or participating on this project.*

	Subcontractor/Subconsultant	Subcontractor/Subconsultant	Subcontractor/Subconsultant
Company's Full Name	Sowinski Sullivan Architects, PC	Jersey Boring & Drilling Co., Inc.	
Address	25 Mohawk Avenue	36 Pier Lane West	
City	Sparta	Fairfield	
Zip	07870	07004	
County	Sussex	Essex	
Phone	973-726-3260	973-287-6857	
Fax	973-726-7986	973-521-7981	
E-mail	ssowinski@sowinskisullivan.com	shelley@jerseyboring.com	
Owner	Suzanne Sowinski, AIA, LEED AP	Shelley Lach	
Date Established	1996	1978	
Date Certified	1996	2/10/2000	
Ethnicity	White	White	
Gender	Female	Female	
Certification Status: DBE or Non-DBE	DBE	DBE	
Federal Tax ID # / SSN #	22-3657397	22-222-6346	
Annual Gross Receipts: A – Less than \$500K B - \$500K to \$1M C - \$1M to \$2M D - \$2M to \$5M E - \$5M and over indicate the letter that applies	D	D	
Primary NAICS Code:	541310	238910	

NON-DBE SUBCONTRACTOR UTILIZATION - FORM A2

Directions: To be completed by any Bidder/Proposer/Prime for "all" subs including suppliers participating on this contract.

NJ Transit Contract No: 21-059

Date: August 30, 2022

Prime Contract Value: \$1,636,813.17

Bidder/Proposer Prime Name: WSP USA Inc.

Project Title: Final Design, Engineering and Other Technical Services for the Newark Penn Station Distributed Generation (DG) Project

Name, Address and Telephone # of all Subcontractor/Subconsultants	FEIN #	Provide Detailed Scope of Work to be Performed	Dollar Amount of Subcontractor/Sub-consultant Work (\$) Awarded	Percentage of Subcontract or Work (%)
None				
Must provide a detailed scope of work; one-word descriptions are not acceptable.		TOTALS	\$0.00	0.0%

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

WSP USA Inc

Sowinski Sullivan Architects, PC

Name of Bidder/Proposer/Prime: FINAL DESIGN, ENGINEERING AND
OTHER TECHNICAL SERVICES FOR THE
NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

Name of DBE Firm:

Project/Contract Name:

IFB/RFP Contract Number: 21-059

Does the undersigned DBE (Answer Accordingly):

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. (Yes or **No**)

Intend to subcontract any portion of its scope of work to a DBE(s)?
If yes, DBE Sub-Primes must complete and submit Form AA.

Circle one. (Yes or **No**)
At what percent? _____ %

Intend to subcontract any portion of its scope of work to a Non-DBE(s)?
If yes, must complete and submit Form AA2.

Circle one. (Yes or **No**)
At what percent? _____ %

The undersigned will perform the following described work on the above-referenced project: *(Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).*

Architectural Services to integrate the power generation interventions within this Newark Penn station.

Dollar Value of DBE Subcontract: \$ 227,834.80

Total Quantity/Units (if applicable): N/A Per Unit Cost (if applicable): \$ N/A

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. (**Yes** or No)

The Prime Contractor projected the following commencement and completion date for such work as follows:

DBE Contract Start Date: October 1st, 2022 DBE Contract Completion Date March 31st, 2024

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

Signature of 1st Tier DBE

8/30/2022

Date

President

Title

Suzanne Sowinski

Print Name

973-726-3260 x124

Telephone #:

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

WSP USA Inc. Name of Bidder/Proposer/Prime: Project/Contract Name: <u>Newark Penn Station Distributed Generation (DG) Project</u>	AmerCom Corporation Name of DBE Firm: IFB/RFP Contract Number: <u>21-059</u>
--	---

Does the undersigned DBE (Answer Accordingly):

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. (Yes or **No**)

Intend to subcontract any portion of its scope of work to a DBE(s)? Circle one. (Yes or **No**)
If yes, DBE Sub-Primes must complete and submit Form AA. At what percent? _____ %

Intend to subcontract any portion of its scope of work to a Non-DBE(s)? Circle one. (Yes or **No**)
If yes, must complete and submit Form AA2. At what percent? _____ %

The undersigned will perform the following described work on the above-referenced project: (Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).

Prepare Monthly Project and Financial Progress and Cost Control Reports, provide input to update the Project Schedule, Update Records Management Control System, and construction cost estimating.

Dollar Value of DBE Subcontract: \$ 109,931.65

Total Quantity/Units (if applicable): N.A. **Per Unit Cost (if applicable):** \$ N.A.

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. (**Yes** or No)

The Prime Contractor projected the following commencement and completion date for such work as follows:

DBE Contract Start Date: October 1, 2022 DBE Contract Completion Date March 31, 2024

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

 Signature of 1 st Tier DBE	<u>8/30/2022</u> Date	<u>Vice President</u> Title
<u>Luis Barragan</u> Print Name		<u>973-768-7531</u> Telephone #:

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

WSP

Name of Bidder/Proposer/Prime:

Richard Grubb and Associates, Inc.

Name of DBE Firm:

Project/Contract Name: Newark Penn Station Distributed GenerationIFB/RFP Contract Number: 21-059**Does the undersigned DBE (Answer Accordingly):**

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. (Yes or **No**)

Intend to subcontract any portion of its scope of work to a DBE(s)?

Circle one. (Yes or **No**)

If yes, DBE Sub-Primes must complete and submit Form AA.

At what percent? _____ %

Intend to subcontract any portion of its scope of work to a Non-DBE(s)?

Circle one. (Yes or **No**)

If yes, must complete and submit Form AA2.

At what percent? _____ %

The undersigned will perform the following described work on the above-referenced project: *(Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).*

Phase IA Archaeological Survey

Dollar Value of DBE Subcontract: \$ 20,019.09

Total Quantity/Units (if applicable): _____ Per Unit Cost (if applicable): \$ _____

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. (**Yes** or No)

The Prime Contractor projected the following commencement and completion date for such work as follows:

DBE Contract Start Date: October 1, 2022 DBE Contract Completion Date March 31, 2024

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

Signature of 1st Tier DBE

08/30/2022

Date

President

Title

Alice Domm

609-655-0692

Print Name

Telephone #:

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

WSP USA Inc

Name of Bidder/Proposer/Prime:

Mercer Planning Associates, LLC

Name of DBE Firm:

Project/Contract Name: Newark Penn Station Distributed Generation

IFB/RFP Contract Number: 21-059

Does the undersigned DBE (Answer Accordingly):

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. (Yes or **No**)

Intend to subcontract any portion of its scope of work to a DBE(s)?

Circle one. (Yes or **No**)

If yes, DBE Sub-Primes must complete and submit Form AA.

At what percent? _____ %

Intend to subcontract any portion of its scope of work to a Non-DBE(s)?

Circle one. (Yes or **No**)

If yes, must complete and submit Form AA2.

At what percent? _____ %

The undersigned will perform the following described work on the above-referenced project: *(Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).*

Stakeholder and public engagement services

Dollar Value of DBE Subcontract: \$ 43,263.41

Total Quantity/Units (if applicable): _____ Per Unit Cost (if applicable): \$ _____

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. (Yes or **No**)

The Prime Contractor projected the following commencement and completion date for such work as follows:

DBE Contract Start Date: 10/1/22 DBE Contract Completion Date 3/31/24

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

Signature of 1st Tier DBE

8/30/22

Date

Principal

Title

Courtenay D. Mercer

Print Name

732-354-1316

Telephone #:

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

WSP USA Inc.

Name of Bidder/Proposer/Prime:

Jersey Boring & Drilling Co., Inc.

Name of DBE Firm:

Project/Contract Name: Newark Penn Station
Distributed Generation Project

IFB/RFP Contract Number: 21-059

Does the undersigned DBE (Answer Accordingly):

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. (Yes or No) No

Intend to subcontract any portion of its scope of work to a DBE(s)?
If yes, DBE Sub-Primes must complete and submit Form AA.

Circle one. (Yes or No) No
At what percent? _____%

Intend to subcontract any portion of its scope of work to a Non-DBE(s)?
If yes, must complete and submit Form AA2.

Circle one. (Yes or No) No
At what percent? _____%

The undersigned will perform the following described work on the above-referenced project: *(Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).*

Subsurface drilling- soil borings & rock coring.

Dollar Value of DBE Subcontract: \$ 50,000.00

Total Quantity/Units (if applicable): _____ Per Unit Cost (if applicable): \$ _____

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. (Yes or No) No

The Prime Contractor projected the following commencement and completion date for such work as follows:

DBE Contract Start Date: 10/1/2022 DBE Contract Completion Date: 4/1/2023

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

Molly Lach 4/21/22
Signature of 1st Tier DBE Date

Corporate Secretary
Title

Molly Lach
Print Name

(973) 287 - 6857
Telephone #:

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

Certified ProfileCLOSE WINDOW [Print](#)**Business & Contact Information**

BUSINESS NAME	AmerCom Corp., DBA AmerCom Corporation
OWNER	Mr. Richard Lee
ADDRESS	1259 Route 46 East, Bldg #2 Parsippany, NJ 07054 [map]
PHONE	973-402-6111
FAX	973-588-7020
EMAIL	rlee@amercom.org
WEBSITE	http://www.amercomcorp.com
COUNTY	Morris (NJ)

Certification Information

CERTIFYING AGENCY	New Jersey Transit
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	Civil engineering, geophysical surveying, landscape surveying, GPS mapping, technical design engineering feasibility studies for highway, street, and bridges, engineering inspection services, traffic analysis counting surveys, and construction management.

Commodity Codes

Code	Description
NAICS 237310	Construction management, highway, road, street and bridge
NAICS 237990	Construction management, mass transit
NAICS 541330	Engineering services
NAICS 541360	Geophysical Surveying and Mapping Services
NAICS 541370	Surveying and Mapping (except Geophysical) Services

From: New Jersey Transit <njtransit@sdbbe.com>
Date: June 21, 2021 at 12:45:13 PM EDT
To: Richard Lee <rlee@amercom.org>
Subject: NJ TRANSIT: Disadvantaged Business Enterprise certification for AmerCom Corp. dba AmerCom Corporation
Reply-To: New Jersey Transit <njtransit@sdbbe.com>



Richard Lee
AmerCom Corp. dba AmerCom Corporation
1259 Route 46 East, Bldg #2
Parsippany, NJ 07054

Re: Disadvantaged Business Enterprise certification for AmerCom Corp. dba AmerCom Corporation

Dear Richard Lee:

Congratulations! We are pleased to inform you that your company, AmerCom Corp. dba AmerCom Corporation has been found eligible for certification and is now certified officially as a Disadvantaged Business Enterprise (DBE) by NJ TRANSIT, on behalf of the New Jersey Unified Certification Program (NJUCP). This certification grants DBE status and benefits to your firm on federally funded projects by NJUCP Partners NJ TRANSIT, the New Jersey Department of Transportation, and the Port Authority of New York and New Jersey. Provided your company continues to meet the eligibility criteria and comply with the participation requirements established in Code of Federal Regulations Title 49 Part 26, your certification will remain in effect until your firm completes the program (graduates) or you choose to withdraw from the program.

Note: This certification letter is to be utilized as evidence of your firm's DBE Certification under the NJUCP.

DBE Program Participation Requirements

On an annual basis, at the anniversary of your certification date, you must submit a signed and notarized DBE "No Change Affidavit" affirming that there have been no changes within your company that would affect your eligibility or status as a DBE. It is your responsibility to notify this office in writing **within 30 days** of any significant changes to your company including but not limited to the ownership, control, and location. Failure to do so may result in decertification of your business.

NJ TRANSIT's Office of Business Development will provide you notice and reminders of when the information above is due and **reserves the right under regulation to request information from you regarding your company at any time.** Failure to provide information when due and/or respond to requests for information in a timely way, may result in decertification.

DBE Certification Information

Your company's NJUCP Identification number is 002799
Certification Effective Date - June 1, 2021

The following table lists the North American Industry Classification System (NAICS) code(s) and classification(s) that have been assigned to your company in accordance with the service(s) your company render(s) and the business description giving details to the specific services your firm provides. Your firm will be listed on the NJUCP Directory (<https://njucp.dbesystem.com>) which will indicate the type of work that your firm has been certified to perform.

Business Description: Civil engineering, geophysical surveying, landscape surveying, GPS mapping, technical design engineering feasibility studies for highway, street, and bridges, engineering inspection services, traffic analysis counting surveys, and construction management.

NAICS 237310: CONSTRUCTION MANAGEMENT, HIGHWAY, ROAD, STREET AND BRIDGE

NAICS 237990: CONSTRUCTION MANAGEMENT, MASS TRANSIT

NAICS 541330: ENGINEERING SERVICES

NAICS 541360: GEOPHYSICAL SURVEYING AND MAPPING SERVICES

NAICS 541370: SURVEYING AND MAPPING (EXCEPT GEOPHYSICAL) SERVICES

On behalf of the NJUCP, we welcome you to our DBE family. We are pleased to have you as a member and wish you much success.

Sincerely,

Adonis Abreu

Senior Business Development Specialist

NJ TRANSIT OFFICE OF CIVIL RIGHTS - BUSINESS DEVELOPMENT

This message was sent to: rllee@amercom.org

Sent on: 6/21/2021 11:45:05 AM

System ReferenceID: 137160163

Certified ProfileCLOSE WINDOW [Print](#)**Business & Contact Information**

BUSINESS NAME	MERCER PLANNING ASSOCIATES INC
OWNER	Ms. Courtenay Mercer
ADDRESS	331 1/2 8th Street JERSEY CITY, NJ 07302 [map]
PHONE	732-354-1316
EMAIL	CMERCER@MERCERPLANNING.COM
WEBSITE	http://www.mercerplanning.com
COUNTY	Bergen (NJ)

Certification Information

CERTIFYING AGENCY	New Jersey Department of Transportation
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	PROVIDES LAND USE PLANNING CONSULTING SERVICES PRIMARILY TO GOVERNMENT ENTITIES

Commodity Codes

Code	Description
NAICS 531390	Other Activities Related to Real Estate
NAICS 541320	Landscape architectural services



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

SHEILA Y. OLIVER
Lt. Governor

October 4, 2021

Courtenay Mercer
MERCER PLANNING ASSOCIATES INC
344 GROVE STREET, SUITE 256
JERSEY CITY, NJ 07302

RE: Renewal of DBE Certification - Anniversary Date: Annually on October 2

Dear Ms. Mercer:

We are pleased to inform you that your firm has been found eligible to continue as a Disadvantaged Business Enterprise (DBE) by the New Jersey Department of Transportation on behalf of the New Jersey Unified Certified Program (NJUCP).

Your certification status with the NJUCP will remain in effect as long as your firm continues to meet the DBE program's eligibility requirements outlined in U.S. Department of Transportation, Code of Federal Regulations Title 49 CFR Part 26. However, on an annual basis, you must submit the "No Change Affidavit" and supporting documents.

Additionally, if any time during the year there is a change in your firm, it is your obligation to notify this agency, in writing, within (30) days. Changes include, but are not limited to: ownership, and /or control, officers, directors, management, key personnel, scope of work performed, daily operations, ongoing business relationships with other firms or individuals, or the physical location of your firm. Failure to do so may result in the removal of your DBE Certification in accordance with §26.83(j) and §26.109(c).

The following table lists the North American Industry Classification System (NAICS) code(s) and description(s) that have been assigned to your business in accordance with the service(s) it render(s).

NAICS: Specialty Description

NAICS 531390: OTHER ACTIVITIES RELATED TO REAL ESTATE

NAICS 541320: LANDSCAPE ARCHITECTURAL SERVICES

Your firm will be listed in the NJUCP Directory which can be accessed at <https://njucp.dbesystem.com>.

If you have any questions regarding your DBE certification, you may email NJDOT's Disadvantaged and Small Business Program Unit at DOT.DBE_ESBEPrograms@dot.nj.gov or call (609) 963-2051.

Sincerely,

Nadir A. Jones

Nadir A. Jones, Manager
Contract Compliance & DBE/ESBE Support
Division of Civil Rights & Affirmative Action Nadir A. Jones, Manager

Certified ProfileCLOSE WINDOW [Print](#)**Business & Contact Information**

BUSINESS NAME	Richard Grubb and Associates, Inc., DBA RGA, Inc.
OWNER	Ms. Alice Domm, Esq.
ADDRESS	259 Prospect Plains Road Building D Cranbury, NJ 08512 [map]
PHONE	609-655-0692 Ext. 324
FAX	609-655-3050
EMAIL	adomm@rgaincorporated.com
WEBSITE	http://www.rgaincorporated.com
COUNTY	Middlesex (NJ)

Certification Information

CERTIFYING AGENCY	New Jersey Transit
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	Cultural resource compliance services (transportation), architectural history, historical research & archaeological needs including public involvement, interpretation & consulting, cultural resource surveys, and State Historical Preservation Office (SHPO) support services.

Commodity Codes

Code	Description
NAICS 115310	Forest management plans preparation
NAICS 541310	Architectural Services
NAICS 541618	Other Management Consulting Services
NAICS 541620	Environmental consulting services
NAICS 541690	Other Scientific and Technical Consulting Services
NAICS 541720	Research and Development in the Social Sciences and Humanities



Alice Domm
Richard Grubb and Associates, Inc. dba RGA, Inc.
259 Prospect Plains Road
Building D
Cranbury, NJ 08512

Re: Disadvantaged Business Enterprise certification for Richard Grubb and Associates, Inc. dba RGA, Inc.

Dear Alice Domm:

Congratulations! We are pleased to inform you that your company, Richard Grubb and Associates, Inc. dba RGA, Inc. has been found eligible for certification and is now certified officially as a Disadvantaged Business Enterprise (DBE) by NJ TRANSIT, on behalf of the New Jersey Unified Certification Program (NJUCP). This certification grants DBE status and benefits to your firm on federally funded projects by NJUCP Partners NJ TRANSIT, the New Jersey Department of Transportation, and the Port Authority of New York and New Jersey. Provided your company continues to meet the eligibility criteria and comply with the participation requirements established in Code of Federal Regulations Title 49 Part 26, your certification will remain in effect until your firm completes the program (graduates) or you choose to withdraw from the program.

Note: This certification letter is to be utilized as evidence of your firm's DBE Certification under the NJUCP.

DBE Program Participation Requirements

On an annual basis, at the anniversary of your certification date, you must submit a signed and notarized DBE "No Change Affidavit" affirming that there have been no changes within your company that would affect your eligibility or status as a DBE. It is your responsibility to notify this office in writing **within 30 days** of any significant changes to your company including but not limited to the ownership, control, and location. Failure to do so may result in decertification of your business.

NJ TRANSIT's Office of Business Development will provide you notice and reminders of when the information above is due and **reserves the right under regulation to request information from you regarding your company at any time.** Failure to provide information when due and/or respond to requests for information in a timely way, may result in decertification.

DBE Certification Information

Your company's NJUCP Identification number is 004475
Certification Effective Date - September 1, 2021

The following table lists the North American Industry Classification System (NAICS) code(s) and classification(s) that have been assigned to your company in accordance with the service(s) your company render(s) and the business description giving details to the specific services your firm provides. Your firm will be listed on the NJUCP Directory (<https://njucp.dbesystem.com>) which will indicate the type of work that your firm has been certified to perform.

Business Description: Cultural resource compliance services (transportation), architectural history, historical research & archaeological needs including public involvement, interpretation & consulting, cultural resource surveys, and State Historical Preservation Office (SHPO) support services.

NAICS 115310: FOREST MANAGEMENT PLANS PREPARATION
NAICS 541310: ARCHITECTURAL SERVICES
NAICS 541618: OTHER MANAGEMENT CONSULTING SERVICES
NAICS 541620: ENVIRONMENTAL CONSULTING SERVICES
NAICS 541690: OTHER SCIENTIFIC AND TECHNICAL CONSULTING SERVICES
NAICS 541720: RESEARCH AND DEVELOPMENT IN THE SOCIAL SCIENCES AND HUMANITIES

On behalf of the NJUCP, we welcome you to our DBE family. We are pleased to have you as a member and wish you much success.

Sincerely,

Adonis Abreu

Senior Business Development Specialist
NJ TRANSIT OFFICE OF CIVIL RIGHTS - BUSINESS DEVELOPMENT

This message was sent to: adomm@rgaincorporated.com
Sent on: 8/24/2021 10:59:05 AM
System ReferenceID: 142331874

Certified ProfileCLOSE WINDOW [Print](#)**Business & Contact Information**

BUSINESS NAME	Sowinski Sullivan Architects PC
OWNER	Suzanne Sowinski
ADDRESS	25 MOHAWK AVENUE SPARTA, NJ 07871-1808 [map]
PHONE	973-726-3260 Ext. 124
FAX	973-726-7986
EMAIL	ksullivan@sowinskisullivan.com
WEBSITE	http://www.sowinskisullivan.com
COUNTY	Sussex (NJ)

Certification Information

CERTIFYING AGENCY	The Port Authority of New York & New Jersey
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	Architecture firm Rail & bus stations Intermodal facilities Shops and yards Historic restoration Commercial space designs

Commodity Codes

Code	Description
NAICS 541310	Architectural Services
NAICS 541320	Landscape architectural services
NAICS 541330	Engineering consulting services
NAICS 541410	Interior design services

March 2, 2022

Suzanne Sowinski-Sullivan
President
Sowinski Sullivan Architects P.C.
25 Mohawk Avenue
Sparta, NJ 07871-1808

RE: ANNUAL AFFIDAVIT - CONTINUED DBE ELIGIBILITY

Suzanne Sowinski-Sullivan:

We are pleased to inform you that **Sowinski Sullivan Architects P.C.**, continues to meet the eligibility criteria for Disadvantaged Business Enterprise (DBE) certification pursuant to U.S. Department of Transportation, Code of Federal Regulations Title 49 Part 26.

Annually, you must submit a signed and notarized Annual "No Change" Affidavit with supporting documentation. It is your responsibility to notify this office in writing within 30 days of any changes. Failure to do so may result in decertification of your business.

If you have any questions regarding this letter, you may contact me at (201) 395-3953 or via email at LAkopdzhanova@panynj.gov.

Sincerely,



Liza Akopdzhanova
Certification Analyst
Diversity, Equity & Inclusion Office



Please be sure to add panynj@diversitysoftware.com - our official system email address- to your safe sender list so you don't miss any messages from us.

Certified ProfileCLOSE WINDOW [Print](#)**Business & Contact Information**

BUSINESS NAME	Jersey Boring & Drilling Co., Inc.
OWNER	Ms. Shelly Lach
ADDRESS	36 Pier Lane West Fairfield, NJ 07004 [map]
PHONE	973-287-6857
FAX	973-521-7981
EMAIL	shelley@jerseyboring.com
WEBSITE	http://www.jerseyboring.com
COUNTY	Essex (NJ)

Certification Information

CERTIFYING AGENCY	New Jersey Transit
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	Contractor for environmental drilling; concrete core drilling; material testing; inspection services; test borings; well installations; geotechnical instrumentation installations; concrete and asphalt coring.

Commodity Codes

Code	Description
NAICS 238910	Site Preparation Contractors
NAICS 237110	Drilling water wells (except water intake wells in oil and gas fields)
NAICS 237110	Water and Sewer Line and Related Structures Construction
NAICS 237110	Water well drilling, digging, boring or sinking (except water intake wells in oil and gas fields)
NAICS 238910	Boring, for building construction
NAICS 238910	Core drilling and test boring for construction
NAICS 238910	Drilled shaft (i.e., drilled building foundations) construction
NAICS 238910	Test boring for construction

December 11, 2020

Shelly Lach
Jersey Boring & Drilling Co., Inc.
36 Pier Lane West
Fairfield, NJ 07004

Re: Disadvantaged Business Enterprise certification for Jersey Boring & Drilling Co., Inc.

Dear Shelly Lach:

Congratulations! We are pleased to inform you that your company, Jersey Boring & Drilling Co., Inc. has been found eligible for certification and is now certified officially as a Disadvantaged Business Enterprise (DBE) by NJ TRANSIT, on behalf of the New Jersey Unified Certification Program (NJUCP). This certification grants DBE status and benefits to your firm on federally funded projects by NJUCP Partners NJ TRANSIT, the New Jersey Department of Transportation, and the Port Authority of New York and New Jersey. Provided your company continues to meet the eligibility criteria and comply with the participation requirements established in Code of Federal Regulations Title 49 Part 26, your certification will remain in effect until your firm completes the program (graduates) or you choose to withdraw from the program.

Note: This certification letter is to be utilized as evidence of your firm's DBE Certification under the NJUCP.

DBE Program Participation Requirements

On an annual basis, at the anniversary of your certification date, you must submit a signed and notarized DBE "No Change Affidavit" affirming that there have been no changes within your company that would affect your eligibility or status as a DBE. It is your responsibility to notify this office in writing **within 30 days** of any significant changes to your company including but not limited to the ownership, control, and location. Failure to do so may result in decertification of your business.

NJ TRANSIT's Office of Business Development will provide you notice and reminders of when the information above is due and **reserves the right under regulation to request information from you regarding your company at any time.** Failure to provide information when due and/or respond to requests for information in a timely way, may result in decertification.

DBE Certification Information

Your company's NJUCP Identification number is 000528
Certification Effective Date - February 1, 2021

The following table lists the North American Industry Classification System (NAICS) code(s) and classification(s) that have been assigned to your company in accordance with the service(s) your company render(s) and the business description giving details to the specific services your firm provides. Your firm will be listed on the NJUCP Directory (<https://njucp.dbesystem.com>) which will indicate the type of work that your firm has been certified to perform.

Business Description: Contractor for environmental drilling; concrete core drilling; material testing; inspection services; test borings; well installations; geotechnical instrumentation installations; concrete and asphalt coring.

NAICS 238910: SITE PREPARATION CONTRACTORS

NAICS 237110: DRILLING WATER WELLS (EXCEPT WATER INTAKE WELLS IN OIL AND GAS FIELDS)

NAICS 237110: WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION

NAICS 237110: WATER WELL DRILLING, DIGGING, BORING OR SINKING (EXCEPT WATER INTAKE WELLS IN OIL AND GAS FIELDS)

NAICS 238910: BORING, FOR BUILDING CONSTRUCTION

NAICS 238910: CORE DRILLING AND TEST BORING FOR CONSTRUCTION

NAICS 238910: DRILLED SHAFT (I.E., DRILLED BUILDING FOUNDATIONS) CONSTRUCTION

NAICS 238910: TEST BORING FOR CONSTRUCTION

On behalf of the NJUCP, we welcome you to our DBE family. We are pleased to have you as a member and wish you much success.

Sincerely,

Adonis Abreu
Senior Business Development Specialist
NJ TRANSIT OFFICE OF CIVIL RIGHTS - BUSINESS DEVELOPMENT

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EXHIBIT E
CONSULTANT CERTIFICATIONS

EXHIBIT 2

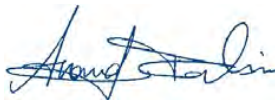
EXHIBIT 2
ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

Proposers are required to acknowledge receipt of all Addenda issued prior to the Proposal due date. This acknowledgment is made by the Proposer, if an individual; by a partner, if a partnership or limited liability partnership; or by an officer of the corporation, if a corporation or by a member, if a limited liability corporation.

The undersigned acknowledges receipt of the following Addenda.

<u>Addendum Number</u>	<u>Date</u>
<u>1</u>	<u>January 7, 2022</u>
<u>2</u>	<u>February 2, 2022</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

By:



Signature of Company Official

District Leader

Official's Title

WSP USA Inc.

Company Name

EXHIBIT 6



OWNERSHIP DISCLOSURE FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: RFP 21-059 - Newark Penn Station Distributed Generation (DG) Project

VENDOR NAME: WSP USA Inc.

PURSUANT TO N.J.S.A. 52:25-24.2, ALL PARTIES ENTERING INTO A CONTRACT WITH THE STATE ARE REQUIRED TO PROVIDE A STATEMENT OF OWNERSHIP.

- | | YES | NO |
|---|-------------------------------------|-------------------------------------|
| 1. The vendor is a Non-Profit Entity ; and therefore, no disclosure is necessary. | ☐ | ☒ |
| 2. The vendor is a Sole Proprietor ; and therefore, no other disclosure is necessary.
A Sole Proprietor is a person who owns an unincorporated business by himself or her-self.
A limited liability company with a single member is not a Sole Proprietor. | ☐ | ☒ |
| 3. The vendor is a corporation, partnership, or limited liability company . | ☒ | ☐ |

If you answered **YES** to Question 3, you must disclose the following: **(a)** the names and addresses of all stockholders in the corporation who own 10% or more of its stock, of any class; **(b)** all individual partners in the partnership who own a 10% or greater interest therein; or, **(c)** all members in the limited liability company who own a 10% or greater interest therein.*

NAME	Parsons Brinckerhoff Holdings Inc. (100% owner)		
ADDRESS	One Penn Plaza, 4th Floor		
ADDRESS			
CITY	New York	STATE	NY
		ZIP	10119

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

- | | YES | NO |
|--|-------------------------------------|--------------------------|
| 4. For each of the corporations, partnerships, or limited liability companies identified above, are there any individuals, partners, members, stockholders, corporations, partnerships, or limited liability companies owning a 10% or greater interest of those listed business entities? | ☒ | ☐ |

If you answered **YES** to Question 4, you must disclose the following: **(a)** the names and addresses of all stockholders in the corporation who own 10% or more of its stock, of any class; **(b)** all individual partners in the partnership who own a 10% or greater interest therein; or, **(c)** all members in the limited liability company who own a 10% or greater interest therein. The disclosure(s) shall be continued until the names and addresses of every non-corporate stockholder, individual partner, and/or member a 10% or greater interest has been identified.*

NAME	See attached		
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

NAME			
ADDRESS			
ADDRESS			
CITY		STATE	
		ZIP	

5. As an alternative to completing this form, a Vendor with any direct or indirect parent entity which is publicly traded, may submit the name and address of each publicly traded entity and the name and address of each person that holds a 10% or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission or the foreign equivalent, and, if there is any person that holds a 10% or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal Securities and Exchange Commission or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a 10% or greater beneficial interest.*

<https://www.wsp.com/en-GL/investors/reports-and-filings#Information-Circular>

See page 5 of 2021 Management Information Circular

* Attach additional sheets if necessary

Attachment to
Ownership Disclosure

WSP USA Inc.'s ultimate parent* is WSP Global Inc., a Canadian corporation publicly traded on the Toronto Stock Exchange. WSP Global Inc. has two majority shareholders, which each own 10% or greater interest in the firm.

Shareholders of WSP Global Inc. with 10% or greater interest:

Name: Caisse De Depot et Placement de Quebec

Address: 1000 Jean Paul Riopelle Place, Montreal, QC, Canada H2Z 2B3

Name: CPP Investment Board

Address: One Queen St. East, Suite 2500, Toronto, ON, Canada M5C 2W5

*The full ownership chain to the ultimate parent is:



EXHIBIT 7

EXHIBIT 7
NEW JERSEY TRANSIT
SOURCE DISCLOSURE CERTIFICATION FORM

Consultant(Proposer): WSP USA Inc. Contract Number: 21-059

The Consultant(Proposer) submits this form in response to an RFP issued by NJ TRANSIT in accordance with the requirements of N.J.S.A. 52:34-13.2.

PART 1

☒ All services will be performed by the Consultant(Proposer) and the Subconsultants in the United States. Skip part 2.

PART 2

☐ Services will be performed by the Consultant (Proposer) and/or Subconsultants outside of the United States. **Complete Part 2.**

Where services will be performed outside the United States, please list every country where services will be performed by the Consultant (Proposer) and all Subconsultants. If any of the services cannot be performed within the United States, the Consultant (Proposer) shall state, with specificity, the reasons why the services cannot be performed in the United States. Attach additional sheets, if necessary. The Contracting Officer will review this justification and, if deemed sufficient, may seek approval of the President and CEO (Executive Director).

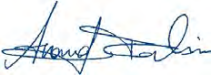
Name of Consultant(Proposer)/ Subconsultant	Performance Location by Country	Description of Service(s) to be Performed Outside the United States	Reason Why the Service(s) Cannot be Performed in the U. S.

Any changes to the information set forth in this Certification during the term of any contract awarded under the referenced solicitation or extension thereof will be immediately reported by the Consultant (Proposer) to the Director of Contracts, NJ TRANSIT Corporation, One Penn Plaza East, Newark, NJ 07105.

If during the term of the Contract, the Consultant (Proposer) shifts the location of any of the services outside the United States, without a prior to a written determination by the Contracting Officer, that the services cannot be performed in the United States, the Consultant(Proposer) shall be deemed in breach of Contract, and the Contract will be subject to termination for cause pursuant to Article 16 of the Professional Services Agreement.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Consultant(Proposer), that the foregoing information and any attachments hereto, to the best of my knowledge are true and correct. I acknowledge that NJ TRANSIT is relying on the information contained herein, and that the Consultant(Proposer) is under a continuing obligation from the date of this certification through the completion of any contract(s) with NJ TRANSIT to notify NJ TRANSIT in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with NJ TRANSIT, permitting NJ TRANSIT to declare any contract(s) resulting from this certification to be void and unenforceable.

Signature: 

Date: February 15, 2022

Print Name: Andy Paluri

Title: District Leader

EXHIBIT 9



DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: RFP 21-059 - Newark Penn Station Distributed Generation (DG) Project

VENDOR/BIDDER NAME: WSP USA Inc.

Pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4) any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must certify that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Division's website at <https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Vendors/Bidders must review this list prior to completing the below certification. If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE BOX

☒ I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.

OR

☐ I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List. I will provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, has engaged in regarding investment activities in Iran by completing the information requested below.

Entity Engaged in Investment Activities
Relationship to Vendor/ Bidder
Description of Activities

Duration of Engagement
Anticipated Cessation Date
Attach Additional Sheets If Necessary.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature

February 15, 2022

Date

Andy Paluri - District Leader

Print Name and Title

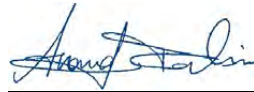
EXHIBIT 10

EXHIBIT 10
CONTRACTOR'S CERTIFICATION OF ELIGIBILITY

The WSP USA Inc. (Insert Name of Company) hereby certifies that it and its Subcontractors are not listed on the State of New Jersey, Department of Labor and Workforce Development, Division of Wages and Hour Compliance, Prevailing Wage Debarment List or on the State of New Jersey, Department of Treasury, Consolidated Debarment Report.

WSP USA Inc. (Insert Name of Company) and its Subcontractors has/have no exclusion(s) on the consolidated U.S. Government, Systems for Award Management (SAM) database located at www.SAM.gov.

I, being duly authorized, certify that the information supplied above is complete and correct to the best of my knowledge. I certify that all of the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Signature

Andy Paluri

Type or Print Name

District Leader

Title

February 15, 2022

Date

EXHIBIT 11

EXHIBIT 11
NON-COLLUSION AFFIDAVIT

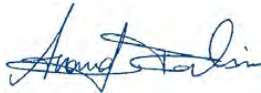
STATE OF New Jersey :

COUNTY OF Mercer :

I, Andy Paluri of the City of Lawrenceville
in the County of Mercer and the State of New Jersey, of full age, being
duly sworn according to law on my oath depose and say that:

I am District Leader of the firm of
the Proposer making the Proposal for the above-named project, and that I executed the said
Proposal with full authority so to do; that said Proposer has not, directly, entered into any
agreement, participated in any collusion, or otherwise taken any action in restraint of free,
competitive bidding in connection with the above-named project; and that all statements contained
in said Proposal and in this affidavit are true and correct; and made with full knowledge that NJ
Transit Corp. relies upon the truth of the statements contained in said Proposal and in the
statements contained in this affidavit in awarding the Contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit
or secure such Contract upon an agreement or understanding for a commission, percentage,
brokerage or contingent fee, except bona fide employees or bona fide established commercial or
selling agencies maintained by WSP USA Inc.. (Name of
Proposer)



Signature

Andy Paluri

EXHIBIT 12

EXHIBIT 12a
AFFIDAVIT OF COMPLIANCE
NJ TRANSIT'S CODE OF ETHICS FOR VENDORS
AND
STATE OF NEW JERSEY ETHICS LAWS

I, Andy Paluri (name of individual), executing this document on behalf of the undersigned company, partnership, corporation, limited liability partnership, limited liability corporation, or entity hereinafter referred to as "Contractor", presently seeking to do business with NJ TRANSIT by way of a Request for Proposals ("RFP"), hereby warrant and affirm to NJ TRANSIT as follows:

1. I warrant and affirm that Contractor has received a copy of NJ TRANSIT's Code of Ethics for Vendors and that I have read and studied this document and distributed this document to all of Contractor's personnel, including but not limited to Subcontractors, involved in seeking to do business with NJ TRANSIT and required said personnel to fully read this document. In addition, I further warrant and affirm that Contractor has received from NJ TRANSIT a document entitled "Important Notice to All Contractors and Consultants" and that I have read and studied this document, including the page setting forth various New Jersey statutory provisions, and that Contractor has distributed this document to all of Contractor's personnel involved in seeking to do business with NJ TRANSIT and required said personnel to fully read this document.

2. Contractor warrants and affirms that it has issued written instructions to all of Contractor's personnel involved in seeking to do business with NJ TRANSIT instructing and requiring same to strictly adhere to the Contractor's responsibilities as set forth in NJ TRANSIT's Code of Vendor Ethics and in the "Important Notice to All Contractors and Consultants".

3. Contractor warrants and affirms that during the bidding or proposal process for the contract with NJ TRANSIT, no gratuities or other inducements have been offered or given or will be offered or given in any form including gifts, gratuities, benefits, inducements, meals (other than *de minimis* valued snacks such as coffee, tea, soda, pretzels, cookies, or similar non-meal items), entertainment, or any other thing of value or favors of any kind to any member of NJ TRANSIT's Board of Directors, officer or employee of NJ TRANSIT.

4. The Contractor warrants and affirms that during the RFP process for the contract with NJ TRANSIT, Contractor has not and will not make any offers of employment to any member of the NJ

TRANSIT Board of Directors, officer or employee directly involved with this contract or solicit or interview therefor, directly or indirectly, without first seeking and obtaining written approval from NJ TRANSIT's Chief Ethics Liaison Officer.

5. The Contractor warrants and affirms that during the RFP process for the contract with NJ TRANSIT it has and shall promptly report in writing to NJ TRANSIT every instance that comes to the Contractor's attention and knowledge regarding any member of NJ TRANSIT's Board of Directors, officer or employee of NJ TRANSIT or their immediate family member, who has either accepted, solicited or asked Contractor to provide any amount of money, gifts, loans, gratuities, benefits, inducements, food (with the exception of coffee, tea, soda, pretzels, donuts, or similar snacks, which may be provided to all attendees at a conference, seminar or business meeting), entertainment or any other thing of value or favors of any kind or has made any solicitation or request, directly or indirectly, for employment with or through the Contractor.

6. The Contractor acknowledges and accepts that for breach or violation of the foregoing warranties and affirmations, NJ TRANSIT shall have the discretion and legal right to disqualify Contractor from bidding or proposing for a contract between the Contractor and NJ TRANSIT.

WSP USA Inc.

(Print Name of Contractor)



(Signature of Authorized Principal or Officer)

Andy Paluri - District Leader

(Print Name and Title of Signator)

EXHIBIT 13

EXHIBIT 13
NEW JERSEY TRANSIT CORPORATION

**CERTIFICATION FOR CONTRACTS, GRANTS, LOANS
AND COOPERATIVE AGREEMENTS (Byrd Anti-Lobbying Certification)**

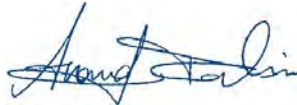
The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.



Signature of Authorized Official

Andy Paluri

Print Name

District Leader

Title

WSP USA Inc.

Firm

February 15, 2022

Date

EXHIBIT 15

EXHIBIT 15

RFP NO. 21-059

CERTIFICATION OF NO TAX LIABILITY OR FELONY CONVICTION

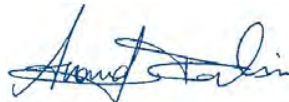
On behalf of WSP USA Inc.

(Name of Entity/Company/Business Association) (hereinafter "Prospective Vendor"), I hereby certify that, as of the date of execution of this Certification, the Prospective Vendor:

1. Does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and the Prospective Vendor
2. Has not been convicted of any felony criminal violation under any Federal law within the preceding 24 months; and the Prospective Vendor
3. Agrees that, if awarded any contract by NJ TRANSIT, the Prospective Vendor will flow down the requirements of Paragraphs 1 and 2 to all lower tier subcontractors or subconsultants involved in this work (including sub-subcontractors and sub-subconsultants, etc.), without regard to the value of any such subagreement (or sub-subagreement, etc.).

The Prospective Vendor further understands and acknowledges that the conditions and obligations herein continue through and until the date of any contract award. If any of the conditions stated herein change prior to the date of contract award, for us or for any subcontractor or subconsultant (or sub-subcontractor or sub-subconsultant, etc.), the Prospective Vendor will immediately notify the NJ TRANSIT contracting officer.

I certify under penalty of perjury that the foregoing statements made by me are true and correct. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Signature

Andy Paluri

Type or Print Name

District Leader

Title

February 15, 2022

Date

EXHIBIT 16

Intent to Propose Form

Please respond via email using the form below to indicate your organization's Intent to Propose by the date specified in the Timeline

RFP No. 21-059

**Final Design, Engineering, and other Technical Services
for the Newark Penn Station Distributed Generation (DG) Project**

All proposers must complete this page and email it to:

Faith Blair

NJ TRANSIT Procurement Officer

Email: *fblair@njtransit.com*

Name of Proposer: WSP USA Inc.

**We confirm the receipt of your request for proposal and will take the following action
[check only one box]:**

☒ **We intend to submit an electronic proposal**

☐ **We decline to submit a proposal [please provide reason]**

Signature: 

Name (Print): David Fraytak

Telephone #: 609.512.3643

Date: January 27, 2022

Email Address: David.Fraytak@wsp.com

Alternate Name (Print): Randy Hubler

Alternate Email Address: Randy.Hubler@wsp.com

Intent to Propose Forms must be received by the date specified in the RFP timeline.

Once your Intent to Propose Form has been received by NJ TRANSIT, you will receive instructions on how to access the Secure File Transfer Site (SFTS) via Microsoft OneDrive. From this site, you will be able to download information as well as upload your electronic version of the proposal. The SFTS Microsoft OneDrive was utilized to provide a secure method for facilitating file transfers to and from outside parties.

Exhibit 17

**CERTIFICATION AND ACKNOWLEDGEMENT OF NEW JERSEY
EXECUTIVE ORDER NO. 271 (MURPHY 2021) (“EO 271”)**

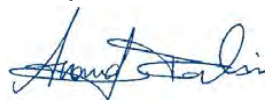
On behalf of WSP USA Inc. (Name
of Entity/Company/Business Association) (hereinafter “Prospective Contractor”), I hereby certify that,
as of the date of execution of this Certification and Acknowledgment, the Prospective Contractor:

1. Has read and reviewed the terms and conditions of EO 271; and
2. Has the policies and practices required by EO 271 in place; and
3. If awarded a contract by NJ TRANSIT, will collect all data necessary for compliance with
EO 271; and
4. If awarded a contract by NJ TRANSIT, will certify, at the time of submission of an invoice,
that we have complied with this Order during the period of time covered by the invoice; or
5. Already has a vaccination or testing policy in place that includes the same, additional or
stricter requirements than EO 271, and such policy comports with the minimum
requirements of EO 271.

The Prospective Contractor understands and acknowledges that the conditions and obligations
must be flowed down to, and made a part of, all contracts with subcontractors at any tier.

The Prospective Contractor further understands that the requirements of EO 271 have the same
force and effect as if they were included in the contract documents, and that all remedies available to
NJ TRANSIT in the contract documents are applicable to the Prospective Contractor’s compliance
with EO 271 and the representations contained within this Certification.

I certify under penalty of perjury that the foregoing statements made by me are true and correct.
I am aware that if any of the foregoing statements made by me are willfully false, I am subject to
punishment.



Signature

Andy Paluri

Type or Print Name

District Leader

Title

February 15, 2022

Date

BUSINESS REGISTRATION CERTIFICATE



STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name: WSP USA INC.
Trade Name:
Address: ONE PENN PLAZA
NEW YORK, NY 10119-0002
Certificate Number: 0057410
Effective Date: July 17, 1964
Date of Issuance: July 12, 2017

For Office Use Only:
20170712082400659



STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name: AMER-COM CORP.
Trade Name:
Address: 1259 ROUTE 46 EAST, BLDG.2
PARSIPPANY, NJ 07054
Certificate Number: 0078542
Effective Date: February 06, 1991
Date of Issuance: August 11, 2016

For Office Use Only:
20160811100147519

**STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE**

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:

MERCER PLANNING ASSOCIATES LLC

TRADE NAME:

ADDRESS:

**46 MARLBOROUGH AVE
MIDDLESEX NJ 08846**

SEQUENCE NUMBER:

1372375

EFFECTIVE DATE:

11/29/07

ISSUANCE DATE:

12/03/07



Acting Director
New Jersey Division of Revenue

FORM-BRC(08-01)

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

State of New Jersey Business Registration Certificate:

Richard Grubb and Associates, Inc.

STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE		DEPARTMENT OF TREASURY/ DIVISION OF REVENUE PO BOX 252 TRENTON, N J 08646-0252
TAXPAYER NAME: RICHARD GRUBB AND ASSOCIATES, INC.	TRADE NAME:	
ADDRESS: 259 PROSPECT PLAINS ROAD BUILD CRANBURY NJ 08512-3241	SEQUENCE NUMBER: 0076332	
EFFECTIVE DATE: 07/05/88	ISSUANCE DATE: 02/26/13	
 Director New Jersey Division of Revenue		
FORM-BRC (04-08) D205846V		
This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.		



STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name: SOWINSKI SULLIVAN ARCHITECTS, PC

Trade Name:

Address: 25 MOHAWK AVE
SPARTA, NJ 07871-1808

Certificate Number: 0104361

Effective Date: June 22, 1999

Date of Issuance: September 18, 2019

For Office Use Only:

20190918123733023



CERTIFICATION FOR EXECUTIVE ORDER NO. 291

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

On March 2, 2022, Governor Murphy signed [Executive Order 291](#), which is attached here. In part, EO 291 requires that "The Division of Purchase and Property in the Department of the Treasury shall review relevant State contracts to determine if any are with companies owned or controlled by the government of Russia, Belarus, or their instrumentalities, or businesses that invest directly in such companies, directly or as subcontractors".

Your company has been identified as one which has an active contract with the State of New Jersey. As a Contractor, pursuant to the State of New Jersey Standard Terms and Conditions, your company must comply with all local, State and Federal laws, rules and regulations – this includes executive orders. Accordingly, please select the appropriate response below.



I, on behalf of the Contractor identified below, certify that neither the Contractor nor any subcontractors used by the Contractor to provide goods or services to the State of New Jersey, is owned or controlled by the government of Russia, Belarus, or their instrumentalities; and, that neither the Contractor nor any subcontractors invest directly in any company that is owned or controlled by the government of Russia, Belarus, or their instrumentalities.

OR



I, on behalf of the Contractor identified below, am unable to certify that neither the Contractor nor any subcontractors used by the Contractor to provide goods or services to the State of New Jersey, is owned or controlled by the government of Russia, Belarus, or their instrumentalities; and, that neither the Contractor nor any subcontractors invest directly in any company that is owned or controlled by the government of Russia, Belarus, or their instrumentalities.

Please identify/explain the ownership, control and or investment activities of the Contractor or subcontractor below.
Attach Additional Sheets If Necessary.

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Contractor, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Contractor is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I may be subject to criminal prosecution under the law, and it will constitute a material breach of my contract(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature Authorized Representative

October 24th, 2022

Date

Anand Paluri, Sr. Vice President

Print Name and Title Authorized Representative

WSP USA INC

Print Name of Contractor

NJ TRANSIT REQUEST FOR PROPOSAL (RFP) NO. 21-059
FINAL DESIGN, ENGINEERING AND OTHER TECHNICAL SERVICES
ASSOCIATED WITH THE NEWARK PENN STATION DISTRIBUTED
GENERATION (DG) PROJECT

EEO REQUIREMENT

CERTIFICATE OF EMPLOYEE INFORMATION REPORT

RENEWAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of **15-JUN-2019** to **15-JUN-2022**

WSP USA INC.
ONE PENN PLAZA
NEW YORK

NY 10119



Elizabeth Maher Muoio

ELIZABETH MAHER MUOIO
State Treasurer

EXHIBIT 4
MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)
N.J.A.C. 17:27 et seq.

GOODS, GENERAL SERVICES, AND PROFESSIONAL SERVICES CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or ex-pression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affection-al or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprentice-ship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable 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 age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are

taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval;

Certificate of Employee Information Report; or

Employee Information Report Form AA-302 (electronically provided by the Division and distributed to the public agency through the Division's website at: http://www.state.nj.us/treasury/contract_compliance).

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be request-ed by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.