

2. AMENDMENT/MODIFICATION NO. <b>0003</b>	3. EFFECTIVE DATE <b>11 Feb 2002</b>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. <i>(If applicable)</i>
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6. ISSUED BY  <b>District Engineer U.S. Army Engineer District, Philadelphia Wanamaker Building, 100 Penn Square East Philadelphia, PA 19107-2290</b>	7. ADMINISTERED BY <i>(If other than Item 6)</i>
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8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>	(✓)	9A. AMENDMENT OF SOLICITATION NO. <b>DACW61-02-R-0007</b>
	(X)	9B. DATED <i>(SEE ITEM 11)</i> <b>03 Jan 2002</b>
		10A. MODIFICATION OF CONTRACTS/ORDER NO.
		10B. DATED <i>(SEE ITEM 13)</i>

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.  is extended,  is not ex-

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*  
**ALTERATION OF THE LIFT BRIDGE, PHILADELPHIA NAVAL BUSINESS CENTER, PHILADELPHIA, PA**

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

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| (✓) | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|     | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i> SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|     | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:   |
|     | D. OTHER <i>(Specify type of modification and authority)</i>   |

**E. IMPORTANT:** Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

**THIS AMENDMENT DOES NOT CHANGE THE FEBRUARY 28, 2002 DATE FOR RECEIPT OF PROPOSALS.**

SEE CHANGES ATTACHED.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>	16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>
15B. CONTRACTOR/OFFEROR  <i>(Signature of person authorized to sign)</i>	16B. UNITED STATES OF AMERICA  BY <i>(Signature of Contracting Officer)</i>
15C. DATE SIGNED	16C. DATE SIGNED

SF 30 CONTINUATION SHEET

14. DESCRIPTION OF AMENDMENT:

a. SPECIAL CONTRACT REQUIREMENTS:

(1) Section 00700 - CONTRACT CLAUSES - Please delete clause 52.246-21 - WARRANTY OF CONSTRUCTION on Pages 112, 113 and 114 in its entirety.

(2) Section 00810 - SPECIAL CONTRACT REQUIREMENTS - Please add 00810-Page 11 and 12, annotated Amendment No. 0003, attached hereto.

b. TECHNICAL SPECIFICATIONS:

(1) Section 05120 - STRUCTURAL STEEL: - Please delete 05120-Page 7 in its entirety and substitute the revised page of the same number, annotated Amendment No. 0003, attached hereto.

(2) Section 16100 - BRIDGE CONTROL SYSTEM: - Please delete 16100-Page 19 and 20 in their entirety and substitute the revised pages of the same number, annotated Amendment No. 0003, attached hereto.

c. CONTRACT DRAWINGS:

Please delete Drawing Numbers S-022, S-035, S-060, S-061, S-062, S-064, S-066, S-081, S-095, S-099, S-102, S-107, S-109, M-011, E-009, E-012, E-034, E-046, E-050, E-051, E-052, and E-053 in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 January 2002, attached hereto.

d. Please indicate receipt of this amendment on Standard Form 1442 (SOLICITATION, OFFER, AND AWARD) as Amendment No. 0003. Failure to acknowledge all amendments may be cause for rejection of the bid.

**SCR-20 WARRANTY OF CONSTRUCTION**

*(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.*

*(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.*

*(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of -*

- (1) The Contractor's failure to conform to contract requirements; or*
- (2) Any defect of equipment, material, workmanship, or design furnished.*

*(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.*

*(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.*

*(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.*

*(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall --*

- (1) Obtain all warranties that would be given in normal commercial practice;*
- (2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and*
- (3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.*

*(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.*

*(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.*

*(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.*

*(k) Defects in design or manufacture of equipment specified by the Government on a "brand name and model" basis, shall not be included in this warranty. In this event, the Contractor shall require any subcontractors, manufacturers, or suppliers thereof to execute their warranties, in writing, directly to the Government.*

*(l) In the event of the transfer of ownership of the bridge from the United States Government to the City of Philadelphia, or the Philadelphia Authority for Industrial Development (PAID), all warranties shall remain in effect for the full period for the benefit of the City of Philadelphia or PAID.*

*(End of Clause)*

The Contractor shall submit to the Contracting Officer the proposed method and procedure of erection and any strengthening required due to erection stresses. If the erection stresses in any member exceed the allowed unit stresses by more than 25%, the Contractor shall, at his own expense, increase the section of such member as may be necessary to bring the stresses within permissible values. The examination by the Contracting Officer of the Contractor's erection methods, erection devices, and erection stresses shall not relieve the Contractor of the responsibility for the safe erection of the work.

### 3.2.2 Jacking Devices

The Contractor shall be solely responsible for the strength and successful operation of all jacking or adjusting devices used. All jacks used shall be of the hydraulic type with a load capacity of at least 50% in excess of the load to be lifted. Any jacking or adjusting procedure shall be designed and detailed, so that the load in the members being jacked can be transmitted to safety shims or blocking which shall closely follow any adjusting or lifting movement required, thus providing for carrying the loads independent of the jacks or adjusting devices in case of failure, and to permit the removal of the jacks or devices at any stage of the operations for their renewal, repair, or maintenance. All jacks or adjusting devices shall be removed and the full dead load of the structure shall be on supports.

### 3.2.3 Alignment of Towers

a. Special note is hereby made of the need for accuracy and special care in the tower erection in order to assure that proper running clearances are provided for all parts as the span is guided along its lift travel by the fixed tower guide tracks. Accordingly, the Contractor shall exercise such special care and provide all expertise and equipment as is necessary to assure that the geometry of the finish structure, under full dead load at normal temperature of 68 Deg F, is within the following tolerances of deviation from the geometrical dimensions shown on the plans, deviations beyond which will not be accepted (pre-approved correction will be required by and at the Contractor's expense).

Transverse Distance In-to-In of Front Column Transverse Wheel Guide Tracks	<b>+1/8, -1/8 inch</b>
Longitudinal Distance C-to-C of Front Columns (Across Channel)	<b>+1/2, -1/8 inch</b>
Tower Column Verticality - Maximum Deviation From Plumb	<b>1:2,000</b>

b. The Contractor shall accurately install and adjust all span guide rollers, so as to provide the clearances indicated on the drawings.

c. The foregoing specific requirements shall not relieve or in any way alter the requirement that all other portions of the structure be erected to the highest standards of erection accuracy specified or implied by the contract.

### 3.2.4 Structural Connections

#### 3.2.4.1 Structural Bolting



The AC motors shall be 200 horsepower, 1200 RPM, totally enclosed non-ventilated, **inverter duty, constant torque rated**, with a service factor of **1.0**.

Motors shall be furnished with internal heaters, double shafts and encoders.

Motors shall be designed, manufactured, and tested in accordance with the applicable requirements of NEMA Standards Publication No. MG 1, Motors and Generators.

#### 2.1.19 AC Motors

Motors with horse-power rating of 500 Hp or smaller shall conform to NEMA MG 1 and UL 1004. AC motors shall be polyphase induction motors.

### 2.2 Electrical Power Distribution System

#### 2.2.1 General

The electrical power distribution system shall consist of circuit breakers, motor control centers, disconnect switches, panelboards, lighting and other equipment and devices necessary to provide a complete power system.

#### 2.2.2 Circuit Breakers

Molded case circuit breakers in enclosures or panelboards shall be sized as indicated on drawings, shall be UL-listed and meet NEMA Standard No. AB1, where applicable. Circuit breakers shall have frame size rating larger than their trip rating.

Circuit breakers shall have toggle-type operating mechanisms, with quick-make, quick-break action and positive handle indication. Circuit breaker operating handles shall assume a center position when tripped. Two-pole and three-pole breakers shall be common-trip. Each circuit breaker shall have a permanent trip unit containing individual thermal and magnetic trip elements in each pole.

Circuit breakers shall be suitable for mounting and operating in any position. Connections to bus shall be bolt-on.

Lugs shall be copper, UL-listed for copper conductors. Circuit breakers shall be U.L. listed for installation of mechanical screw-type lugs.

Individually enclosed circuit breakers shall be in Nema 12 enclosures, provided with operating mechanism and handle for external operation, and padlock provisions

#### 2.2.3 Motor Control Center

a. The motor control center (MCC) shall be rated as shown on plans, Bulletin 2100, Centerline by Allen-Bradley, or Model 6 by Square-D, or an approved equal.

b. The motor control center assemblies shall be NEMA 12 construction. Motor starter units shall be of the combination type with molded case circuit breaker (Motor circuit protector). Wiring shall be NEMA class II, type C with master terminal board. Each motor control cabinet shall be of dead-front construction and shall incorporate vertical busses connected to

the horizontal bus, when required.

c. The motor control center shall consist of vertical sections bolted together with a common frame to form a rigid, free-standing assembly. The MCC shall be suitable for operation on the 480 volt, 3 phase service. The control voltage shall be 120 volts AC, at 60 Hz.

d. Removable structure steel lifting angles shall be provided on the top sections. Each vertical section shall be approximately 90 inches high, excluding lifting angles and mounting channels, and not less than 15 inches deep by 20 inches wide.

e. The vertical sections shall be divided into suitable space factors. Size 1 and size 2 across-the-line, non-reversing combination starter units shall fit into one space factor. In such cases, each space factor shall be covered by an individual door, as described in the paragraph below.

f. End vertical section shall have end closing plates providing access to horizontal wireways and the horizontal bus. The top plate shall be of removable one-piece construction. Removable blank doors shall cover all un-used unit spaces, and shall be provided with 1/4 turn pawl-type latches.

g. Horizontal wireways shall be provided both top and bottom. The wireways shall be completely isolated from the horizontal and vertical busses. A full height vertical wireway shall be provided in each standard vertical section, completely isolated from the horizontal and vertical busses. A separately removable hinged door with 1/4 turn pawl-type latches shall cover the vertical wireway. Wire ties shall be furnished in the vertical wire trough to group and securely hold wires in place.

h. The main horizontal bus bar shall be copper, tin-plated, and rated not less than 800 amps. The bus shall be one-continuous piece and extend the full length of the assembly, except where split for shipment, in which case, the bus shall be continuous in each shipping block with a splice kit supplied as required to interconnect the busses in the field.

i. The vertical bus shall be copper, tin-plated, rated not less than 400 amps.

j. Both the horizontal and vertical busses shall be supported and braced to withstand 42,000 RMS symmetrical amps.

k. The horizontal ground bus shall be copper, 1/4 inch thick by 2 inches wide, and located in the top and bottom horizontal wireways. Ground lugs shall be provided as standard.

l. Unit connections shall be bolt-on type, or plug-in type, high quality, two-point connection for each phase, designed to tighten during heavy current surge. The plug-in fingers shall be tin-plated to yield a low resistance connection, and shall be backed by spring steel clips to provide high-pressure connection points. Each plug-in unit shall be held in place by one or more latches, located at the front of the unit. Latches shall provide maximum front accessibility and installation convenience. All contactors shall be electrically held type. The following types and sizes of starters shall be provided:

- Reversing starter with circuit breaker
- Non-reversing starter with circuit breaker.