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George Latimer
County Executive

Office of the County Attorney

John M. Nonna
County Attorney

March 4, 2021

Westchester County Board of Legislators
Michaelian Office Building
148 Martine Avenue, 8th Floor
White Plains, New York 10601

Re: Legislation authorizing the County of Westchester, acting by and through the County Attorney, to settle the claims of E.E. Cruz & Company, Inc. for additional compensation under Contract No. 11-503-REV.

Dear Honorable Members of the Board:

Attached for your consideration is an Act which, if adopted by your Honorable Board, would authorize the Westchester County Attorney to settle the claims of E.E. Cruz & Company, Inc. ("Cruz") against the County of Westchester (the "County") for additional compensation in connection with Contract No. 11-503-REV (the "Contract") for Rehabilitation of the Fulton Avenue Bridge Over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor, New York (the "Project").

By resolution duly approved on May 12, 2016, the Board of Acquisition and Contract awarded the Contract for the Project to Cruz for the sum of $14,816,000.00. The scope of work for the Project included the removal and replacement of the steel bridge deck, stringers and bracing, sidewalk panels, and various secondary members of the Fulton Avenue Bridge (the "Bridge"), a bascule movable bridge over the Hutchinson River.

On or about February 2, 2020, Cruz submitted to the Commissioner of the Department of Public Works and Transportation (the "Commissioner") a verified statement in the form of a "Final Application for Payment,"[1] along with accompanying materials for his consideration, listing two (2) separate claims for additional compensation for work performed by Cruz on the Project. Specifically, Cruz seeks additional payment under Contract Item Nos. 589.01, 800.23 and 800.34 for the total sum of $1,744,719.00 (the "Claims").

[1] Cruz subsequently submitted to the Commissioner a revised Contractor's Certificate for Final Application for payment on or about July 2, 2020, affirming that Cruz paid all subcontractors used by it on the Project in Full.

I. The Claims:

1. Removal of Existing Steel –Item No. 589.01.

This claim concerns the removal of existing steel from the Bridge. For Item No. 589.01, the engineering consultant hired by the County to prepare the drawings, the specifications, and the necessary bidding information for the Project, Henningson, Durham & Richardson Architecture and Engineering, in association with HDR Engineering Inc. ("HDR"), included in its bid specifications the removal of approximately of 178,684 pounds of existing steel from the Bridge. Per the bid specifications prepared by HDR, the pay unit for the removal of existing steel from the Bridge is per pound of steel removed. In its bid for the Project, Cruz provided an itemized proposal containing a unit bid price of $8.00 per pound of existing steel removed from the Bridge, resulting in an amount bid of $1,429,472.00 for Item No. 589.01.

To date, Cruz has been paid $1,429,472.00 for the removal of 178,684 pounds of steel, which is in line with the original estimate provided by HDR and the amount bid by Cruz. Cruz, however, seeks additional payment of $1,292,000.00 from the County, claiming that it removed a total of 340,184 pounds of existing steel from the Bridge, or 161,500 pounds over and above the amount approximated by HDR. Upon investigation of Cruz's claim, the County discovered that HDR neglected to include the Bridge's steel decking in its original estimate.

2. Floorbeam 5 Interferences – Item Nos. 800.23 and 800.34.

This claim concerns in-field modifications along the upper and lower flanges of the Bridge's Floorbeam 5. The in-field modifications were required when the upper and lower flanges made contact with separate joints during test operations on November 13, 2017 and February 15, 2018, respectively. Cruz claims that the interferences were the result of errors in the design documents prepared by HDR related to the deck joint assembly work contemplated by the Contract. Cruz furthermore claims that it is entitled to additional compensation in the total sum of $452,718.00 for the resulting in-field modifications.

II. The Commissioner's Determination.

Pursuant to the terms of the Contract, the Commissioner is the arbiter of any, and all, disputes between the County and Cruz arising out of the Contract plans and/or the measurement for payment thereunder. In accordance with this role, the Commissioner issued a determination (the "Determination") addressing the Claims on August 27, 2020, a copy of which I annex for your reference. After due consideration of the Claims, and consultation with the Law Department with respect to the relevant and applicable law governing the same, the Commissioner ultimately determined that Cruz is entitled to additional compensation of $1,061,745.60 under Item No. 589.01, and that Cruz is not entitled to additional compensation under Item Nos. 800.23 and 800.34. Furthermore, the Commissioner determined that a disincentive assessment of $366,000.00, applied pursuant to Item No. 698.93940015 for Cruz's failure to timely complete the Project, reduces the additional compensation due under Item 589.01 to $695,745.60.

1. Removal of Existing Steel – Item No. 589.01.

The general rule is that unit price contracts entitle a contractor to payment for work completed, at the agreed-upon unit price. To this point, the courts have consistently held that, even in circumstances in which the amount of work completed is considerably in excess of the agreed

upon original estimates upon which a unit price contract is based, the payment terms remain valid and the parties must abide by them as long as the contract is clear, complete and unambiguous.

Here, the Contract is a unit price contract; to wit, incorporated into the Contract is Cruz's itemized proposal containing unit prices bid for each work item, including the unit price of $8.00 per pound of steel removed from the Bridge. The terms of the Contract are clear, complete and unambiguous. As such, pursuant to the applicable legal authority, Cruz is entitled to payment of $8.00 per pound of steel removed from the Bridge notwithstanding the fact that the total amount of steel removed exceeds HDR's original estimate.

Premised upon the foregoing, the Commissioner determined that Cruz is due additional payment in the sum of $1,061,745.60 under Item No. 589.01. In reaching this determination, the Commissioner rejected Cruz's claim that it removed a total of 340,184 pounds of steel from the Bridge—an overrun of 161,500 pounds from HDR's original estimate—and noted that Cruz offered no support whatsoever for their numbers. The Commissioner instead pointed to balancing equations provided by Cruz in its communications with the County, and then deducted quantities of items that are not payable per the Project specifications (i.e., concrete, welds, bolts, etc.) to support his calculation that Cruz removed a total of 311,402.2 pounds of existing steel from the Bridge under Item No. 589.01. The Commissioner's calculation thus resulted in the following determination:

HDR's Original Estimate:	178,684.0 lbs.
Total Steel Removed by Cruz:	311,402.2 lbs.
Difference:	132,718.2 lbs.
Unit Price Bid by Cruz:	$8.00/lb.
Sum Due to Cruz:	$1,061,745.60 (132,718.2 lbs. x $8.00)

2. Floorbeam 5 Interferences – Item Nos. 800.23 and 800.34.

The Commissioner determined that Cruz is not entitled to additional compensation for the in-field modifications performed by Cruz with respect to Item Nos. 800.23 and 800.34. In support of this determination, the Commissioner points to the clear and unequivocal language contained in the Contract requiring Cruz to perform all necessary field surveys to verify field conditions and to verify all existing dimensions affecting the fabrication, construction and fit of replacement concrete and steel elements required for the Project. Further to this point, the Contract required Cruz to fabricate all materials in accordance with their own measurements, and not to rely solely on the plans and specifications provided by HDR. Accordingly, Cruz should have known of the potential interferences to the upper and lower flanges of Floorbeam 5 prior to test operations, thus precluding Cruz's claim for additional compensation under Item Nos. 800.23 and 800.34.

3. Disincentive Assessment – Item No. 698.93940015.

Under Item No. 698.93940015, substantial completion of the project was required on or before November 22, 2017. The work was not substantially complete until May 24, 2018—183 days beyond the substantial completion date. Accordingly, pursuant to a Special Notice annexed to the Project's bid specification, a disincentive assessment of $2,000.00 per day must be applied, reducing the sum due Cruz under Contract Item No. 589.01 to $695,745.60 (183 days x $2,000/day).

III. Settlement of the Claims.

Cruz advised that it disagrees with the Commissioner and intends to challenge the Determination via an Article 78 proceeding. The Department of Law, the Department of Public Works and Transportation, and the principals of Cruz have engaged in negotiations in order to avoid the potential expense of litigation. These negotiations have resulted in a proposed agreement (the "Settlement Agreement") to settle Cruz's Claims, conditioned on your Honorable Board's approval.

Pursuant to the proposed Settlement Agreement, the County is to pay Cruz the full sum of $850,000.00 in full and final settlement of its Claims. HDR is to contribute $154,254.40 to the $850,000.00 settlement amount with Cruz via direct payment to the County pursuant to a separate agreement with the County, which is the subject of separate legislation submitted to your Honorable Board for approval simultaneously with this legislative package. The following reflects the proposed settlement with Cruz:

Cruz Claim under Item No. 589.01:	$1,292,000.00
Cruz Claim under Item Nos. 800.23 and 800.34:	$ 452,719.00
Total Cruz Claim:	**$1,744,719.00**
Item No. 589.01 Determination:	$1,061,745.60
Item Nos. 800.23 and 800.34 Determination:	$ 0.00
Item No. 698.93940015 Determination:	($366,000.00)
Total Due Determination:	**$ 695,745.60**
Proposed Settlement Amount:	**$ 850,000.00**
Proposed Payment by the County:	$ 695,745.60
Proposed Payment by HDR:	$ 154,254.40

In consideration of the $850,000.00 payment to Cruz, Cruz and the County will release each other from all claims and/or causes of action related to Cruz's Claims, and the County will rescind and retract the disincentive assessment made within the Determination identified as Item No. 698.93940015.

This Act is subject to Section 158.11(5) of the Westchester County Charter.

Very truly yours,

John M. Nonna
Westchester County Attorney

Attachments

cc: Kenneth Jenkins, Deputy County Executive
Joan McDonald, Director of Operations
Hugh J. Greechan, P.E.
Commissioner of Department of Public Works

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In the Matter of the Claim of:

COMMISSIONER'S DETERMINATION

E.E. Cruz & Company, Inc. for Additional Compensation under Westchester County Contract No. 11-503-REV for Rehabilitation of the Fulton Avenue Bridge Over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor, New York.

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I. AUTHORITY

By a resolution duly approved on May 12, 2016, the Westchester County Board of Acquisition and Contract (the "County Board") awarded Contract No. 11-503-Rev. for Rehabilitation of the Fulton Avenue Bridge over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor, New York, to E.E. Cruz & Company, Inc. in the sum of $14,816,000.00.

Pursuant to the May 12th Resolution, the County of Westchester (the "County") executed Contract 11-503-REV with E.E. Cruz & Company, Inc., which included the following: (i) the Agreement, dated May 12, 2016 (the "Agreement"), (ii) Information for Bidders, (iii) General Clauses, (iv) Special Clauses, (v) Specifications, (vi) Itemized Proposal, and (vii) Plans and issued Addenda (collectively referred to as the "Contract").

As a condition precedent to receiving final payment under the Contract, the Contractor is required to submit a supplementary verified statement that includes all claims that accrued between substantial completion and final completion of the project. *Information for Bidders, § 22(B)*. Only claims particularly identified on the Contractor's supplementary verified statement would be preserved; all other claims of whatever nature would be deemed waived and released. *Id.*

The Contractor submitted a Contractor's Certificate for Final Application for Payment, sworn to on February 2, 2020, along with accompanying materials, in support of its final claim for payment ("Final Application for Payment"). A copy of the Final Application for Payment is annexed as Exhibit "A." In paragraph 4 of the Final Application for Payment, the Contractor listed the following unpaid bills and liabilities:

Claims No.	Name of Claimant	Purposes		Amount
1.	E.E. Cruz	589.01-Removal of existing steel		$1,292,000.
2.	E.E. Cruz	FB 5 Interferences		$452,718.
3.	E.E. Cruz	Final Retainage Release		$148,160.
			TOTAL	$1,892,878.

Accompanying the Final Application for Payment, the Contractor submitted the following materials in support of Claim Nos. (1) and (2):

1. Letter Log No L-022, dated February 12, 2020, re: Contract No. 11-503-REV, Rehabilitation of Fulton Avenue Bridge over Hutchinson River Item 589.01- Removal of Existing Steel- Additional Quantities, a copy of which is annexed as Exhibit "B" ("Letter Log No. L-022").

2. Letter Log No. L-23, dated February 12, 2020, re: Contract No. 11-503-REV, Rehabilitation of Fulton Avenue Bridge over Hutchinson River- 800.23 – Floor Beam 5 Upper Flange Interference and 800.34 – Floor Beam 5 Bottom Flange Interference, a copy of which is annexed as Exhibit "C" ("Letter Log No. L-23").

The Commissioner of the Department of Public Works and Transportation (the "Commissioner") is authorized to render a full and final determination as to any and all disputes pursuant the following provision in the Contract:

> "[S]hould *any dispute arise respecting the true construction, interpretation or meaning of the Contract plans, specifications or conditions herein, or the measurement for the payment thereunder, same shall be referred to and decided by the said Commissioner* and his decision hereon shall be final and conclusive upon the parties hereto and may not be challenged except in a proceeding commenced pursuant to Article 78 of the Civil Practice Law and Rules. This provision shall also apply to the true value of any duly authorized extra work or any work permitted by agreement in case any work shall be ordered performed, or any work called for shall be so omitted under and upon the direction of said Commissioner."

Agreement, p. 8 (emphasis added).

In accordance with the authority granted to the Commissioner pursuant to the Contract, I have fully reviewed the claims submitted by E.E. Cruz & Company, Inc. (the "Contractor"). After careful consideration, the following constitutes my full and final determination with respect to the Contractor's Claim Nos. 1 and 2; a separate determination shall be rendered with respect to the Contractor's Claim No. 3.

II. FACTS

By the May 12th Resolution, the County Board awarded the Contract to the Contractor for the sum of $14,816,000.00. The scope of work for the rehabilitation of the Fulton Avenue bridge (the "Bridge"), a bascule movable bridge, over the Hutchinson River (the "Project") included the removal and replacement of the Bridge's "steel bridge deck, stringers and bracing, sidewalk panels and various secondary members…[and] both approach spans…." *General Requirements to the Contract, para. 1.*

Upon its submission of the Contractor's Final Application for Payment and Letter Log Nos. L-022 and L-023, the Contractor seeks an additional payment under Contract Item Nos. 589.01 (Claim No.1), as well as 800.23 and 800.34 (Claim No. 2) for the total sum of $1,744,718.30.

a. Claim No. 1 - Item No. 589.01 – Removal of Existing Steel.

Item No. 589.01 concerns the removal of existing steel from the Bridge. For Item No. 589.01, the County provided the "approximate" quantity of 178,684 pounds of existing steel with the "Pay Unit" being measured in pounds. In its bid for the Project, the Contractor provided a "Unit Bid Price" of $8.00 per pound resulting in an "Amount Bid" of $1,429,472.00 for the removal of the 178.684 pounds of existing steel approximated by the County's engineering consultant, HDR Engineering Inc. (the "Engineer").

To date, the Contractor has been paid $1,429,472.00 for the removal of 178,684 pounds of steel.

The Contractor seeks an additional payment of $1,292,000.00 from the County for the removal of existing steel under Item No. 589.01 and seeks a determination with respect to same by submission of Letter Log No. L-022. Specifically, the Contractor claims that it removed a total of 340,184 pounds of existing steel from the Bridge, or 161,500 pounds over and above that which was approximated by the Engineer. Notwithstanding its estimation, the Contractor claims that the County acknowledged a total existing steel removal quantity of 320,263 pounds and requests a minimum payment of $1,132,632.00 under Item No. 589.01, calculated as an additional 141,579 pounds at the Unit Price of $8.00/pound. The Contractor has not annexed any support for its 340,184 pound estimation, or any support for its claim that the County has acknowledged and agreed that 320,263 pounds of steel were removed, to its application for additional payment under Item No. 589.01.

The County, in turn, does not deny that at the point in time the 178,684 pounds of steel was removed that amount represented only part of the amount of the steel that needed to be removed, and the removal of the existing steel had not been completed. However, the County disputes the quantity of additional existing steel the Contractor claims it removed.

The Engineer calculates that the Contractor removed a total of 311,402.2 total pounds of steel from the Bridge—an overrun of 132,718.2 pounds from the original estimate provided by the County. The County furthermore claims that it never acknowledged and/or agreed that 320,263 pounds of steel were removed from the Bridge. Rather, the County agrees that it discussed the 320,263 quantity number with the Contractor, but that this was done prior to the Engineer fully examining the item in detail and analyzing each component of the quantity of steel involved. The County refers to a September 16, 2019 email to the Contractor, a copy of which is annexed as Exhibit "D", in which the Project Engineer provides the basis for its calculation that the total quantity of steel removed was 311,402.2 pounds. The County claims that the 311,402.2 poundage was determined by using balancing calculations provided by the Contractor, and then deducting quantities not payable per the Project specifications (i.e.,

concrete, welds, bolts, etc.). The County, by the Engineer, offers a detailed estimation resulting in the quantity alleged, a copy of which is annexed hereto as Exhibit "E".

b. Claim No. 2 - Item Nos. 800.23 and 800.34 – Floor Beam 5, Upper and Bottom Flange Interference.

Item Nos. 800.23 and 800.34 concern in-field modifications along the upper and lower flanges of the Bridge's Floorbeam 5 for which the Contractor claims it is due payment under the Contract. Upon its submission of Letter Log No. L-023, the Contractor seeks payment under Item Nos. 800.23 and 800.34 of $61,280.03 and $391,438.27, respectively.

i. Item No. 800.23 - Floor Beam 5 – Upper Flange Interference.

This claim concerns a constructability interference, which occurred when the Contractor attempted to raise the Bridge to prepare for an incoming barge on November 13, 2017. Specifically, upon attempting to raise the Bridge, it was discovered that a floor beam flange on both the East and West spans of the Bridge were coming into contact with a joint requiring the Contractor to cut the floor beam flange to enable the Bridge to continue to raise. The Contractor claims that the design documents of the Engineer were not clear on the measurements and are the cause of the interference, and subsequent additional work required. The County, however, claims that the Contractor is at fault because the Contractor was required to conduct contractually required surveys and confirm all measurements prior to fabricating the replacement portions of the Bridge and attempting to raise the Bridge. The County claims that if the Contractor conducted the required survey(s) and confirmed the measurements in advance as required, it would have discovered the issue, it could have requested prior clarification, and it could have avoided any costs associated with the interference.

ii. Item No. 800.34 – Floor Beam 5 - Bottom Flange Interference.

This claim concerns a constructability interference, which occurred during a test operation of the Bridge on February 15, 2018. Specifically, the bottom flange of Floorbeam 5 on both the East and West spans of the Bridge interfered with the counter-weight slab armor joint, preventing same from opening to its predetermined seventy (70) degree mark; thus, requiring the Contractor to cut three (3) inches of steel from each corresponding flange as both the Pelham Manor span and Mount Vernon Span of the Bridge were affected. This, however, affected the integrity of the flange as a whole, requiring the Contractor to drill steel on the other side of the flange in order to reinforce the flange and the beam. The Contractor again claims that the interference stems from a flaw in the designs provided by the Engineer. The County again claims that the Contractor is at fault because the Contractor was required to conduct contractually required surveys and confirm all measurements prior to fabricating the replacement portions of the Bridge and attempting to raise the Bridge, which would have thus discovered the issue in advance, could have requested prior clarification, and avoided the subsequent costs associated with the interference claimed by the Contractor.

c. Item No. 698.93940015 – Disincentive Assessment.

There is another Item No. that affects the County's ability to make any payments to the Contractor under the Contract that that must be analyzed.

Item No. 698.93940015 concerns "incentive payments/disincentive assessments for work subject to the Special Note 'Incentive/Disincentive Clause.'" *Itemized Proposal, p. 6.*

The Contract provides that "[l]ate completion of I/D work will result in a disincentive assessment which will be deducted from money due to the contractor." *Special Notice, p. 2.*

I/D Work is defined to include "all work relating to the closure of the Fulton Avenue Bridge to two-way vehicular and pedestrian traffic as detailed in the reference contract plans" (the "I/D Work"). *Id.*

The Contract provides for an assessment in the sum of $2,000.00 per day (the "Daily Cost") beginning the calendar day subsequent to Wednesday November 22, 2017 and continuing each day thereafter until the I/D Work is substantially completed to the satisfaction of the Engineer. *Id. at p.1.* Substantial completion is defined as the date upon which the Bridge is "successfully opened 9 out of 10 times, under normal operating conditions from the new operator's house, within a 4-hour window." *Id. at p. 2-3.* The Engineer is the sole authority in determining when the work is substantially complete. *Id. at p. 3.*

Moreover, the Contract provides:

> "Failure to substantially complete any I/D work within the number of consecutive calendar days specified will result in the daily cost specified for that work in the special note "DESCRIPTION OF I/D WORK" being assessed for every calendar day in excess of the number of consecutive calendar days specified, up to the time when the work is substantially complete. **THERE IS NO LIMIT ON THE AMOUNT OF DISINCENTIVE ASSESSMENT."**
>
> *Id. at p. 3 (emphasis in the original).*

III. DISCUSSION

The Commissioner's determination is ultimately guided by the terms of the Contract itself, which includes the drawings, plans and specifications.

a. Claim No. 1 - Item No. 589.01 – Removal of Existing Steel.

The general rule is that unit price contracts entitle a contractor to payment for work completed, at the agreed-upon unit price, even in circumstances in which the amount of work is considerably in excess of the estimates. In such a case, the contractor is entitled to the unit price bid, but not to any unforeseen damages, lost profit or additional costs or materials.

Here, the Contract is subject to the Contractor's "Itemized Proposal" with unit prices bid for each work item. As such, it is a unit price contract subject to the following covenants as set forth in the Contract:

> The County covenants and agrees with the said Contractor, in consideration of the covenants and agreements herein being strictly and in all respects complied with by the said Contractor as specified, that it will well and truly pay unto said Contractor the unit prices set forth in the Proposal for the various items included in the Contract. *Agreement*, p. 2.
>
> The Contractor will accept the unit prices named in the proposal for all additions to or deductions from the original quantities as given in the specifications. It is agreed that the Commissioner will make estimates of the value for the work completed as provided in the specifications and the final estimate will be made accordingly. *Agreement*, p. 4.
>
> If the various parts of the work have been divided into classes and/or items to enable the bidder to bid for different portions of the work in accordance with its estimate of their costs, in the event of any increase or decrease in the quantity will be paid for at the price bid for that particular item. The sum of the amount for each class or item, obtained by multiplying the approximate quantity by the unit price, shall constitute the total sum bid. *Information to Bidders*, § 13.

Pursuant to the terms of the Contract, the Contractor is entitled to payment for the removal of quantities of steel over and above the approximate quantity provided by the County under Item 589.01 at the "Unit Bid Price" of $8.00 per pound.

Notwithstanding the foregoing, the Contractor failed to provide any support whatsoever in its application for additional payment to substantiate its claim that it removed 340.184 pounds of steel. Nor has the Contractor provided any support for its claim that the County acknowledged a quantity of 320.263. Indeed, the only support annexed to its application for payment were excerpts of Contract provisions supporting its claim for additional payment at the Unit Bid Price of $8.00/pound; nothing to support the actual estimate that it alleges.

The County, on the other hand, supports its claim with a communication to the Contractor advising of its 311.402.2 estimation as well as a detailed analysis of how it reached said estimation. As such, it is my determination that the Contractor is entitled to additional payment of $1,061,745.60 under Item 589.01, calculated as an additional 132,718.2 pounds of steel removed at a Unit Bid Price of $8.00/pound.

b. Claim No. 2 - Item Nos. 800.23 and 800.34 – Floor Beam 5 – Upper and Bottom Flange Interference.

The terms of the Contract are clear; to wit: the relevant terms of the Contract are as follows:

Agreement, p. 2:

> The Contractor acknowledges receipt of the "Information for Bidders, General and Special Clauses, Specification, Proposal and Plans" relating to this Contract, as well as all issued Addenda thereto, all of which are expressly incorporated in this Contract as if fully set forth herein.

Agreement, p. 9:

> The Contractor by the submitting of bids and execution of this Contract hereby covenants and agrees that he has examined the plans, specifications and the site work, as to local conditions, difficulties and accuracy of approximate estimate quantities and does hereby further covenant and agree that he will not make any claim for damages by reason of any such local conditions, difficulties or variation of approximate estimate of quantities.

Special Clauses, para. 34:

> The detail plans and specifications for the contract have been prepared with care and intended to show as clearly as is practicable the work required to be done. The contractor must realize however, that construction details cannot always be accurately anticipated and that in executing the work, field conditions may require reasonable modifications in the details of the plans and quantities of work involved. Work under all items in the contract must be carried out to meet these field conditions to the satisfaction of the Engineer and in accordance with his instructions and the contract specifications.

Drawing No. S-03, Sheet No. 14 of 159, Note 16 (emphasis added):

> These contract documents have been prepared based on field inspections and original contract plans. Actual field conditions may require modifications to construction details and work quantities. The Contractor shall perform work in accordance with field conditions. Bidders shall visit the site of the Project before submitting a proposal to ascertain the work extents.

Drawing No. G-03, Sheet No. 3 of 159, Notes 3 and 4 (emphasis added):

> Note 3: The Contractor shall verify dimensions necessary for the proper fit of concrete and steel elements prior to the fabrication of the steel. The cost of field verifying dimensions shall be included in the price bid for structural steel items.
>
> Note 4: Horizontal, vertical, and detail dimensions and elevations shown on these plans have been obtained from the available drawings of the existing structures, and from other sources. The Contractor shall perform a field survey to establish base lines and control points and to verify all existing dimensions affecting fabrication and construction. Submit this field survey to the Engineer before shop and construction drawings are started. The Contractor shall fabricate all materials

in accordance with their own measurements and be responsible for proper fit of all work. The Engineer's approval of shop drawings shall not relieve the Contractor of this responsibility.

In accordance with the unambiguous terms of the Contract cited above, the Contractor's claims for additional compensation under Item Nos. 800.23 and 800.34, respectively, is without merit.

As described above, the primary guide in determining whether a contractor is entitled to receive additional compensation is the contract itself. Here, the Contractor agreed that the Contract, and its obligations pursuant to same, consisted of its adherence to the terms and conditions stated in all specifications and plans. Pursuant to the Project plans and specifications cited above, it was incumbent upon the Contractor to verify all dimensions prior to fabrication; it was furthermore incumbent upon the Contractor to include the cost of same in the Amount Bid, and to conduct all necessary and proper surveys to verify field conditions. These Contract provisions clearly and unambiguously establish that the parties intended for the Contractor to rely upon its own personal investigation, which included verifying conditions and dimensions which affect the Project. It necessarily follows then that the interferences to the upper and lower flange of Floorbeam 5 occurring during on November 13, 2017 and February 15, 2018 were either known or should have been known by the Contractor.

As such, the Contractor's claim for additional compensation under Item Nos. 800.23 and 800.34 is denied.

c. Item No. 698.93940015 – Disincentive Assessment.

Under Item No. 698.93940015, substantial completion of all I/D Work was required on or before November 22, 2017. The work was not substantially complete until May 24, 2018 - 183 days beyond the required substantial completion date. Therefore, pursuant to the Special Notice section of the Contract, a disincentive assessment in the sum of $366.000.00 (183 days x $2.000/day) must be deducted from money due to the Contractor. The County offers the email, dated May 25, 2018, attached hereto as Exhibit "G" in support of the May 24, 2018 substantial completion date.

IV. CONCLUSION

Claim No. 1. - Deducting the $366,000.00 disincentive assessment under Item No. 698.93940015 from the sum of $1,061,745.60 due the Contractor under Item 589.01, it is the final determination of the Commissioner that the Contractor is entitled to a payment of $695,745.60 under and pursuant to the terms of the Contract for Claim No. 1.

Claim No. 2 - It is the determination of the Commissioner that the Contractor is due no payment under Claim No. 2 - Item Nos. 800.23 and 800.34.

Dated: White Plains, New York
August 27 2020

Hugh J. Greechan, Jr., P.E.
Commissioner
Department of Public Works and Transportation

EXHIBIT A

DEPARTMENT OF PUBLIC WORKS – DIV. OF ENGINEERING
COUNTY OF WESTCHESTER

CONTRACTOR'S CERTIFICATE
Final Application for Payment

I, Paul Marino, Treasurer
(Name of Officer or Principal) (Title)

of EE Cruz Co. Inc.
(Contractor)

32 Avenue of Americas, 13th Floor, New York, NY 10013
(Address of Contractor)

Under Contract No. 11-503 Rev for Rehabilitation of the Fulton Avenue Bridge over Hutchinson River
(Title of Contract)

said Contract having been made between the said Contractor and the County of Westchester, do hereby certify and state with respect to work performed under said Contract through and including Final Estimate No. 24 dated October 28, 2019 (incorporated by reference) as follows:

1. That pursuant to Section 220-a, 220-b, 220-c of the Labor Law, I do hereby certify and state that the names and addresses of all approved subcontractors who performed work under this Contract are as follows:

   See attached list

I further state that all of the above said subcontractors have been paid in full except for those listed in No. 2 below.

2. That pursuant to Section 220-a, 220-b, 220-c of the Labor Law, I do hereby certify and state that the following subcontractors who performed work under this final estimate number and who have not been paid in full are:

Name	Amount
Verde Electric	In discussion with subcontractor

I further state that all of the above subcontractors will be paid under this final estimate.

Contract No. 11-503 Rev
Estimate No. 24

3. That the following is a complete list of all amounts now due and owing from said Contractor to any and all laborers for daily or weekly wages or supplements on account of said contract through and including this final estimate.

Name	Amount
N/A	0

4. That the following is a full and true statement of all unpaid bills and liabilities incurred on this contract covering work performed up to and including the above described final estimate.

Name of Claimant	Purposes	Amount
EE Cruz	589.01-Removal of existing steel	$1,292,000
EE Cruz	FB5 Interferences	$452,718
EE Cruz	Final Retainage release	$148,160
	TOTAL:	$1,892,878

5. That the Contractor submits this Certificate and accompanying material in support of his final claim for payment and the Contractor states that it has no other outstanding claims against the County in regard to the above-captioned contract.

CONTRACTOR FIRM NAME: EE Cruz Co. Inc.

SIGNATURE: Paul Marino

TITLE: Treasurer

STATE OF NEW YORK)
COUNTY OF WESTCHESTER) ss.:
CITY OF New York)

Paul Marino being duly sworn, deposes and says that he is the Treasurer of the
(Title)

Contractor named in the foregoing Certificate and Statement and the person who executed the same; that he is duly authorized to execute said Certificate and Statement on behalf of said Contractor; that (s)he has read such Certificate and Statement subscribed by him (her) and knows the contents thereof; and that the same is true of his (her) own knowledge.

Subscribed and sworn to before me
This 11 day of February, ~~200~~ 2020

Ann B. Wieland
Notary Public, Westchester County

ANN B. WIELAND
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01WI6289849
Qualified in Westchester County
Commission Expires September 30, 2021

Rehabilitation of the Fulton Ave Bridge over Hutchinson River

Contract No. 11-503

No.	Firm Name
1	50 STATES
2	ABATEMENT UNLTD
3	CHAMPION PAINTING
4	CUSTOM EXTERIOR
5	CUSTOM MARINE
6	GIBRALTER
7	GRESHAM
8	JC MACHINE WORKS
9	M&H CONTRACTING
10	MENGLER
11	VERDE ELECTRIC

EXHIBIT B

E.E. CRUZ / CO. INC.
CONTRACTORS / ENGINEERS

February 12, 2020
Letter Log No L-022

Mr. Hugh J. Greechan, Jr. P.E.
County of Westchester
Department of Public Works and Transportation
148 Martine Ave., Rm. 518
White Plains, NY 10601

Re: Contract No. 11-503-REV, Rehabilitation of the Fulton Avenue Bridge Over Hutchinson River
Item 589.01 – Removal of Existing Steel – Additional Quantities

Dear Mr. Greechan:

Further to our numerous meetings on this subject and in connection with the referenced contract, E.E. Cruz & Company, Inc. ("E.E. Cruz") disputes the County of Westchester's refusal to issue payment for additional quantities of item 589.01 – Removal of Existing Steel at the unit price indicated in E.E. Cruz's proposal. Pursuant to the contract executed between the County of Westchester and E.E. Cruz on May 12, 2016, the County explicitly agreed to issue payment at the unit prices set forth in the proposal for all additions to the original quantities. Moreover, E.E. Cruz is required to accept such unit prices for additional quantities. Specific reference is made to page four of the contract (Exhibit 1) which states;

"....between the parties to this Contract that the Contractor will accept the unit prices named in the proposal for all additions to or deductions from the original quantities as given in the specifications. It is agreed that the Commissioner will make estimates of the value for the work completed as provided in the specifications and the final estimate will be made accordingly."

Furthermore, paragraph 10 of the Proposal Requirements (Exhibit 2) states;

"...undersigned does hereby agree to accept their indicated lump sum price for the total work and/or their indicated unit prices for various items of the work as the sole basis in determination of the value of addition to, or deduction from the specified scope of contract work"

Information for Bidders, Article 19 – Increase or Decrease of Quantities: Elimination of Items (Exhibit 3) states;

"...the Contractor agrees that quantities shown on the Proposal Pages opposite items of the work for which unit prices have been requested are approximate estimated quantities, and during the progress of work the County may find it advisable and shall have the right to...increase and decrease the shown approximate estimated quantities...
The Contractor shall make no claim for anticipated profits or loss of profits, because of any difference between the quantities of various classes of work actually done..."

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E.E. Cruz is merely seeking exactly what the contract requires: payment of additional quantities at the unit price bid. There simply is no contractual basis for denying payment of the additional quantities under item 589.01 at the unit prices set forth in E.E. Cruz's proposal.

It has been over 2 years since EE Cruz have removed existing steel identified on contract drawings and requested payment under 589.01 – Removal of Existing Steel bid item. Contract quantity for this bid item is 178,684 lbs and Westchester County has paid EE Cruz up to this bid quantity.

EE Cruz removed 340,184 lbs of existing steel and requested an additional payment under the referenced bid item for **161,500 lbs @ $8/lb = $1,292,000**. Westchester County has acknowledged total existing steel removal quantity as 320,263 lbs, but only paid EE Cruz up to the contract quantity.

Pursuant to the contract requirements stated above, we hereby request immediate payment for this bid item at a minimum up to the undisputed quantity of 320,263 lbs as acknowledged by Westchester County for a total of **$1,132,632**

EE Cruz reserves all of its rights not only to payment for additional quantities under this bid item, but also for the interest charges for over two years for monies withheld unfairly despite crystal clear contract language.

If you have any questions regarding our request herein, please do not hesitate to call Kadir Ozbek at 917-335 2388.

Very truly yours,

Paul Marino
Treasurer
E.E. Cruz and Company, Inc.

CC: R. Donnelly, K. Roseman (WC)
JohnPaul Cunningham (HDR)
J. Sheehan, Bill Riley (EEC)
P. Monte, J. Egan, Esq.

EXHIBIT C

E.E. CRUZ / CO. INC.
CONTRACTORS / ENGINEERS

February 12, 2020
Letter Log No L-023

Mr. Hugh J. Greechan, Jr. P.E.
County of Westchester
Department of Public Works and Transportation
148 Martine Ave., Rm. 518
White Plains, NY 10601

Re: Contract No. 11-503-REV, Rehabilitation of the Fulton Avenue Bridge Over Hutchinson River -
800.23 - Floor Beam 5 Upper Flange Interference
800.34 - Floor Beam 5 Bottom Flange Interference

Dear Mr. Greechan:

Further to our numerous meetings on this subject and in connection with the referenced contract, E.E. Cruz & Company, Inc. ("EEC") disputes the County of Westchester's (WC) refusal to issue payment for additional cost incurred due to in-field modifications required along the top and bottom flanges of Floorbeam 5 (FB5). Below we remind you of the time line of events on this subject and the fact that WC was given due notice as detailed on the attached Exhibits.

Time line of events:

- 11/13/2017 – EEC discovered multiple constructability interferences during the operation of the bridge.
- 11/16/2017 – EEC put HDR/WC on notice regarding constructability interferences related to FB5 and requested a change order (Exhibit 1).
- 11/22 thru 12/07/17 – EEC incurred costs with respect to these interferences and remedy work that was necessary to make the bridge operational for barge traffic. These additional costs were documented on T&M sheets and submitted to WC.
- 12/7/2017 – EEC submitted its letter L-016 and informed HDR/WC of costs it had incurred between 11/22 and 12/07 and requested compensation (Exhibit 2)
- On 02/15/2018 via an email, EEC informed HDR/WC of further interferences related to FB5 stating "*...during final balancing of the Mount Vernon Leaf (West Side) we noticed that at 53 degrees the bottom flange of FB5W was bidding against the top flange of counter weight slab armored joint. We couldn't raise the leaf any further in order to reach the 70 degree required per spec...*" (Exhibit 3)
- On or about 4/9/2018, HDR issued a DRAFT drawing showing Upper Flange Interference (previously removed between 11/22 and 12/7) and contemplated removal of the bottom flange to address recent interference issue (Exhibit 4).
- 4/11/2018 – EEC submitted its letter L-018 and informed HDR/WC of the direct and indirect (time related) costs of this FB5 bottom flange interference (Exhibit 5).
- 6/4/2018 – HDR issued its findings related to FB5 interference (Exhibit 6). These findings can be summarized as follows:

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- Referred to the complicated nature of the problem and several site visits and surveys conducted by 50 States (EEC's survey sub), M.J. Engineering (HDR sub) and HDR itself
- Acknowledged the FB5 interference and the necessity to cut bottom flange by 3 7/8"
- HDR was able to confirm that the top of deck at the trunnion location is approximately 2' – 6 ½" above the centerline of trunnion, which HDR claimed to be consistent with the trunnion location identified in the 1971 as-built plans and the dimension HDR utilized in the original design plans.
- HDR provided a model depicting how the leaf would have cleared FB5 based on these dimensions (which they believed are to be correct)
- HDR concluded its letter by putting blame on EEC for not performing condition surveys in two stages and contemplated that this issue would have been recognized and mitigated ahead of time

- 6/12/2018 – EEC issued a detailed response to HDR's letter (Exhibit 7):
  - Compared As-Built drawings and Contract drawings and clearly and unarguably showed that HDR's new design reduced available distance between existing FB5 and newly constructed fixed edge of the deck joint by 2 9/16"
  - Pointed out to two issues represented on HDR's letter:
    1. HDR's model used the deck joint at the location shown on the current contract drawings, which is not the case as proven by as-built drawings
    2. HDR's flawed model still only yielded to a 1/8" clearance between FB5 bottom flange and fixed end joint which by no means is adequate or practical for a moveable bridge
  - Pointed out that per contract requirements FB5, FB6 and main girder trunnions were to remain as per original contract scope of work.
  - Concluded that:
    1. During the design, HDR changed the location of the entire deck joint assembly, which led to the interference between FB5 and the fixed part of deck joint
    2. There were no contractual requirements for pre and post survey of existing members
    3. HDR should have performed these surveys during the design phase considering that HDR had changed the location of deck joint,
- 6/13/2018 – HDR replied to EEC's letter, but instead of providing explanation on the reasons behind moving the entire joint assembly, restated positions from their original letter dated 6/4/2018. Furthermore directed EEC to keep T&M forms tracking cost (Exhibit 8)
- 6/15/2018 – EEC replied to HDR's letter stating that work will be performed under protest and EEC will keep daily T&M sheets (Exhibit 9).
- 6/18 thru 6/29/18 – EEC proceed with clearing out the interference as per details provided by HDR. These additional costs were documented on T&M sheets and submitted to WC.
- Throughout 2018 and 2019, EEC, HDR and WC conducted several technical and change order negotiation meetings for FB5 interference issue. At the end of these meetings, HDR/WC agreed with EEC's position that HDR's new design moved the joint closer to the operation of the bascule span and EEC is entitled for compensation. However, HDR/WC insisted on their position that pre deck demolition and post deck demolition as-built surveys would have caught this problem ahead of time and resulted in a more cost efficient fix.

Conclusion

Pursuant to the contract executed between the WC and EEC on May 12, 2016, both parties agreed that EEC was to provide the final product exactly as it was laid out in the plans, specifications and drawings that had been previously reviewed and approved by WC.

Page one of the contract (Exhibit 10) explicitly states:

"Said Contractor, shall and will... provide all manner and kind of materials... necessary for the due and proper performance of this Contract...in conformity with said plans and specification without any alteration, deviation, additions, or omissions therefrom except upon due request and under the written direction of said Commissioner."

In other words, EEC was contractually obligated to construct the bridge according to the information provided by the WC. Thus, EEC is not responsible for extra costs resulting from inherent flaws with, or discrepancies between, the as-built condition and proposed design.

FB5 interference issues are a direct result of relocation of the joint assembly (moving it closer to the swing of the bascule span) during the design phase.

Contract had no pre deck demolition and post deck demolition survey provisions

Even if EEC had performed these pre and post deck demolition surveys, it would have still followed the contract documents and constructed the deck joint exactly as shown on the contract drawings. EEC would have no reason to doubt that HDR had a design mistake with the location of the deck joint.

Only a pre-construction full design review of contract drawings would have allowed the project team to identify this design mistake ahead of time. A full design review was not a contract requirement.

EEC cannot be held responsible for time and cost implications of FB5 interference.

Quantum:

EEC submitted its associated cost to WC for values of $53,570.80 and $415,000.00 for modifications required along the top and bottom flanges of FB5 respectively. Upon a more detailed review of the work required and backup information subsequently submitted by EEC's subcontractors, EEC hereby revises its proposals for change order 800.23 to **$61,280.03** for modifications to the top flange of FB5 (Exhibit 11), and for change order 800.34 to **$391,438.27** for modifications to the bottom flange of FB5 (Exhibit 12).

We hereby request a fair evaluation of these outstanding change orders and an expedited payment for this work totaling **$452,718.3**

EEC reserves all of its rights for the interest charges for over two years for monies withheld unfairly despite crystal clear contract language.

If you have any questions regarding our request herein, please do not hesitate to call Kadir Ozbek at 917-335 2388.

Very truly yours,

Paul Marino
Treasurer
E.E. Cruz and Company, Inc.

CC: R. Donnelly, K. Roseman (WC)
JohnPaul Cunningham (HDR)
J. Sheehan, Bill Riley (EEC)
P. Monte, J. Egan, Esq.

Attachments: Exhibits 1 thru 12

EXHIBIT D

From: Cunningham, JohnPaul
Sent: Monday, September 16, 2019 11:39 AM
To: Ozbek, Kadir <KOzbek@eecruz.com>
Cc: Roseman, Kevin <kmr5@westchestergov.com>; Hajjeh, Khaled <Khaled.Hajjeh@hdrinc.com>
Subject: Item 589.01 (Steel Removal) quantity total

Kadir,

I just wanted to let you know that we further investigated the Steel Removal (Item 589.01) and checked our calculation numbers from a couple of different angles.

One of the ways we did this was by using the balancing calculations that you provided. We took the tables and deducted out the quantities that were not payable per the specification. With these deductions the payment quantities for the two bascule spans are 132,667.1 on the Mount Vernon spreadsheet and 133,824.7 on Pelham Manor spreadsheet. For your information the largest of the deductions was for Concrete that was included in the calculation. As an example, 43,377.4 lbs were deducted (from the original 187,902.3) for the concrete weight on the Mount Vernon spreadsheet. Other deductions included welds, bolts, etc. Utilizing these numbers, a total of 266,491.8 pounds were removed on the Bascule spans.

As for the counterweight spans, we utilized the project plans and confirmed our previous estimate (including reviewing photos, emails and previous spreadsheets) of 44,910.4 lbs. Please note that the steel removed at the counterweight spans was significantly lighter than the steel that was subsequently installed.

Therefore, the total quantity for item 589.01 to be paid is 266,491.8 lbs plus 44,910.4 lbs or 311,402.2 lbs. With the original contract value of 178,684 lbs this represents an overrun of 132,718.2 lbs.

John Paul

John Paul Cunningham Jr., PE, CCM
Hudson Valley Area Manager

HDR
711 Westchester Ave. Suite 103
White Plains, NY 10604
D 914.993.2004 M 914.290.3108
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hdrinc.com/follow-us

EXHIBIT E

EXHIBIT E

ITEM 589.01
Total Quantity Removed (lbs)

Mount Vernon	132,667.1 lbs
Pelham Manor	133,824.7 lbs
Counterweight Spans (Both)	44,910.4 lbs
Total Steel Removed	311,402.2 lbs
Contract Quantity	178,684.0 lbs
Overrun	132,718.2 lbs

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
1 REMOVALS														
	1.1 BASCULE STEEL													
		1.1.1 Bay 3 Steel (FB1 to FB2)												
		Sidewalk Support Plate	Girders	FB1-FB2	1		171.8	171.8	52.584	3.994	0.000	9,035.9	686.3	0.0
		Beveled Fill Plate	Girders	FB1-FB2	1		204.1	204.1	52.584	4.039	0.000	10,730.1	824.2	0.0
		5/16" Weld	Girders	FB1-FB2	1			13.5	52.584	3.994	0.000	0.0	0.0	0.0
		Sidewalk Stringers 12WF31	Stringers	FB1-FB2	1		1,038.5	1,038.5	52.584	3.413	0.000	54,608.5	3,544.4	0.0
		7/16" Shims	Stringers	FB1-FB2	1		29.0	29.0	52.584	2.895	0.000	1,526.5	84.0	0.0
		Bolts in Bottom Flange	Stringers	FB1-FB2	1			6.5	52.584	2.895	0.000	0.0	0.0	0.0
		Roadway Stringers	Stringers	FB1-FB2	1		4,690.0	4,690.0	52.584	2.272	1.000	246,619.0	10,655.7	4,690.0
		Cope in Top Flange	Stringers	FB1-FB2	1		-57.8	-57.8	52.584	3.005	1.000	-3,041.8	-173.8	-57.8
		Cope in Web	Stringers	FB1-FB2	1		-23.8	-23.8	52.584	2.841	1.000	-1,252.5	-67.7	-23.8
		3 X 3 Connection Angles	Stringers	FB1-FB2	1		300.8	300.8	52.584	2.189	1.000	15,817.3	658.5	300.8
		7/8" Bolts	Stringers	FB1-FB2	1			116.6	52.584	2.189	1.000	0.0	0.0	0.0
		Roadway Stringers	Stringers (R & S.)	FB1-FB2	1		2,931.3	2,931.3	52.584	2.272	-1.600	154,136.9	6,659.8	-4,690.0
		Cope in Top Flange	Stringers (R & S.)	FB1-FB2	1		-36.2	-36.2	52.584	3.005	-1.600	-1,901.2	-108.6	57.8
		Cope in Web	Stringers (R & S.)	FB1-FB2	1		-14.9	-14.9	52.584	2.841	-1.600	-782.8	-42.3	23.8
		3 X 3 Connection Angles	Stringers (R & S.)	FB1-FB2	1		188.0	188.0	52.584	2.189	-1.600	9,885.8	411.5	-300.8
		7/8" Bolts	Stringers (R & S.)	FB1-FB2	1			72.9	52.584	2.189	-1.600	0.0	0.0	0.0
		Roadway Stringers S3, S8, S13	Stringers To Remain	FB1-FB2	1			-1,758.8	52.584	2.272	0.000	0.0	0.0	0.0
		Cope in Top Flange	Stringers To Remain	FB1-FB2	1			21.7	52.584	3.005	0.000	0.0	0.0	0.0
		Cope in Web	Stringers To Remain	FB1-FB2	1			8.9	52.584	2.841	0.000	0.0	0.0	0.0
		3 X 3 Connection Angles	Stringers To Remain	FB1-FB2	1			-112.8	52.584	2.189	0.000	0.0	0.0	0.0
		7/8" Bolts	Stringers To Remain	FB1-FB2	1			-43.7	52.584	2.189	0.000	0.0	0.0	0.0
		Channel 10 C 25	Sidewalk Channels	FB1-FB2	1		841.7	841.7	52.584	3.439	0.000	44,257.3	2,894.4	0.0
		7/8" Bolts	Sidewalk Channels	FB1-FB2	1			55.1	52.584	3.022	0.000	0.0	0.0	0.0
		Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB1-FB2	0		430.2	430.2	52.584	1.422	0.000	0.0	0.0	0.0
		Bracing Type 2 (Stringer S3-6,S11-13)	Lateral Bracing	FB1-FB2	0		360.8	360.8	52.584	1.422	0.000	0.0	0.0	0.0
		Bracing Type 3 (Stringer S5-6,S8-11)	Lateral Bracing	FB1-FB2	0		464.3	464.3	52.584	1.422	0.000	0.0	0.0	0.0
		Gusset Plate at Main Girders	Type 1 Bracing	FB1-FB2	0		76.6	76.6	52.584	1.507	0.000	0.0	0.0	0.0
		4 x 4 x 1/2 Angle	Type 1 Bracing	FB1-FB2	0		38.4	38.4	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Angle	Type 1 Bracing	FB1-FB2	0			9.7	52.584	1.422	0.000	0.0	0.0	0.0
		Plate 9 x 4 x 1/2	Type 1 Bracing	FB1-FB2	0		20.4	20.4	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Plate	Type 1 Bracing	FB1-FB2	0			9.7	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Bracing Type 1	Type 1 Bracing	FB1-FB2	0			45.4	52.584	1.507	0.000	0.0	0.0	0.0
		Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB1-FB2	0		229.7	229.7	52.584	1.507	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 1 & 2 Bracing	FB1-FB2	0			58.3	52.584	1.507	0.000	0.0	0.0	0.0
		Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB1-FB2	0		153.1	153.1	52.584	1.507	0.000	0.0	0.0	0.0
		4 x 4 Support Angles	Type 3 Bracing	FB1-FB2	0		76.8	76.8	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 3 Bracing	FB1-FB2	0			77.8	52.584	1.507	0.000	0.0	0.0	0.0
		Main Bars	Roadway Grid	FB1-FB2	1		7,934.3	7,934.3	52.584	3.204	0.000	417,216.4	25,421.4	0.0
		Cross Bars	Roadway Grid	FB1-FB2	1		5,556.9	5,556.9	52.584	3.356	0.000	292,206.6	18,649.1	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Supplemental Bars	Roadway Grid	FB1-FB2	1		1,168.7	1,168.7	52.584	3.397	0.000	61,452.3	3,969.9	0.0
		Diagonal Bars	Roadway Grid	FB1-FB2	1		3,203.9	3,203.9	52.584	3.397	0.000	168,471.5	10,883.5	0.0
		Edge Bars at Curbs	Roadway Grid	FB1-FB2	1		61.3	61.3	52.584	3.356	0.000	3,224.3	205.8	0.0
		Opening in Main Bars at Cross Bars	Roadway Grid	FB1-FB2	1		-305.1	-305.1	52.584	3.356	0.000	-16,042.7	-1,023.9	0.0
		Opening in Cross Bars at Main Bars	Roadway Grid	FB1-FB2	1		-152.5	-152.5	52.584	3.397	0.000	-8,021.4	-518.2	0.0
		Opening in Cross Bars at Supp Bars	Roadway Grid	FB1-FB2	1		-73.5	-73.5	52.584	3.397	0.000	-3,867.4	-249.8	0.0
		Welding	Roadway Grid	FB1-FB2	1			869.7	52.584	3.356	0.000	0.0	0.0	0.0
		M Bars	Sdwk Panels L, AH	FB1-FB2	1		755.1	755.1	59.154	4.142	0.000	44,667.8	3,127.7	0.0
		C Bars	Sdwk Panels L, AH	FB1-FB2	1		53.6	53.6	59.154	4.252	0.000	3,171.4	228.0	0.0
		Boltdown Plate, bdp34	Sdwk Panels L, AH	FB1-FB2	1		60.2	60.2	59.154	3.994	0.000	3,560.2	240.4	0.0
		Bolts in bdp34	Sdwk Panels L, AH	FB1-FB2	1			6.5	59.154	3.990	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels L, AH	FB1-FB2	1		129.2	129.2	59.154	3.994	0.000	7,640.8	515.9	0.0
		Bolts in bdp2	Sdwk Panels L, AH	FB1-FB2	1			6.5	59.154	3.994	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels L, AH	FB1-FB2	1		75.3	75.3	59.154	3.990	0.000	4,457.1	300.6	0.0
		Bolts in bdp9	Sdwk Panels L, AH	FB1-FB2	1			6.5	59.154	3.990	0.000	0.0	0.0	0.0
		Plate p1	Sdwk Panels L, AH	FB1-FB2	1		607.1	607.1	59.154	4.278	0.000	35,910.5	2,597.0	0.0
		Weld M Bars to Plate p1	Sdwk Panels L, AH	FB1-FB2	1			3.9	59.154	4.267	0.000	0.0	0.0	0.0
		Trim Bar b1	Sdwk Panels L, AH	FB1-FB2	1		36.0	36.0	61.250	4.145	0.000	2,202.4	149.0	0.0
		Trim Bar b8	Sdwk Panels L, AH	FB1-FB2	1		21.5	21.5	59.154	4.142	0.000	1,273.5	89.2	0.0
		Trim Bar b23	Sdwk Panels L, AH	FB1-FB2	1		20.1	20.1	59.154	4.142	0.000	1,186.7	83.1	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels L, AH	FB1-FB2	1			2.6	59.154	4.142	0.000	0.0	0.0	0.0
		Cut in Plate p1	Sdwk Panels L, AH	FB1-FB2	1		-1.7	-1.7	61.000	4.278	0.000	-101.9	-7.1	0.0
		M Bars	Sdwk Panels K, AG	FB1-FB2	1		755.1	755.1	55.104	4.132	0.000	41,609.6	3,120.1	0.0
		C Bars	Sdwk Panels K, AG	FB1-FB2	1		53.6	53.6	55.104	4.242	0.000	2,954.2	227.4	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels K, AG	FB1-FB2	1		62.9	62.9	55.104	3.994	0.000	3,465.8	251.2	0.0
		Bolts in bdp32, bdp33	Sdwk Panels K, AG	FB1-FB2	1			6.5	55.104	3.994	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels K, AG	FB1-FB2	1		129.2	129.2	55.104	3.984	0.000	7,117.7	514.6	0.0
		Bolts in bdp2	Sdwk Panels K, AG	FB1-FB2	1			6.5	55.104	3.984	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels K, AG	FB1-FB2	1		75.3	75.3	55.104	3.980	0.000	4,152.0	299.9	0.0
		Bolts in bdp9	Sdwk Panels K, AG	FB1-FB2	1			6.5	55.104	3.980	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels K, AG	FB1-FB2	1		607.1	607.1	55.104	4.268	0.000	33,451.9	2,591.0	0.0
		Weld M Bars to Plate pk	Sdwk Panels K, AG	FB1-FB2	1			3.9	55.104	4.257	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels K, AG	FB1-FB2	1		21.5	21.5	55.104	4.132	0.000	1,186.3	89.0	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels K, AG	FB1-FB2	1			2.6	55.104	4.132	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels K, AG	FB1-FB2	1		21.0	21.0	55.104	4.132	0.000	1,155.3	86.6	0.0
		Cut in Plate pk	Sdwk Panels K, AG	FB1-FB2	1		-1.7	-1.7	55.104	4.268	0.000	-92.1	-7.1	0.0
		M Bars	Sdwk Panels J, AF	FB1-FB2	1		755.1	755.1	51.052	4.114	0.000	38,549.9	3,106.5	0.0
		C Bars	Sdwk Panels J, AF	FB1-FB2	1		53.6	53.6	51.052	4.224	0.000	2,737.0	226.5	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels J, AF	FB1-FB2	1		62.9	62.9	51.052	3.976	0.000	3,211.0	250.1	0.0
		Bolts in bdp32, bdp33	Sdwk Panels J, AF	FB1-FB2	1			6.5	51.052	3.976	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels J, AF	FB1-FB2	1		129.2	129.2	51.052	3.966	0.000	6,594.3	512.3	0.0
		Bolts in bdp2	Sdwk Panels J, AF	FB1-FB2	1			6.5	51.052	3.966	0.000	0.0	0.0	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Boltdown Plate bdp9	Sdwk Panels J, AF	FB1-FB2	1		75.3	75.3	51.052	3.962	0.000	3,846.7	298.5	0.0
		Bolts in bdp9	Sdwk Panels J, AF	FB1-FB2	1			6.5	51.052	3.962	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels J, AF	FB1-FB2	1		607.1	607.1	51.052	4.250	0.000	30,992.0	2,580.0	0.0
		Weld M Bars to Plate pk	Sdwk Panels J, AF	FB1-FB2	1			3.9	51.052	4.239	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels J, AF	FB1-FB2	1		21.5	21.5	51.052	4.114	0.000	1,099.0	88.6	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels J, AF	FB1-FB2	1			2.6	51.052	4.114	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels J, AF	FB1-FB2	1		21.0	21.0	51.052	4.114	0.000	1,070.3	86.3	0.0
		Cut in Plate pk	Sdwk Panels J, AF	FB1-FB2	1		-1.7	-1.7	51.052	4.250	0.000	-85.3	-7.1	0.0
		M Bars	Sdwk Panels C3, C9	FB1-FB2	1		755.1	755.1	47.000	4.089	0.000	35,490.2	3,087.6	0.0
		C Bars	Sdwk Panels C3, C9	FB1-FB2	1		53.6	53.6	47.000	4.199	0.000	2,519.8	225.1	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels C3, C9	FB1-FB2	1		62.9	62.9	47.000	3.951	0.000	2,956.1	248.5	0.0
		Bolts in bdp32, bdp33	Sdwk Panels C3, C9	FB1-FB2	1			6.5	47.000	3.951	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels C3, C9	FB1-FB2	1		129.2	129.2	47.000	3.941	0.000	6,070.9	509.1	0.0
		Bolts in bdp2	Sdwk Panels C3, C9	FB1-FB2	1			6.5	47.000	3.941	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels C3, C9	FB1-FB2	1		75.3	75.3	47.000	3.937	0.000	3,541.4	296.6	0.0
		Bolts in bdp9	Sdwk Panels C3, C9	FB1-FB2	1			6.5	47.000	3.937	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels C3, C9	FB1-FB2	1		607.1	607.1	47.000	4.225	0.000	28,532.2	2,564.9	0.0
		Weld M Bars to Plate pk	Sdwk Panels C3, C9	FB1-FB2	1			3.9	47.000	4.214	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels C3, C9	FB1-FB2	1		21.5	21.5	47.000	4.089	0.000	1,011.8	88.0	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels C3, C9	FB1-FB2	1			2.6	47.000	4.089	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels C3, C9	FB1-FB2	1		21.0	21.0	47.000	4.089	0.000	985.4	85.7	0.0
		10" Roadway Grid Stub	At FB1	FB1-FB2	1		-1,125.5	-1,125.5	60.688	3.249	0.000	-68,304.3	-3,656.7	0.0
		10" Stringer Stubs	At FB1	FB1-FB2	1		-262.5	-262.5	60.583	2.228	0.000	-15,903.0	-584.9	0.0
		Cope in Top Flange	At FB1	FB1-FB2	1		-72.3	72.3	60.583	3.005	0.000	-4,380.7	-217.3	0.0
		Cope in Web	At FB1	FB1-FB2	1		-29.8	29.8	60.583	2.841	0.000	-1,803.7	-84.6	0.0
		10" Roadway Grid Stub	At FB2	FB1-FB2	1		-900.4	-900.4	44.583	3.171	0.000	-40,142.5	-2,855.2	0.0
		10" Stringer Stubs	At FB2	FB1-FB2	1		-262.5	-262.5	44.583	2.150	0.000	-11,703.0	-564.4	0.0
		Cope in Top Flange	At FB2	FB1-FB2	1		-72.3	72.3	44.583	3.005	0.000	-3,223.8	-217.3	0.0
		Cope in Web	At FB2	FB1-FB2	1		-29.8	29.8	44.583	2.841	0.000	-1,327.4	-84.6	0.0
	Subtotal	Bay 3 Steel (FB1 to FB2)					33,681.7	33,644.5	49.748	3.083	0.000	1,675,581.6	103,842.9	0.0
	1.1.2	Bay 2 Steel (FB2 to FB3)												
		Sidewalk Support Plate	Girders	FB2-FB3	1		171.8	171.8	35.751	3.847	0.000	6,143.3	661.1	0.0
		Bevelled Fill Plate	Girders	FB2-FB3	1		204.1	204.1	35.751	3.893	0.000	7,295.2	794.4	0.0
		5/16" Weld	Girders	FB2-FB3	1			13.5	35.751	3.847	0.000	0.0	0.0	0.0
		Sidewalk Stringers	Stringers	FB2-FB3	1		1,038.5	1,038.5	35.751	3.267	0.000	37,127.4	3,392.8	0.0
		7/16" Shims	Stringers	FB2-FB3	1		29.0	29.0	35.751	2.767	0.000	1,037.9	80.3	0.0
		Bolts in Bottom Flange	Stringers	FB2-FB3	1			6.5	35.751	2.767	0.000	0.0	0.0	0.0
		Roadway Stringers W 18 B 35	Stringers	FB2-FB3	1		5,862.5	5,862.5	35.751	2.126	0.800	209,590.2	12,463.7	4,690.0
		Cope in Top Flange	Stringers	FB2-FB3	1		-72.3	-72.3	35.751	2.858	0.800	-2,585.1	-206.7	-57.8
		Cope in Web	Stringers	FB2-FB3	1		-29.8	-29.8	35.571	2.695	0.800	-1,059.1	-80.2	-23.8
		3 X 3 Connection Angles	Stringers	FB2-FB3	1		376.0	376.0	35.571	2.043	0.800	13,374.7	768.2	300.8

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		7/8" Bolts	Stringers	FB2-FB3	1			48.6	35.571	2.043	0.800	0.0	0.0	0.0
		Roadway Stringers W 18 B 35	Stringers (R & S)	FB2-FB3	1		1,758.8	1,758.8	35.751	2.126	-2.667	62,877.1	3,739.1	-4,690.6
		Cope in Top Flange	Stringers (R & S)	FB2-FB3	1		-21.7	-21.7	35.751	2.858	-2.667	-775.5	-62.0	57.9
		Cope in Web	Stringers (R & S)	FB2-FB3	1		-8.9	-8.9	35.571	2.695	-2.667	-317.7	-24.1	23.8
		3 X 3 Connection Angles	Stringers (R & S)	FB2-FB3	1		112.8	112.8	35.571	2.043	-2.667	4,012.4	230.5	-300.8
		7/8" Bolts	Stringers (R & S)	FB2-FB3	1			14.6	35.571	2.043	-2.667	0.0	0.0	0.0
		Roadway Stringers S3, S8, S13	Stringers To Remain	FB2-FB3	1			-1,758.8	35.751	2.126	0.000	0.0	0.0	0.0
		Cope in Top Flange	Stringers To Remain	FB2-FB3	1			21.7	35.751	2.858	0.000	0.0	0.0	0.0
		Cope in Web	Stringers To Remain	FB2-FB3	1			8.9	35.571	2.695	0.000	0.0	0.0	0.0
		3 X 3 Connection Angles	Stringers To Remain	FB2-FB3	1			-112.8	35.571	2.043	0.000	0.0	0.0	0.0
		7/8" Bolts	Stringers To Remain	FB2-FB3	1			-14.6	35.571	2.043	0.000	0.0	0.0	0.0
		Channel 10 C 25	Sidewalk Channels	FB2-FB3	1		841.7	841.7	35.751	3.293	0.000	30,089.8	2,771.6	0.0
		7/8" Bolts	Sidewalk Channels	FB2-FB3	1			55.1	35.751	2.876	0.000	0.0	0.0	0.0
		Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB2-FB3	0		430.2	430.2	35.751	1.276	0.000	0.0	0.0	0.0
		Bracing Type 2 (Stringer S3-5,S11-13)	Lateral Bracing	FB2-FB3	0		360.8	360.8	35.751	1.276	0.000	0.0	0.0	0.0
		Bracing Type 3 (Stringer S5-8,S8-11)	Lateral Bracing	FB2-FB3	0		464.3	464.3	35.751	1.276	0.000	0.0	0.0	0.0
		Gusset Plate at Main Girders	Type 1 Bracing	FB2-FB3	0		76.6	76.6	35.751	1.361	0.000	0.0	0.0	0.0
		4 x 4 x 1/2 Angle	Type 1 Bracing	FB2-FB3	0		38.4	38.4	35.751	1.276	0.000	0.0	0.0	0.0
		Bolts in Angle	Type 1 Bracing	FB2-FB3	0			9.7	35.751	1.276	0.000	0.0	0.0	0.0
		Plate 9 x 4 x 1/2	Type 1 Bracing	FB2-FB3	0		20.4	20.4	35.751	1.276	0.000	0.0	0.0	0.0
		Bolts in Plate	Type 1 Bracing	FB2-FB3	0			9.7	35.751	1.276	0.000	0.0	0.0	0.0
		Bolts in Bracing Type 1	Type 1 Bracing	FB2-FB3	0			45.4	35.751	1.361	0.000	0.0	0.0	0.0
		Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB2-FB3	0		229.7	229.7	35.751	1.361	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 1 & 2 Bracing	FB2-FB3	0			58.3	35.751	1.361	0.000	0.0	0.0	0.0
		Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB2-FB3	0		153.1	153.1	35.751	1.361	0.000	0.0	0.0	0.0
		4 x 4 Support Angles	Type 3 Bracing	FB2-FB3	0		76.8	76.8	35.751	1.276	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 3 Bracing	FB2-FB3	0			77.8	35.751	1.361	0.000	0.0	0.0	0.0
		Main Bars	Roadway Grid	FB2-FB3	1		7,934.3	7,934.3	35.751	3.058	0.000	283,658.6	24,263.0	0.0
		Cross Bars	Roadway Grid	FB2-FB3	1		5,502.4	5,502.4	35.751	3.210	0.000	196,714.9	17,662.6	0.0
		Supplemental Bars	Roadway Grid	FB2-FB3	1		1,168.7	1,168.7	35.751	3.251	0.000	41,780.4	3,799.3	0.0
		Diagonal Bars	Roadway Grid	FB2-FB3	1		3,203.9	3,203.9	35.751	3.251	0.000	114,541.0	10,415.7	0.0
		Edge Bars at Curbs	Roadway Grid	FB2-FB3	1		60.7	60.7	35.751	3.210	0.000	2,170.7	194.9	0.0
		Opening in Main Bars at Cross Bars	Roadway Grid	FB2-FB3	1		-305.1	-305.1	35.751	3.210	0.000	-10,907.2	-979.3	0.0
		Opening in Cross Bars at Main Bars	Roadway Grid	FB2-FB3	1		-152.5	-152.5	35.751	3.251	0.000	-5,453.6	-495.9	0.0
		Opening in Cross Bars at Supp Bars	Roadway Grid	FB2-FB3	1		-73.5	-73.5	35.751	3.251	0.000	-2,629.4	-239.1	0.0
		Welding	Roadway Grid	FB2-FB3	1			866.9	35.751	3.210	0.000	0.0	0.0	0.0
		M Bars	Sdwk Panels H, AE	FB2-FB3	1		755.1	755.1	42.948	4.055	0.000	32,430.5	3,062.0	0.0
		C Bars	Sdwk Panels H, AE	FB2-FB3	1		53.6	53.6	42.948	4.165	0.000	2,302.5	223.3	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels H, AE	FB2-FB3	1		62.9	62.9	42.948	3.917	0.000	2,701.3	246.4	0.0
		Bolts in bdp32, bdp33	Sdwk Panels H, AE	FB2-FB3	1		6.5	6.5	42.948	3.917	0.000	279.2	25.5	0.0
		Boltdown Plate bdp2	Sdwk Panels H, AE	FB2-FB3	1		129.2	129.2	42.948	3.907	0.000	5,547.5	504.7	0.0
		Bolts in bdp2	Sdwk Panels H, AE	FB2-FB3	1			6.5	42.948	3.907	0.000	0.0	0.0	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
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Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Boltdown Plate bdp9	Sdwk Panels H, AE	FB2-FB3	1		75.3	75.3	42.948	3.903	0.000	3,236.0	294.1	0.0
		Bolts in bdp9	Sdwk Panels H, AE	FB2-FB3	1			6.5	42.948	3.903	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels H, AE	FB2-FB3	1		607.1	607.1	42.948	4.191	0.000	26,072.4	2,544.2	0.0
		Weld M Bars to Plate pk	Sdwk Panels H, AE	FB2-FB3	1			3.9	42.948	4.180	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels H, AE	FB2-FB3	1		21.5	21.5	42.948	4.055	0.000	924.6	87.3	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels H, AE	FB2-FB3	1			2.6	42.948	4.055	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels H, AE	FB2-FB3	1		21.0	21.0	42.948	4.055	0.000	900.4	85.0	0.0
		Cut in Plate pk	Sdwk Panels H, AE	FB2-FB3	1		-1.7	-1.7	42.948	4.191	0.000	-71.8	-7.0	0.0
		M Bars	Sdwk Panels G, AD	FB2-FB3	1		755.1	755.1	38.896	4.014	0.000	29,370.8	3,031.0	0.0
		C Bars	Sdwk Panels G, AD	FB2-FB3	1		53.6	53.6	38.896	4.124	0.000	2,085.3	221.1	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels G, AD	FB2-FB3	1		62.9	62.9	38.896	3.876	0.000	2,446.4	243.8	0.0
		Bolts in bdp32, bdp33	Sdwk Panels G, AD	FB2-FB3	1			6.5	38.896	3.876	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels G, AD	FB2-FB3	1		129.2	129.2	38.896	3.866	0.000	5,024.1	499.4	0.0
		Bolts in bdp2	Sdwk Panels G, AD	FB2-FB3	1			6.5	38.896	3.866	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels G, AD	FB2-FB3	1		75.3	75.3	38.896	3.862	0.000	2,930.7	291.0	0.0
		Bolts in bdp9	Sdwk Panels G, AD	FB2-FB3	1			6.5	38.896	3.862	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels G, AD	FB2-FB3	1		607.1	607.1	38.896	4.150	0.000	23,612.5	2,519.3	0.0
		Weld M Bars to Plate pk	Sdwk Panels G, AD	FB2-FB3	1			3.9	38.896	4.139	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels G, AD	FB2-FB3	1		21.5	21.5	38.896	4.014	0.000	837.4	86.4	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels G, AD	FB2-FB3	1			2.6	38.896	4.014	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels G, AD	FB2-FB3	1		21.0	21.0	38.896	4.014	0.000	815.5	84.2	0.0
		Cut in Plate pk	Sdwk Panels G, AD	FB2-FB3	1		-1.7	-1.7	38.896	4.150	0.000	-65.0	-6.9	0.0
		M Bars	Sdwk Panels F, AC	FB2-FB3	1		755.1	755.1	34.844	3.964	0.000	26,311.1	2,993.3	0.0
		C Bars	Sdwk Panels F, AC	FB2-FB3	1		53.6	53.6	34.844	4.074	0.000	1,868.1	218.4	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels F, AC	FB2-FB3	1		62.9	62.9	34.844	3.826	0.000	2,191.5	240.6	0.0
		Bolts in bdp32, bdp33	Sdwk Panels F, AC	FB2-FB3	1			6.5	34.844	3.826	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels F, AC	FB2-FB3	1		129.2	129.2	34.844	3.816	0.000	4,500.7	492.9	0.0
		Bolts in bdp2	Sdwk Panels F, AC	FB2-FB3	1			6.5	34.844	3.816	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels F, AC	FB2-FB3	1		75.3	75.3	34.844	3.812	0.000	2,625.4	287.2	0.0
		Bolts in bdp9	Sdwk Panels F, AC	FB2-FB3	1			6.5	34.844	3.812	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels F, AC	FB2-FB3	1		607.1	607.1	34.844	4.100	0.000	21,152.7	2,489.0	0.0
		Weld M Bars to Plate pk	Sdwk Panels F, AC	FB2-FB3	1			3.9	34.844	4.089	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels F, AC	FB2-FB3	1		21.5	21.5	34.844	3.964	0.000	750.1	85.3	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels F, AC	FB2-FB3	1			2.6	34.844	3.964	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels F, AC	FB2-FB3	1		21.0	21.0	34.844	3.964	0.000	730.5	83.1	0.0
		Cut in Plate pk	Sdwk Panels F, AC	FB2-FB3	1		-1.7	-1.7	34.844	4.100	0.000	-58.2	-6.9	0.0
		M Bars	Sdwk Panels C2, C8	FB2-FB3	1		755.1	755.1	30.792	3.907	0.000	23,251.3	2,950.2	0.0
		C Bars	Sdwk Panels C2, C8	FB2-FB3	1		53.6	53.6	30.792	4.017	0.000	1,650.8	215.4	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels C2, C8	FB2-FB3	1		62.9	62.9	30.792	3.769	0.000	1,936.7	237.1	0.0
		Bolts in bdp32, bdp33	Sdwk Panels C2, C8	FB2-FB3	1			6.5	30.792	3.769	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels C2, C8	FB2-FB3	1		129.2	129.2	30.792	3.759	0.000	3,977.3	485.5	0.0
		Bolts in bdp2	Sdwk Panels C2, C8	FB2-FB3	1			6.5	30.792	3.759	0.000	0.0	0.0	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description / Design Drawings	Mark / Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Boltdown Plate bdp9	Sdwk Panels C2, C8	FB2-FB3	1		75.3	75.3	30.792	3.755	0.000	2,320.1	282.9	0.0
		Bolts in bdp9	Sdwk Panels C2, C8	FB2-FB3	1			6.5	30.792	3.755	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels C2, C8	FB2-FB3	1		607.1	607.1	30.792	4.043	0.000	18,692.8	2,454.4	0.0
		Weld M Bars to Plate pk	Sdwk Panels C2, C8	FB2-FB3	1			3.9	30.792	4.032	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels C2, C8	FB2-FB3	1		21.5	21.5	30.792	3.907	0.000	662.9	84.1	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels C2, C8	FB2-FB3	1			2.6	30.792	3.907	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels C2, C8	FB2-FB3	1		21.0	21.0	30.792	3.907	0.000	645.6	81.9	0.0
		10" Roadway Grid Stub	At FB2	FB2-FB3	1		-900.4	-900.4	43.749	3.171	0.000	-39,391.6	-2,855.2	0.0
		10" Stringer Stubs	At FB2	FB2-FB3	1		-262.5	-262.5	43.749	2.150	0.000	-11,484.1	-564.4	0.0
		Cope in Top Flange	At FB2	FB2-FB3	1		-72.3	72.3	43.749	2.858	0.000	-3,163.4	-206.7	0.0
		Cope in Web	At FB2	FB2-FB3	1		-29.8	29.8	43.749	2.695	0.000	-1,302.5	-80.2	0.0
		10" Roadway Grid Stub	At FB3	FB2-FB3	1		-900.4	-900.4	27.750	2.956	0.000	-24,986.1	-2,661.6	0.0
		10" Stringer Stubs	At FB3	FB2-FB3	1		-262.5	-262.5	27.750	2.956	0.000	-7,284.4	-776.0	0.0
		Cope in Top Flange	At FB3	FB2-FB3	1		-72.3	72.3	27.750	2.858	0.000	-2,006.6	-206.7	0.0
		Cope in Web	At FB3	FB2-FB3	1		-29.8	29.8	27.750	2.695	0.000	-826.2	-80.2	0.0
	Subtotal	Bay 2 Steel (FB2 to FB3)					33,825.7	33,682.1	34.022	2.939	0.000	1,150,830.7	99,427.9	-0.6
	1.1.3	Main Girder Top Flange Plates												
		Steel Plates			1			10,373.0	-11.420	6.830	0.000	0.0	0.0	0.0
	Subtotal	Main Girder Top Flange Plates					0.0	10,373.0	0.000	0.000	0.000	0.0	0.0	0.0
	1.1.4	Bay 1 Steel (FB3 to FB4)												
		Sidewalk Support Plate	Girders	FB3-FB4	1		171.8	171.8	18.917	3.501	0.000	3,250.6	601.6	0.0
		Bevelled Fill Plate	Girders	FB3-FB4	1		204.1	204.1	18.917	3.546	0.000	3,860.1	723.6	0.0
		5/16" Weld	Girders	FB3-FB4	1			13.5	18.917	3.501	0.000	0.0	0.0	0.0
		9/16" Stiffeners at FB4	Girders	FB4	1		244.0	244.0	10.500	3.040	0.000	2,562.5	741.9	0.0
		Sidewalk Stringers	Stringers	FB3-FB4	1		1,038.5	1,038.5	18.917	2.983	0.000	19,645.3	3,097.8	0.0
		7/16" Shims	Stringers	FB3-FB4	1		29.0	29.0	18.917	2.483	0.000	549.2	72.1	0.0
		Bolts in Bottom Flange	Stringers	FB3-FB4	1			6.5	18.917	2.483	0.000	0.0	0.0	0.0
		Roadway Stringers W 18 B 35	Stringers	FB3-FB4	1		5,862.5	5,862.5	18.917	1.842	4.000	110,900.9	10,798.7	23,450.0
		Cope in Top Flange	Stringers	FB3-FB4	1		-72.3	-72.3	18.917	2.574	4.000	-1,367.9	-186.1	-289.2
		Cope in Web	Stringers	FB3-FB4	1		-29.8	-29.8	18.917	2.411	4.000	-563.2	-71.8	-119.1
		3 X 3 Connection Angles	Stringers	FB3-FB4	1		376.0	376.0	18.917	1.759	4.000	7,112.8	661.4	1,504.0
		7/8" Bolts	Stringers	FB3-FB4	1			145.8	18.917	1.759	4.000	0.0	0.0	0.0
		Roadway Stringers W 18 B 35	Stringers (R & S)	FB3-FB4	1		1,758.8	1,758.8	18.917	1.842	-13.333	33,270.3	3,239.6	-23,449.4
		Cope in Top Flange	Stringers (R & S)	FB3-FB4	1		-21.7	-21.7	18.917	2.574	-13.333	-410.4	-55.8	289.2
		Cope in Web	Stringers (R & S)	FB3-FB4	1		-8.9	-8.9	18.917	2.411	-13.333	-169.0	-21.5	119.1
		3 X 3 Connection Angles	Stringers (R & S)	FB3-FB4	1		112.8	112.8	18.917	1.759	-13.333	2,133.8	198.4	-1,504.0
		7/8" Bolts	Stringers (R & S)	FB3-FB4	1			43.7	18.917	1.759	-13.333	0.0	0.0	0.0
		Channel 10 C 25	Sidewalk Channels	FB3-FB4	1		841.7	841.7	18.917	3.009	0.000	15,921.5	2,532.5	0.0
		7/8" Bolts	Sidewalk Channels	FB3-FB4	1			55.1	18.917	2.592	0.000	0.0	0.0	0.0
		Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB3-FB4	1		430.2	430.2	18.917	0.992	0.000	8,138.1	426.8	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
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Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Bracing Type 2 (Stringer S3-5,S11-13)	Lateral Bracing	FB3-FB4	1		360.8	360.8	18.917	0.992	0.000	6,825.4	357.9	0.0
		Bracing Type 3 (Stringer S5-8,S8-11)	Lateral Bracing	FB3-FB4	1		464.3	464.3	18.917	0.992	0.000	8,783.9	460.6	0.0
		Gusset Plate at Main Girders	Type 1 Bracing	FB3-FB4	1		76.6	76.6	18.917	1.077	0.000	1,448.3	82.5	0.0
		4 x 4 x 1/2 Angle	Type 1 Bracing	FB3-FB4	1		38.4	38.4	18.917	0.992	0.000	726.4	38.1	0.0
		Bolts in Angle	Type 1 Bracing	FB3-FB4	1			9.7	18.917	0.992	0.000	0.0	0.0	0.0
		Plate 9 x 4 x 1/2	Type 1 Bracing	FB3-FB4	1		20.4	20.4	18.917	0.992	0.000	386.2	20.3	0.0
		Bolts in Plate	Type 1 Bracing	FB3-FB4	1			9.7	18.917	0.992	0.000	0.0	0.0	0.0
		Bolts in Bracing Type 1	Type 1 Bracing	FB3-FB4	1			45.4	18.917	1.077	0.000	0.0	0.0	0.0
		Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB3-FB4	1		229.7	229.7	18.917	1.077	0.000	4,345.0	247.4	0.0
		Bolts in Gusset Plate	Type 1 & 2 Bracing	FB3-FB4	1			58.3	18.917	1.077	0.000	0.0	0.0	0.0
		Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB3-FB4	1		153.1	153.1	18.917	1.077	0.000	2,896.7	164.9	0.0
		4 x 4 Support Angles	Type 3 Bracing	FB3-FB4	1		76.8	76.8	18.917	0.992	0.000	1,452.8	76.2	0.0
		Bolts in Gusset Plate	Type 3 Bracing	FB3-FB4	1			77.8	18.917	1.077	0.000	0.0	0.0	0.0
		Main Bars	Roadway Grid	FB3-FB4	1		7,934.3	7,934.3	18.917	2.774	0.000	150,092.9	22,009.7	0.0
		Cross Bars	Roadway Grid	FB3-FB4	1		5,556.9	5,556.9	18.917	2.926	0.000	105,120.8	16,259.6	0.0
		Supplemental Bars	Roadway Grid	FB3-FB4	1		1,168.7	1,168.7	18.917	2.967	0.000	22,107.4	3,467.4	0.0
		Diagonal Bars	Roadway Grid	FB3-FB4	1		3,203.9	3,203.9	18.917	2.967	0.000	60,607.3	9,505.8	0.0
		Edge Bars at Curbs	Roadway Grid	FB3-FB4	1		61.3	61.3	18.917	2.926	0.000	1,160.0	179.4	0.0
		Opening in Main Bars at Cross Bars	Roadway Grid	FB3-FB4	1		-305.1	-305.1	18.917	2.926	0.000	-5,771.3	-892.7	0.0
		Opening in Cross Bars at Main Bars	Roadway Grid	FB3-FB4	1		-152.5	-152.5	18.917	2.967	0.000	-2,885.7	-452.6	0.0
		Opening in Cross Bars at Supp Bars	Roadway Grid	FB3-FB4	1		-73.5	-73.5	18.917	2.967	0.000	-1,391.3	-218.2	0.0
		Welding	Roadway Grid	FB3-FB4	1			869.7	18.917	2.926	0.000	0.0	0.0	0.0
		M Bars	Sdwk Panels E, AB	FB3-FB4	1		755.1	755.1	26.740	3.841	0.000	20,191.6	2,900.4	0.0
		C Bars	Sdwk Panels E, AB	FB3-FB4	1		53.6	53.6	26.740	3.951	0.000	1,433.6	211.8	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels E, AB	FB3-FB4	1		62.9	62.9	26.740	3.703	0.000	1,681.8	232.9	0.0
		Bolts in bdp32, bdp33	Sdwk Panels E, AB	FB3-FB4	1			6.5	26.740	3.703	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels E, AB	FB3-FB4	1		129.2	129.2	26.740	3.693	0.000	3,454.0	477.0	0.0
		Bolts in bdp2	Sdwk Panels E, AB	FB3-FB4	1			6.5	26.740	3.693	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels E, AB	FB3-FB4	1		75.3	75.3	26.740	3.689	0.000	2,014.8	278.0	0.0
		Bolts in bdp9	Sdwk Panels E, AB	FB3-FB4	1			6.5	26.740	3.689	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels E, AB	FB3-FB4	1		607.1	607.1	26.740	3.977	0.000	16,233.0	2,414.3	0.0
		Weld M Bars to Plate pk	Sdwk Panels E, AB	FB3-FB4	1			3.9	26.740	3.966	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels E, AB	FB3-FB4	1		21.5	21.5	26.740	3.841	0.000	575.7	82.7	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels E, AB	FB3-FB4	1			2.6	26.740	3.841	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels E, AB	FB3-FB4	1		21.0	21.0	26.740	3.841	0.000	560.6	80.5	0.0
		Cut in Plate pk	Sdwk Panels E, AB	FB3-FB4	1		-1.7	-1.7	26.740	3.977	0.000	-44.7	-6.6	0.0
		M Bars	Sdwk Panels D, AA	FB3-FB4	1		755.1	755.1	22.688	3.767	0.000	17,131.9	2,844.5	0.0
		C Bars	Sdwk Panels D, AA	FB3-FB4	1		53.6	53.6	22.688	3.877	0.000	1,216.3	207.9	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels D, AA	FB3-FB4	1		62.9	62.9	22.688	3.629	0.000	1,427.0	228.2	0.0
		Bolts in bdp32, bdp33	Sdwk Panels D, AA	FB3-FB4	1			6.5	22.688	3.629	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels D, AA	FB3-FB4	1		129.2	129.2	22.688	3.619	0.000	2,930.6	467.5	0.0
		Bolts in bdp2	Sdwk Panels D, AA	FB3-FB4	1			6.5	22.688	3.619	0.000	0.0	0.0	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
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Leaf: Mount Vernon (West)
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Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Boltdown Plate bdp9	Sdwk Panels D, AA	FB3-FB4	1		75.3	75.3	22.688	3.615	0.000	1,709.5	272.4	0.0
		Bolts in bdp9	Sdwk Panels D, AA	FB3-FB4	1			6.5	22.688	3.615	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels D, AA	FB3-FB4	1		607.1	607.1	22.688	3.903	0.000	13,773.2	2,369.4	0.0
		Weld M Bars to Plate pk	Sdwk Panels D, AA	FB3-FB4	1			3.9	22.688	3.892	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels D, AA	FB3-FB4	1		21.5	21.5	22.688	3.767	0.000	488.4	81.1	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels D, AA	FB3-FB4	1			2.6	22.688	3.767	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels D, AA	FB3-FB4	1		21.0	21.0	22.688	3.767	0.000	475.7	79.0	0.0
		Cut in Plate pk	Sdwk Panels D, AA	FB3-FB4	1		-1.7	-1.7	22.688	3.903	0.000	-37.9	-6.5	0.0
		M Bars	Sdwk Panels C1, C7	FB3-FB4	1		755.1	755.1	18.636	3.686	0.000	14,072.2	2,783.3	0.0
		C Bars	Sdwk Panels C1, C7	FB3-FB4	1		53.6	53.6	18.636	3.796	0.000	999.1	203.5	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels C1, C7	FB3-FB4	1		62.9	62.9	18.636	3.548	0.000	1,172.1	223.2	0.0
		Bolts in bdp32, bdp33	Sdwk Panels C1, C7	FB3-FB4	1			6.5	18.636	3.548	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels C1, C7	FB3-FB4	1		129.2	129.2	18.636	3.538	0.000	2,407.2	457.0	0.0
		Bolts in bdp2	Sdwk Panels C1, C7	FB3-FB4	1			6.5	18.636	3.538	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels C1, C7	FB3-FB4	1		75.3	75.3	18.636	3.534	0.000	1,404.2	266.3	0.0
		Bolts in bdp9	Sdwk Panels C1, C7	FB3-FB4	1			6.5	18.636	3.534	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels C1, C7	FB3-FB4	1		607.1	607.1	18.636	3.822	0.000	11,313.3	2,320.2	0.0
		Weld M Bars to Plate pk	Sdwk Panels C1, C7	FB3-FB4	1			3.9	18.636	3.811	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels C1, C7	FB3-FB4	1		21.5	21.5	18.636	3.686	0.000	401.2	79.4	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels C1, C7	FB3-FB4	1			2.6	18.636	3.686	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels C1, C7	FB3-FB4	1		21.0	21.0	18.636	3.686	0.000	390.7	77.3	0.0
		M Bars	Sdwk Panels B, Z	FB3-FB4	1		755.1	755.1	14.584	3.596	0.000	11,012.5	2,715.4	0.0
		C Bars	Sdwk Panels B, Z	FB3-FB4	1		53.6	53.6	14.584	3.706	0.000	781.9	198.7	0.0
		Boltdown Plates, bdp32, bdp33	Sdwk Panels B, Z	FB3-FB4	1		62.9	62.9	14.584	3.458	0.000	917.3	217.5	0.0
		Bolts in bdp32, bdp33	Sdwk Panels B, Z	FB3-FB4	1			6.5	14.584	3.458	0.000	0.0	0.0	0.0
		Boltdown Plate bdp2	Sdwk Panels B, Z	FB3-FB4	1		129.2	129.2	14.584	3.448	0.000	1,883.8	445.4	0.0
		Bolts in bdp2	Sdwk Panels B, Z	FB3-FB4	1			6.5	14.584	3.448	0.000	0.0	0.0	0.0
		Boltdown Plate bdp9	Sdwk Panels B, Z	FB3-FB4	1		75.3	75.3	14.584	3.444	0.000	1,098.9	259.5	0.0
		Bolts in bdp9	Sdwk Panels B, Z	FB3-FB4	1			6.5	14.584	3.444	0.000	0.0	0.0	0.0
		Plate pk	Sdwk Panels B, Z	FB3-FB4	1		607.1	607.1	14.584	3.732	0.000	8,853.5	2,265.6	0.0
		Weld M Bars to Plate pk	Sdwk Panels B, Z	FB3-FB4	1			3.9	14.584	3.721	0.000	0.0	0.0	0.0
		Trim Bar b8	Sdwk Panels B, Z	FB3-FB4	1		21.5	21.5	14.584	3.596	0.000	314.0	77.4	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels B, Z	FB3-FB4	1			2.6	14.584	3.596	0.000	0.0	0.0	0.0
		Trim Bars b21, b22	Sdwk Panels B, Z	FB3-FB4	1		21.0	21.0	14.584	3.596	0.000	305.8	75.4	0.0
		Cut in Plate pk	Sdwk Panels B, Z	FB3-FB4	1		-1.7	-1.7	14.584	3.732	0.000	-24.4	-6.2	0.0
		M Bars	Sdwk Panels A, Y	FB3-FB4	1		503.4	503.4	11.196	3.516	0.000	5,636.1	1,770.0	0.0
		C Bars	Sdwk Panels A, Y	FB3-FB4	1		35.3	35.3	11.196	3.626	0.000	395.5	128.1	0.0
		Boltdown Plates, bdp92, bdp17	Sdwk Panels A, Y	FB3-FB4	1		41.4	41.4	11.196	3.368	0.000	463.8	139.5	0.0
		Bolts in bdp92, bdp17	Sdwk Panels A, Y	FB3-FB4	1			4.9	11.196	3.368	0.000	0.0	0.0	0.0
		Boltdown Plate bdp1	Sdwk Panels A, Y	FB3-FB4	1		86.2	86.2	11.196	3.368	0.000	965.3	290.4	0.0
		Bolts in bdp1	Sdwk Panels A, Y	FB3-FB4	1			6.5	11.196	3.368	0.000	0.0	0.0	0.0
		Boltdown Plate bdp7	Sdwk Panels A, Y	FB3-FB4	1		50.3	50.3	11.196	3.364	0.000	563.1	169.2	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
		Bolts in bdp7	Sdwk Panels A, Y	FB3-FB4	1			6.5	11.196	3.364	0.000	0.0	0.0	0.0
		Plate pa	Sdwk Panels A, Y	FB3-FB4	1		408.4	408.4	11.196	3.652	0.000	4,572.4	1,491.5	0.0
		Weld M Bars to Plate pa	Sdwk Panels A, Y	FB3-FB4	1			2.6	11.196	3.641	0.000	0.0	0.0	0.0
		Trim Bar b1	Sdwk Panels A, Y	FB3-FB4	1		36.0	36.0	9.834	3.483	0.000	353.6	125.2	0.0
		Trim Bars b21, b22	Sdwk Panels A, Y	FB3-FB4	1		13.8	13.8	11.196	3.516	0.000	154.6	48.5	0.0
		Weld at M Bars with Trim Bars	Sdwk Panels A, Y	FB3-FB4	1			1.8	11.196	3.516	0.000	0.0	0.0	0.0
		Trim Bars b4	Sdwk Panels A, Y	FB3-FB4	1		14.4	14.4	11.196	3.516	0.000	160.9	50.5	0.0
		Cut in Plate pa	Sdwk Panels A, Y	FB3-FB4	1		-1.7	-1.7	11.196	3.652	0.000	-18.7	-6.1	0.0
		10" Roadway Grid Stub	At FB3	FB3-FB4	1		-900.4	-900.4	26.916	2.956	0.000	-24,235.2	-2,661.6	0.0
		10" Stringer Stubs	At FB3	FB3-FB4	1		-262.5	-262.5	26.916	1.935	0.000	-7,065.5	-507.9	0.0
		Cope in Top Flange	At FB3	FB3-FB4	1		-72.3	72.3	26.916	2.574	0.000	-1,946.3	-186.1	0.0
		Cope in Web	At FB3	FB3-FB4	1		-29.8	29.8	26.916	2.411	0.000	-801.4	-71.8	0.0
	Subtotal	Bay 1 Steel (FB3 to FB4)					38,571.0	38,236.7	18.661	2.754	0.000	682,456.0	100,717.9	0.0
	1.1.5	Floor Beam FB-4W												
		Floorbeam 36WF300		FB4	1		18,387.5	18,387.5	10.500	0.739	0.000	193,068.8	13,588.4	0.0
		Cut in Flange at Girder Connection		FB4	1		-317.4	-317.4	10.500	0.739	0.000	-3,332.4	-234.5	0.0
		Top Cover Plate		FB4	1		5,145.0	5,145.0	10.500	2.342	0.000	54,022.5	12,049.6	0.0
		Bottom Cover Plate		FB4	1		4,501.9	4,501.9	10.500	-0.719	0.000	47,269.7	-3,236.8	0.0
		Haunch at FB4		FB4	1			10,897.4	8.333	2.499	0.000	0.0	0.0	0.0
		Concrete Deck FB4 to FB5		FB4	1			27,640.0	6.833	2.424	0.000	0.0	0.0	0.0
		Haunch at FB5		FB4	1			4,640.0	4.333	1.850	0.000	0.0	0.0	0.0
	Subtotal	Floor Beam FB-4W					27,717.0	71,094.4	10.500	0.800	0.000	291,028.6	22,166.6	0.0
	SUBTOTAL	BASCULE STEEL					131,795.4	187,030.6	28.832	2.475	0.000	3,799,898.9	326,155.3	0.0

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE
Leaf: Mount Vernon (West)
Date: 06/01/20
Time: 3:37 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	Gresham Weight	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
	1.2 SPAN LOCKS													
	1.2.1 Span Lock Machinery													
		Operator with Lock Bar	Roadway Center Line		0				59.313	1.790	-0.083	0.0	0.0	0.0
		Receiver Support Plate	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		Bolts in Support Plate	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		1/2" Shims	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		1/2" Backer Plate	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		Vertical Plate	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		Stiffeners	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		Guide Shoe	Girder		0				61.667	2.978	0.000	0.0	0.0	0.0
		Guide Support Plate	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
		Bolts in Support Plate	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
		1/2" Shims	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
		Vertical Plate	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
		Stiffeners	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
		Guide Shoe	Roadway Center Line		0				61.667	1.790	-0.750	0.0	0.0	0.0
	Subtotal	Span Lock Machinery					0.0	0.0	0.000	0.000	0.000	0.0	0.0	0.0
	1.2.2 Platform													
		Short Angle	Roadway Center Line		1		38.8	38.8	54.083	0.186	-2.000	2,096.9	7.2	-77.5
		Bolts in Angle	Roadway Center Line		1		3.2	3.2	54.083	0.186	-2.000	175.2	0.6	-6.5
		Long Angle	Roadway Center Line		1		136.9	136.9	57.500	0.186	-2.000	7,873.4	25.5	-273.9
		Angle Posts	Roadway Center Line		1		87.3	87.3	57.500	0.666	-2.000	5,017.7	58.1	-174.5
		Bolts in Angle	Roadway Center Line		1		25.9	25.9	57.500	0.666	-2.000	1,490.4	17.3	-51.8
		Clip Angle	Roadway Center Line		1		41.2	41.2	57.500	1.249	-2.000	2,369.0	51.5	-82.4
		Angle Bracket	Roadway Center Line		1		41.1	41.1	54.083	1.186	-2.000	2,224.4	48.8	-82.3
		Bolts in Angle	Roadway Center Line		1		6.5	6.5	54.083	1.186	-2.000	350.5	7.7	-13.0
		Steel Grating	Roadway Center Line		1		468.3	468.3	57.500	0.186	-2.000	26,925.2	87.1	-936.5
		Connection Plates for Angle Brackets	Roadway Center Line		1		22.5	22.5	54.083	1.186	-2.000	1,216.9	26.7	-45.0
	Subtotal	Platform					871.7	871.7	57.060	0.379	-2.000	49,739.5	330.4	-1,743.4
	SUBTOTAL	SPAN LOCKS					871.7	871.7	57.060	0.379	-2.000	49,739.5	330.4	-1,743.4
SUBTOTAL	1 REMOVALS						132,667.1	187,902.3	29.017	2.461	-0.013	3,849,636.4	326,485.7	-1,743.4

DETAILED ANALYSIS OF BALANCE PROGRESS
FULTON AVE. BASCULE BRIDGE

Leaf: Pelham Manor (East)
Date: 06/01/20
Time: 3:45 PM

Group	Subgroup	Element Description Design Drawings	Mark Shop drawings	Location	Installed 1=Yes 0=No	Date Installed	HDR Weight (lb)	X (ft) Horiz. Arm	Y (ft) Vert. Arm	Z (ft) Trans. Arm	Wx (ft-lb)	Wy (ft-lb)	Wz (ft-lb)
1 REMOVALS													
	1.1 BASCULE STEEL												
		1.1.1 Bay 4 Steel (FB1 to FB2)											
		Sidewalk Support Plate	Girders	FB1-FB2	1		171.8	52.584	3.994	0.000	9,035.9	686.3	0.0
		Bevelled Fill Plate	Girders	FB1-FB2	1		204.1	52.584	4.039	0.000	10,730.1	824.2	0.0
		5/16" Weld	Girders	FB1-FB2	1			52.584	3.994	0.000	0.0	0.0	0.0
		Sidewalk Stringers 12WF31	Stringers	FB1-FB2	1		1,038.5	52.584	3.413	0.000	54,608.5	3,544.4	0.0
		7/16" Shims	Stringers	FB1-FB2	1		29.0	52.584	2.895	0.000	1,526.5	84.0	0.0
		Bolts in Bottom Flange	Stringers	FB1-FB2	1			52.584	2.895	0.000	0.0	0.0	0.0
		Roadway Stringers 18 B 35	Stringers	FB1-FB2	1		4,690.0	52.584	2.272	-0.500	246,619.0	10,655.7	-2,345.0
		Cope in Top Flange	Stringers	FB1-FB2	1		-57.8	52.584	3.005	-0.500	-3,041.8	-173.8	28.9
		Cope in Web	Stringers	FB1-FB2	1		-23.8	52.584	2.841	-0.500	-1,252.5	-67.7	11.9
		3 X 3 Connection Angles	Stringers	FB1-FB2	1		300.8	52.584	2.189	-0.500	15,817.3	658.5	-150.4
		7/8" Bolts	Stringers	FB1-FB2	1			52.584	2.189	-0.500	0.0	0.0	0.0
		Roadway Stringers 18 B 35	Stringers (R & S)	FB1-FB2	1		2,931.3	52.584	2.272	0.800	154,136.9	6,659.8	2,345.0
		Cope in Top Flange	Stringers (R & S)	FB1-FB2	1		-36.2	52.584	3.005	0.800	-1,901.2	-108.6	-28.9
		Cope in Web	Stringers (R & S)	FB1-FB2	1		-14.9	52.584	2.841	0.800	-782.8	-42.3	-11.9
		3 X 3 Connection Angles	Stringers (R & S)	FB1-FB2	1		188.0	52.584	2.189	0.800	9,885.8	411.5	150.4
		7/8" Bolts	Stringers (R & S)	FB1-FB2	1			52.584	2.189	0.800	0.0	0.0	0.0
		Roadway Stringers S3, S8, S13	Stringers To Remain	FB1-FB2	1			52.584	2.272	0.000	0.0	0.0	0.0
		Cope in Top Flange	Stringers To Remain	FB1-FB2	1			52.584	3.005	0.000	0.0	0.0	0.0
		Cope in Web	Stringers To Remain	FB1-FB2	1			52.584	2.841	0.000	0.0	0.0	0.0
		3 X 3 Connection Angles	Stringers To Remain	FB1-FB2	1			52.584	2.189	0.000	0.0	0.0	0.0
		7/8" Bolts	Stringers To Remain	FB1-FB2	1			52.584	2.189	0.000	0.0	0.0	0.0
		Channel 10 C 25	Sidewalk Channels	FB1-FB2	1		841.7	52.584	3.439	0.000	44,257.3	2,894.4	0.0
		7/8" Bolts	Sidewalk Channels	FB1-FB2	1			52.584	3.022	0.000	0.0	0.0	0.0
		Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB1-FB2	0		430.2	52.584	1.422	0.000	0.0	0.0	0.0
		Bracing Type 2 (Stringer S3-5,S11-13)	Lateral Bracing	FB1-FB2	0		360.8	52.584	1.422	0.000	0.0	0.0	0.0
		Bracing Type 3 (Stringer S5-8,S8-11)	Lateral Bracing	FB1-FB2	0		464.3	52.584	1.422	0.000	0.0	0.0	0.0
		Gusset Plate at Main Girders	Type 1 Bracing	FB1-FB2	0		76.6	52.584	1.507	0.000	0.0	0.0	0.0
		4 x 4 x 1/2 Angle	Type 1 Bracing	FB1-FB2	0		38.4	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Angle	Type 1 Bracing	FB1-FB2	0			52.584	1.422	0.000	0.0	0.0	0.0
		Plate 9 x 4 x 1/2	Type 1 Bracing	FB1-FB2	0		20.4	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Plate	Type 1 Bracing	FB1-FB2	0			52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Bracing Type 1	Type 1 Bracing	FB1-FB2	0			52.584	1.507	0.000	0.0	0.0	0.0
		Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB1-FB2	0		229.7	52.584	1.507	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 1 & 2 Bracing	FB1-FB2	0			52.584	1.507	0.000	0.0	0.0	0.0
		Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB1-FB2	0		153.1	52.584	1.507	0.000	0.0	0.0	0.0
		4 x 4 Support Angles	Type 3 Bracing	FB1-FB2	0		76.8	52.584	1.422	0.000	0.0	0.0	0.0
		Bolts in Gusset Plate	Type 3 Bracing	FB1-FB2	0			52.584	1.507	0.000	0.0	0.0	0.0

Main Bars	Roadway Grid	FB1-FB2	1	7,934.3	52.584	3.204	0.000	417,216.4	25,421.4	0.0
Cross Bars	Roadway Grid	FB1-FB2	1	5,556.9	52.584	3.356	0.000	292,206.6	18,649.1	0.0
Supplemental Bars	Roadway Grid	FB1-FB2	1	1,168.7	52.584	3.397	0.000	61,452.3	3,969.9	0.0
Diagonal Bars	Roadway Grid	FB1-FB2	1	3,203.9	52.584	3.397	0.000	168,471.5	10,883.5	0.0
Edge Bars at Curbs	Roadway Grid	FB1-FB2	1	61.3	52.584	3.356	0.000	3,224.3	205.8	0.0
Opening in Main Bars at Cross Bars	Roadway Grid	FB1-FB2	1	-305.1	52.584	3.356	0.000	-16,042.7	-1,023.9	0.0
Opening in Cross Bars at Main Bars	Roadway Grid	FB1-FB2	1	-152.5	52.584	3.397	0.000	-8,021.4	-518.2	0.0
Opening in Cross Bars at Supp Bars	Roadway Grid	FB1-FB2	1	-73.5	52.584	3.397	0.000	-3,867.4	-249.8	0.0
Welding	Roadway Grid	FB1-FB2	1		52.584	3.356	0.000	0.0	0.0	0.0
M Bars	Sdwk Panels M, AJ	FB1-FB2	1	755.1	59.154	4.142	0.000	44,667.8	3,127.7	0.0
C Bars	Sdwk Panels M, AJ	FB1-FB2	1	53.6	59.154	4.252	0.000	3,171.4	228.0	0.0
Boltdown Plate, bdp34	Sdwk Panels M, AJ	FB1-FB2	1	60.2	59.154	3.994	0.000	3,560.2	240.4	0.0
Bolts in bdp34	Sdwk Panels M, AJ	FB1-FB2	1		59.154	3.990	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels M, AJ	FB1-FB2	1	129.2	59.154	3.994	0.000	7,640.8	515.9	0.0
Bolts in bdp2	Sdwk Panels M, AJ	FB1-FB2	1		59.154	3.994	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels M, AJ	FB1-FB2	1	75.3	59.154	3.990	0.000	4,457.1	300.6	0.0
Bolts in bdp9	Sdwk Panels M, AJ	FB1-FB2	1		59.154	3.990	0.000	0.0	0.0	0.0
Plate p1	Sdwk Panels M, AJ	FB1-FB2	1	607.1	59.154	4.278	0.000	35,910.5	2,597.0	0.0
Weld M Bars to Plate p1	Sdwk Panels M, AJ	FB1-FB2	1		59.154	4.267	0.000	0.0	0.0	0.0
Trim Bar b1	Sdwk Panels M, AJ	FB1-FB2	1	36.0	61.250	4.145	0.000	2,202.4	149.0	0.0
Trim Bar b8	Sdwk Panels M, AJ	FB1-FB2	1	21.5	59.154	4.142	0.000	1,273.5	89.2	0.0
Trim Bar b23	Sdwk Panels M, AJ	FB1-FB2	1	20.1	59.154	4.142	0.000	1,186.7	83.1	0.0
Weld at M Bars with Trim Bars	Sdwk Panels M, AJ	FB1-FB2	1		59.154	4.142	0.000	0.0	0.0	0.0
Cut in Plate p1	Sdwk Panels M, AJ	FB1-FB2	1	-1.7	61.000	4.278	0.000	-101.9	-7.1	0.0
M Bars	Sdwk Panels N, AK	FB1-FB2	1	755.1	55.104	4.132	0.000	41,609.6	3,120.1	0.0
C Bars	Sdwk Panels N, AK	FB1-FB2	1	53.6	55.104	4.242	0.000	2,954.2	227.4	0.0
Boltdown Plates, bdp36, bdp37	Sdwk Panels N, AK	FB1-FB2	1	36.3	55.104	3.994	0.000	1,998.1	144.8	0.0
Bolts in bdp36, bdp37	Sdwk Panels N, AK	FB1-FB2	1		55.104	3.994	0.000	0.0	0.0	0.0
Boltdown Plate bdp94	Sdwk Panels N, AK	FB1-FB2	1	75.9	55.104	3.994	0.000	4,184.0	303.3	0.0
Bolts in bdp2	Sdwk Panels N, AK	FB1-FB2	1		55.104	3.984	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels N, AK	FB1-FB2	1	75.3	55.104	3.980	0.000	4,152.0	299.9	0.0
Bolts in bdp9	Sdwk Panels N, AK	FB1-FB2	1		55.104	3.980	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels N, AK	FB1-FB2	1	607.1	55.104	4.268	0.000	33,451.9	2,591.0	0.0
Weld M Bars to Plate pk	Sdwk Panels N, AK	FB1-FB2	1		55.104	4.257	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels N, AK	FB1-FB2	1	21.5	55.104	4.132	0.000	1,186.3	89.0	0.0
Weld at M Bars with Trim Bars	Sdwk Panels N, AK	FB1-FB2	1		55.104	4.132	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels N, AK	FB1-FB2	1	21.0	55.104	4.132	0.000	1,155.3	86.6	0.0
Cut in Plate pk	Sdwk Panels N, AK	FB1-FB2	1	-1.7	55.104	4.268	0.000	-92.1	-7.1	0.0
Cut in M Bars	Sdwk Panels N, AK	FB1-FB2	1	-150.1	55.104	4.132	0.000	-8,272.4	-620.3	0.0
Cut in C Bars	Sdwk Panels N, AK	FB1-FB2	1	-9.8	55.104	4.242	0.000	-541.8	-41.7	0.0
Cut in Plate pn	Sdwk Panels N, AK	FB1-FB2	1	-113.2	55.104	4.268	0.000	-6,238.1	-483.2	0.0
M Bars	Sdwk Panels P, AL	FB1-FB2	1	755.1	51.052	4.114	0.000	38,549.9	3,106.5	0.0
C Bars	Sdwk Panels P, AL	FB1-FB2	1	53.6	51.052	4.224	0.000	2,737.0	226.5	0.0
Boltdown Plates, bdp38, bdp39	Sdwk Panels P, AL	FB1-FB2	1	41.7	51.052	4.216	0.000	2,127.9	175.7	0.0
Bolts in bdp38, bdp39	Sdwk Panels P, AL	FB1-FB2	1		51.052	4.216	0.000	0.0	0.0	0.0
Boltdown Plate bdp95	Sdwk Panels P, AL	FB1-FB2	1	86.7	51.052	4.216	0.000	4,428.3	365.7	0.0
Bolts in bdp95	Sdwk Panels P, AL	FB1-FB2	1		51.052	4.216	0.000	0.0	0.0	0.0

	Boltdown Plate bdp9	Sdwk Panels P, AL	FB1-FB2	1		75.3	51.052	3.962	0.000	3,846.7	298.5	0.0
	Bolts in bdp9	Sdwk Panels P, AL	FB1-FB2	1			51.052	3.962	0 000	0.0	0.0	0.0
	Plate pk	Sdwk Panels P, AL	FB1-FB2	1		607.1	51.052	4.250	0.000	30,992.0	2,580.0	0.0
	Weld M Bars to Plate pk	Sdwk Panels P, AL	FB1-FB2	1			51.052	4.239	0.000	0.0	0.0	0.0
	Trim Bar b8	Sdwk Panels P, AL	FB1-FB2	1		21.5	51.052	4.114	0.000	1,099.0	88.6	0.0
	Weld at M Bars with Trim Bars	Sdwk Panels P, AL	FB1-FB2	1			51.052	4.114	0 000	0.0	0.0	0.0
	Trim Bars b21, b22	Sdwk Panels P, AL	FB1-FB2	1		21.0	51.052	4.114	0.000	1,070.3	86.3	0.0
	Cut in Plate pk	Sdwk Panels P, AL	FB1-FB2	1		-1.7	51.052	4.250	0.000	-85.3	-7.1	0.0
	Cut in M Bars	Sdwk Panels P, AL	FB1-FB2	1		-116.8	51.052	4.114	0.000	-5,960.9	-480.4	0.0
	Cut in C Bars	Sdwk Panels P, AL	FB1-FB2	1		-8.3	51.052	4.224	0.000	-423.7	-35.1	0.0
	Cut in Plate pp	Sdwk Panels P, AL	FB1-FB2	1		-86.9	51.052	4.250	0.000	-4,434.9	-369.2	0.0
	M Bars	Sdwk Panels C4, C10	FB1-FB2	1		755.1	47.000	4.089	0.000	35,490.2	3,087.6	0.0
	C Bars	Sdwk Panels C4, C10	FB1-FB2	1		53.6	47.000	4.199	0.000	2,519.8	225.1	0.0
	Boltdown Plates, bdp32, bdp33	Sdwk Panels C4, C10	FB1-FB2	1		62.9	47.000	3.951	0 000	2,956.1	248.5	0.0
	Bolts in bdp32, bdp33	Sdwk Panels C4, C10	FB1-FB2	1			47.000	3.951	0.000	0.0	0.0	0.0
	Boltdown Plate bdp2	Sdwk Panels C4, C10	FB1-FB2	1		129.2	47.000	3.941	0.000	6,070.9	509.1	0.0
	Bolts in bdp2	Sdwk Panels C4, C10	FB1-FB2	1			47.000	3.941	0.000	0.0	0.0	0.0
	Boltdown Plate bdp9	Sdwk Panels C4, C10	FB1-FB2	1		75.3	47.000	3.937	0.000	3,541.4	296.6	0.0
	Bolts in bdp9	Sdwk Panels C4, C10	FB1-FB2	1			47.000	3.937	0.000	0.0	0.0	0.0
	Plate pk	Sdwk Panels C4, C10	FB1-FB2	1		607.1	47.000	4.225	0.000	28,532.2	2,564.9	0.0
	Weld M Bars to Plate pk	Sdwk Panels C4, C10	FB1-FB2	1			47.000	4.214	0.000	0.0	0.0	0.0
	Trim Bar b8	Sdwk Panels C4, C10	FB1-FB2	1		21.5	47.000	4.089	0.000	1,011.8	88.0	0.0
	Weld at M Bars with Trim Bars	Sdwk Panels C4, C10	FB1-FB2	1			47.000	4.089	0.000	0.0	0.0	0.0
	Trim Bars b21, b22	Sdwk Panels C4, C10	FB1-FB2	1		21.0	47.000	4.089	0.000	985.4	85.7	0.0
	Angle 5x4x1/2	Hatch X	FB1-FB2	1		144.2	53.078	3.906	0.000	7,651.7	563.1	0.0
	Angle 3x3	Hatch X	FB1-FB2	1		7.8	53.078	3.906	0.000	413.5	30.4	0.0
	Bevelled Spacer, BS1	Hatch X	FB1-FB2	1		18.6	53.078	4.052	0.000	987.9	75.4	0.0
	Spacer, SP1	Hatch X	FB1-FB2	1		13.5	53.078	4.052	0.000	717.9	54.8	0.0
	Beam, W1	Hatch X	FB1-FB2	1		125.6	53.078	3.802	0.000	6,667.8	477.6	0.0
	Bolts	Hatch X	FB1-FB2	1			53.078	4.052	0.000	0.0	0.0	0.0
	Bilco Door	Hatch X	FB1-FB2	1		462.0	53.078	4.177	0.000	24,522.0	1,929.8	0.0
	10" Roadway Grid Stub	At FB1	FB1-FB2	1		-1,125.5	60.688	3.249	0.000	-68,304.3	-3,656.7	0.0
	10" Stringer Stubs	At FB1	FB1-FB2	1		-262.5	60.583	2.228	0.000	-15,903.0	-584.9	0.0
	Cope in Top Flange	At FB1	FB1-FB2	1		-72.3	60.583	3.005	0.000	-4,380.7	-217.3	0.0
	Cope in Web	At FB1	FB1-FB2	1		-29.8	60.583	2.841	0.000	-1,803.7	-84.6	0.0
	10" Roadway Grid Stub	At FB2	FB1-FB2	1		-900.4	44.583	3.171	0.000	-40,142.5	-2,855.2	0.0
	10" Stringer Stubs	At FB2	FB1-FB2	1		-262.5	44.583	2.150	0.000	-11,703.0	-564.4	0.0
	Cope in Top Flange	At FB2	FB1-FB2	1		-72.3	44.583	3.005	0.000	-3,223.8	-217.3	0.0
	Cope in Web	At FB2	FB1-FB2	1		-29.8	44.583	2.841	0.000	-1,327.4	-84.6	0.0
Subtotal	Bay 4 Steel (FB1 to FB2)					33,824.8	49.757	3.087	0.000	1,683,020.4	104,405.6	0.0
	1.1.2 Bay 5 Steel (FB2 to FB3)											
	Sidewalk Support Plate	Girders	FB2-FB3	1		171.8	35.751	3.847	0.000	6,143.3	661.1	0.0
	Bevelled Fill Plate	Girders	FB2-FB3	1		204.1	35.751	3.893	0.000	7,295.2	794.4	0.0
	5/16" Weld	Girders	FB2-FB3	1			35.751	3.847	0.000	0.0	0.0	0.0
	Sidewalk Stringers	Stringers	FB2-FB3	1		1,038.5	35.751	3.267	0.000	37,127.4	3,392.8	0.0
	7/16" Shims	Stringers	FB2-FB3	1		29.0	35.751	2.767	0 000	1,037.9	80.3	0.0

Bolts in Bottom Flange	Stringers	FB2-FB3	1		35.751	2.767	0.000	0.0	0.0	0.0
Roadway Stringers W 18 B 35	Stringers	FB2-FB3	1	7,035.0	35.751	2.126	0.800	251,508.3	14,956.4	5,628.0
Cope in Top Flange	Stringers	FB2-FB3	1	-86.8	35.751	2.858	0.800	-3,102.2	-248.0	-69.4
Cope in Web	Stringers	FB2-FB3	1	-35.7	35.571	2.695	0.800	-1,270.9	-96.3	-28.6
3 X 3 Connection Angles	Stringers	FB2-FB3	1	451.2	35.571	2.043	0.800	16,049.6	921.8	361.0
7/8" Bolts	Stringers	FB2-FB3	1		35.571	2.043	0.800	0.0	0.0	0.0
Roadway Stringers W 18 B 35	Stringers (R & S)	FB2-FB3	1	586.3	35.751	2.126	0.000	20,959.0	1,246.4	0.0
Cope in Top Flange	Stringers (R & S)	FB2-FB3	1	-7.2	35.751	2.858	0.000	-258.5	-20.7	0.0
Cope in Web	Stringers (R & S)	FB2-FB3	1	-3.0	35.571	2.695	0.000	-105.9	-8.0	0.0
3 X 3 Connection Angles	Stringers (R & S)	FB2-FB3	1	37.6	35.571	2.043	0.000	1,337.5	76.8	0.0
7/8" Bolts	Stringers (R & S)	FB2-FB3	1		35.571	2.043	0.000	0.0	0.0	0.0
Roadway Stringers S3, S8, S13	Stringers To Remain	FB2-FB3	1		35.751	2.126	0.000	0.0	0.0	0.0
Cope in Top Flange	Stringers To Remain	FB2-FB3	1		35.751	2.858	0.000	0.0	0.0	0.0
Cope in Web	Stringers To Remain	FB2-FB3	1		35.571	2.695	0.000	0.0	0.0	0.0
3 X 3 Connection Angles	Stringers To Remain	FB2-FB3	1		35.571	2.043	0.000	0.0	0.0	0.0
7/8" Bolts	Stringers To Remain	FB2-FB3	1		35.571	2.043	0.000	0.0	0.0	0.0
Channel 10 C 25	Sidewalk Channels	FB2-FB3	1	841.7	35.751	3.293	0.000	30,089.8	2,771.6	0.0
7/8" Bolts	Sidewalk Channels	FB2-FB3	1		35.751	2.876	0.000	0.0	0.0	0.0
Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB2-FB3	0	430.2	35.751	1.276	0.000	0.0	0.0	0.0
Bracing Type 2 (Stringer S3-5,S11-13)	Lateral Bracing	FB2-FB3	0	360.8	35.751	1.276	0.000	0.0	0.0	0.0
Bracing Type 3 (Stringer S5-8,S8-11)	Lateral Bracing	FB2-FB3	0	464.3	35.751	1.276	0.000	0.0	0.0	0.0
Gusset Plate at Main Girders	Type 1 Bracing	FB2-FB3	0	76.6	35.751	1.361	0.000	0.0	0.0	0.0
4 x 4 x 1/2 Angle	Type 1 Bracing	FB2-FB3	0	38.4	35.751	1.276	0.000	0.0	0.0	0.0
Bolts in Angle	Type 1 Bracing	FB2-FB3	0		35.751	1.276	0.000	0.0	0.0	0.0
Plate 9 x 4 x 1/2	Type 1 Bracing	FB2-FB3	0	20.4	35.751	1.276	0.000	0.0	0.0	0.0
Bolts in Plate	Type 1 Bracing	FB2-FB3	0		35.751	1.276	0.000	0.0	0.0	0.0
Bolts in Bracing Type 1	Type 1 Bracing	FB2-FB3	0		35.751	1.361	0.000	0.0	0.0	0.0
Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB2-FB3	0	229.7	35.751	1.361	0.000	0.0	0.0	0.0
Bolts in Gusset Plate	Type 1 & 2 Bracing	FB2-FB3	0		35.751	1.361	0.000	0.0	0.0	0.0
Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB2-FB3	0	153.1	35.751	1.361	0.000	0.0	0.0	0.0
4 x 4 Support Angles	Type 3 Bracing	FB2-FB3	0	76.8	35.751	1.276	0.000	0.0	0.0	0.0
Bolts in Gusset Plate	Type 3 Bracing	FB2-FB3	0		35.751	1.361	0.000	0.0	0.0	0.0
Main Bars	Roadway Grid	FB2-FB3	1	7,934.3	35.751	3.058	0.000	283,658.6	24,263.0	0.0
Cross Bars	Roadway Grid	FB2-FB3	1	5,502.4	35.751	3.210	0.000	196,714.9	17,662.6	0.0
Supplemental Bars	Roadway Grid	FB2-FB3	1	1,168.7	35.751	3.251	0.000	41,780.4	3,799.3	0.0
Diagonal Bars	Roadway Grid	FB2-FB3	1	3,203.9	35.751	3.251	0.000	114,541.0	10,415.7	0.0
Edge Bars at Curbs	Roadway Grid	FB2-FB3	1	60.7	35.751	3.210	0.000	2,170.7	194.9	0.0
Opening in Main Bars at Cross Bars	Roadway Grid	FB2-FB3	1	-305.1	35.751	3.210	0.000	-10,907.2	-979.3	0.0
Opening in Cross Bars at Main Bars	Roadway Grid	FB2-FB3	1	-152.5	35.751	3.251	0.000	-5,453.6	-495.9	0.0
Opening in Cross Bars at Supp Bars	Roadway Grid	FB2-FB3	1	-73.5	35.751	3.251	0.000	-2,629.4	-239.1	0.0
Welding	Roadway Grid	FB2-FB3	1		35.751	3.210	0.000	0.0	0.0	0.0
M Bars	Sdwk Panels H, AE	FB2-FB3	1	755.1	42.948	4.055	0.000	32,430.5	3,062.0	0.0
C Bars	Sdwk Panels H, AE	FB2-FB3	1	53.6	42.948	4.165	0.000	2,302.5	223.3	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels H, AE	FB2-FB3	1	62.9	42.948	3.917	0.000	2,701.3	246.4	0.0
Bolts in bdp32, bdp33	Sdwk Panels H, AE	FB2-FB3	1		42.948	3.917	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels H, AE	FB2-FB3	1	129.2	42.948	3.907	0.000	5,547.5	504.7	0.0
Bolts in bdp2	Sdwk Panels H, AE	FB2-FB3	1		42.948	3.907	0.000	0.0	0.0	0.0

Boltdown Plate bdp9	Sdwk Panels H, AE	FB2-FB3	1		75.3	42.948	3.903	0.000	3,236.0	294.1	0.0
Bolts in bdp9	Sdwk Panels H, AE	FB2-FB3	1			42.948	3.903	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels H, AE	FB2-FB3	1		607.1	42.948	4.191	0.000	26,072.4	2,544.2	0.0
Weld M Bars to Plate pk	Sdwk Panels H, AE	FB2-FB3	1			42.948	4.180	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels H, AE	FB2-FB3	1		21.5	42.948	4.055	0.000	924.6	87.3	0.0
Weld at M Bars with Trim Bars	Sdwk Panels H, AE	FB2-FB3	1			42.948	4.055	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels H, AE	FB2-FB3	1		21.0	42.948	4.055	0.000	900.4	85.0	0.0
Cut in Plate pk	Sdwk Panels H, AE	FB2-FB3	1		-1.7	42.948	4.191	0.000	-71.8	-7.0	0.0
M Bars	Sdwk Panels G, AD	FB2-FB3	1		755.1	38.896	4.014	0.000	29,370.8	3,031.0	0.0
C Bars	Sdwk Panels G, AD	FB2-FB3	1		53.6	38.896	4.124	0.000	2,085.3	221.1	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels G, AD	FB2-FB3	1		62.9	38.896	3.876	0.000	2,446.4	243.8	0.0
Bolts in bdp32, bdp33	Sdwk Panels G, AD	FB2-FB3	1			38.896	3.876	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels G, AD	FB2-FB3	1		129.2	38.896	3.866	0.000	5,024.1	499.4	0.0
Bolts in bdp2	Sdwk Panels G, AD	FB2-FB3	1			38.896	3.866	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels G, AD	FB2-FB3	1		75.3	38.896	3.862	0.000	2,930.7	291.0	0.0
Bolts in bdp9	Sdwk Panels G, AD	FB2-FB3	1			38.896	3.862	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels G, AD	FB2-FB3	1		607.1	38.896	4.150	0.000	23,612.5	2,519.3	0.0
Weld M Bars to Plate pk	Sdwk Panels G, AD	FB2-FB3	1			38.896	4.139	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels G, AD	FB2-FB3	1		21.5	38.896	4.014	0.000	837.4	86.4	0.0
Weld at M Bars with Trim Bars	Sdwk Panels G, AD	FB2-FB3	1			38.896	4.014	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels G, AD	FB2-FB3	1		21.0	38.896	4.014	0.000	815.5	84.2	0.0
Cut in Plate pk	Sdwk Panels G, AD	FB2-FB3	1		-1.7	38.896	4.150	0.000	-65.0	-6.9	0.0
M Bars	Sdwk Panels F, AC	FB2-FB3	1		755.1	34.844	3.964	0.000	26,311.1	2,993.3	0.0
C Bars	Sdwk Panels F, AC	FB2-FB3	1		53.6	34.844	4.074	0.000	1,868.1	218.4	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels F, AC	FB2-FB3	1		62.9	34.844	3.826	0.000	2,191.5	240.6	0.0
Bolts in bdp32, bdp33	Sdwk Panels F, AC	FB2-FB3	1			34.844	3.826	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels F, AC	FB2-FB3	1		129.2	34.844	3.816	0.000	4,500.7	492.9	0.0
Bolts in bdp2	Sdwk Panels F, AC	FB2-FB3	1			34.844	3.816	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels F, AC	FB2-FB3	1		75.3	34.844	3.812	0.000	2,625.4	287.2	0.0
Bolts in bdp9	Sdwk Panels F, AC	FB2-FB3	1			34.844	3.812	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels F, AC	FB2-FB3	1		607.1	34.844	4.100	0.000	21,152.7	2,489.0	0.0
Weld M Bars to Plate pk	Sdwk Panels F, AC	FB2-FB3	1			34.844	4.089	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels F, AC	FB2-FB3	1		21.5	34.844	3.964	0.000	750.1	85.3	0.0
Weld at M Bars with Trim Bars	Sdwk Panels F, AC	FB2-FB3	1			34.844	3.964	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels F, AC	FB2-FB3	1		21.0	34.844	3.964	0.000	730.5	83.1	0.0
Cut in Plate pk	Sdwk Panels F, AC	FB2-FB3	1		-1.7	34.844	4.100	0.000	-58.2	-6.9	0.0
M Bars	Sdwk Panels C2, C8	FB2-FB3	1		755.1	30.792	3.907	0.000	23,251.3	2,950.2	0.0
C Bars	Sdwk Panels C2, C8	FB2-FB3	1		53.6	30.792	4.017	0.000	1,650.8	215.4	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels C2, C8	FB2-FB3	1		62.9	30.792	3.769	0.000	1,936.7	237.1	0.0
Bolts in bdp32, bdp33	Sdwk Panels C2, C8	FB2-FB3	1			30.792	3.769	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels C2, C8	FB2-FB3	1		129.2	30.792	3.759	0.000	3,977.3	485.5	0.0
Bolts in bdp2	Sdwk Panels C2, C8	FB2-FB3	1			30.792	3.759	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels C2, C8	FB2-FB3	1		75.3	30.792	3.755	0.000	2,320.1	282.9	0.0
Bolts in bdp9	Sdwk Panels C2, C8	FB2-FB3	1			30.792	3.755	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels C2, C8	FB2-FB3	1		607.1	30.792	4.043	0.000	18,692.8	2,454.4	0.0
Weld M Bars to Plate pk	Sdwk Panels C2, C8	FB2-FB3	1			30.792	4.032	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels C2, C8	FB2-FB3	1		21.5	30.792	3.907	0.000	662.9	84.1	0.0

	Weld at M Bars with Trim Bars	Sdwk Panels C2, C8	FB2-FB3	1			30.792	3.907	0.000	0.0	0.0	0.0
	Trim Bars b21, b22	Sdwk Panels C2, C8	FB2-FB3	1		21.0	30.792	3.907	0.000	645.6	81.9	0.0
	10" Roadway Grid Stub	At FB2	FB2-FB3	1		-900.4	43.749	3.171	0.000	-39,391.6	-2,855.2	0.0
	10" Stringer Stubs	At FB2	FB2-FB3	1		-262.5	43.749	2.150	0.000	-11,484.1	-564.4	0.0
	Cope in Top Flange	At FB2	FB2-FB3	1		-72.3	43.749	2.858	0.000	-3,163.4	-206.7	0.0
	Cope in Web	At FB2	FB2-FB3	1		-29.8	43.749	2.695	0.000	-1,302.5	-80.2	0.0
	10" Roadway Grid Stub	At FB3	FB2-FB3	1		-900.4	27.750	2.956	0.000	-24,986.1	-2,661.6	0.0
	10" Stringer Stubs	At FB3	FB2-FB3	1		-262.5	27.750	2.956	0.000	-7,284.4	-776.0	0.0
	Cope in Top Flange	At FB3	FB2-FB3	1		-72.3	27.750	2.858	0.000	-2,006.6	-206.7	0.0
	Cope in Web	At FB3	FB2-FB3	1		-29.7	27.750	2.695	0.000	-825.1	-80.1	0.0
Subtotal	Bay 5 Steel (FB2 to FB3)					33,819.3	34.021	2.939	0.174	1,150,552.6	99,402.6	5,891.0
	1.1.3 Main Girder Top Flange Plates											
	Steel Plates			1			-11.420	6.830	0.000	0.0	0.0	0.0
Subtotal	Main Girder Top Flange Plates					0.0	0.000	0.000	0.000	0.0	0.0	0.0
	1.1.4 Bay 6 Steel (FB3 to FB4)											
	Sidewalk Support Plate	Girders	FB3-FB4	1		171.8	18.917	3.501	0.000	3,250.6	601.6	0.0
	Bevelled Fill Plate	Girders	FB3-FB4	1		204.1	18.917	3.546	0.000	3,860.1	723.6	0.0
	5/16" Weld	Girders	FB3-FB4	1			18.917	3.501	0.000	0.0	0.0	0.0
	9/16" Stiffeners at FB4	Girders	FB4	1		244.0	10.500	3.040	0.000	2,562.5	741.9	0.0
	Sidewalk Stringers	Stringers	FB3-FB4	1		1,038.5	18.917	2.983	0.000	19,645.3	3,097.8	0.0
	7/16" Shims	Stringers	FB3-FB4	1		29.0	18.917	2.483	0.000	549.2	72.1	0.0
	Bolts in Bottom Flange	Stringers	FB3-FB4	1			18.917	2.483	0.000	0.0	0.0	0.0
	Roadway Stringers W 18 B 35	Stringers	FB3-FB4	1		2,931.3	18.917	1.842	-7.200	55,450.5	5,399.4	-21,105.0
	Cope in Top Flange	Stringers	FB3-FB4	1		-36.2	18.917	2.574	-7.200	-683.9	-93.1	260.3
	Cope in Web	Stringers	FB3-FB4	1		-14.9	18.917	2.411	-7.200	-281.6	-35.9	107.2
	3 X 3 Connection Angles	Stringers	FB3-FB4	1		188.0	18.917	1.759	-7.200	3,556.4	330.7	-1,353.6
	7/8" Bolts	Stringers	FB3-FB4	1			18.917	1.759	-7.200	0.0	0.0	0.0
	Roadway Stringers W 18 B 35	Stringers (R& S)	FB3-FB4	1		4,690.0	18.917	1.842	4.500	88,720.7	8,639.0	21,105.0
	Cope in Top Flange	Stringers (R& S)	FB3-FB4	1		-57.8	18.917	2.574	4.500	-1,094.3	-148.9	-260.3
	Cope in Web	Stringers (R& S)	FB3-FB4	1		-23.8	18.917	2.411	4.500	-450.6	-57.4	-107.2
	3 X 3 Connection Angles	Stringers (R& S)	FB3-FB4	1		300.8	18.917	1.759	4.500	5,690.2	529.1	1,353.6
	7/8" Bolts	Stringers (R& S)	FB3-FB4	1			18.917	1.759	4.500	0.0	0.0	0.0
	Channel 10 C 25	Sidewalk Channels	FB3-FB4	1		841.7	18.917	3.009	0.000	15,921.5	2,532.5	0.0
	7/8" Bolts	Sidewalk Channels	FB3-FB4	1			18.917	2.592	0.000	0.0	0.0	0.0
	Bracing Type 1(Under Sidewalk)	Lateral Bracing	FB3-FB4	1		430.2	18.917	0.992	0.000	8,138.1	426.8	0.0
	Bracing Type 2 (Stringer S3-5,S11-13)	Lateral Bracing	FB3-FB4	1		360.8	18.917	0.992	0.000	6,825.4	357.9	0.0
	Bracing Type 3 (Stringer S5-8,S8-11)	Lateral Bracing	FB3-FB4	1		464.3	18.917	0.992	0.000	8,783.9	460.6	0.0
	Gusset Plate at Main Girders	Type 1 Bracing	FB3-FB4	1		76.6	18.917	1.077	0.000	1,448.3	82.5	0.0
	4 x 4 x 1/2 Angle	Type 1 Bracing	FB3-FB4	1		38.4	18.917	0.992	0.000	726.4	38.1	0.0
	Bolts in Angle	Type 1 Bracing	FB3-FB4	1			18.917	0.992	0.000	0.0	0.0	0.0
	Plate 9 x 4 x 1/2	Type 1 Bracing	FB3-FB4	1		20.4	18.917	0.992	0.000	386.2	20.3	0.0
	Bolts in Plate	Type 1 Bracing	FB3-FB4	1			18.917	0.992	0.000	0.0	0.0	0.0
	Bolts in Bracing Type 1	Type 1 Bracing	FB3-FB4	1		45.4	18.917	1.077	0.000	858.1	48.9	0.0
	Gusset Plate-Interior (@S3, S8, S13)	Type 1 & 2 Bracing	FB3-FB4	1		229.7	18.917	1.077	0.000	4,345.0	247.4	0.0
	Bolts in Gusset Plate	Type 1 & 2 Bracing	FB3-FB4	1			18.917	1.077	0.000	0.0	0.0	0.0

Gusset Plate at FB1, FB2 (@S5,S11)	Type 3 Bracing	FB3-FB4	1		153.1	18.917	1.077	0.000	2,896.7	164.9	0.0
4 x 4 Support Angles	Type 3 Bracing	FB3-FB4	1		76.8	18.917	0.992	0.000	1,452.8	76.2	0.0
Bolts in Gusset Plate	Type 3 Bracing	FB3-FB4	1			18.917	1.077	0.000	0.0	0.0	0.0
Main Bars	Roadway Grid	FB3-FB4	1		7,934.3	18.917	2.774	0.000	150,092.9	22,009.7	0.0
Cross Bars	Roadway Grid	FB3-FB4	1		5,556.9	18.917	2.926	0.000	105,120.8	16,259.6	0.0
Supplemental Bars	Roadway Grid	FB3-FB4	1		1,168.7	18.917	2.967	0.000	22,107.4	3,467.4	0.0
Diagonal Bars	Roadway Grid	FB3-FB4	1		3,203.9	18.917	2.967	0.000	60,607.3	9,505.8	0.0
Edge Bars at Curbs	Roadway Grid	FB3-FB4	1		61.3	18.917	2.926	0.000	1,160.0	179.4	0.0
Opening in Main Bars at Cross Bars	Roadway Grid	FB3-FB4	1		-305.1	18.917	2.926	0.000	-5,771.3	-892.7	0.0
Opening in Cross Bars at Main Bars	Roadway Grid	FB3-FB4	1		-152.5	18.917	2.967	0.000	-2,885.7	-452.6	0.0
Opening in Cross Bars at Supp Bars	Roadway Grid	FB3-FB4	1		-73.5	18.917	2.967	0.000	-1,391.3	-218.2	0.0
Welding	Roadway Grid	FB3-FB4	1			18.917	2.926	0.000	0.0	0.0	0.0
M Bars	Sdwk Panels E, AB	FB3-FB4	1		755.1	26.740	3.841	0.000	20,191.6	2,900.4	0.0
C Bars	Sdwk Panels E, AB	FB3-FB4	1		53.6	26.740	3.951	0.000	1,433.6	211.8	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels E, AB	FB3-FB4	1		62.9	26.740	3.703	0.000	1,681.8	232.9	0.0
Bolts in bdp32, bdp33	Sdwk Panels E, AB	FB3-FB4	1			26.740	3.703	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels E, AB	FB3-FB4	1		129.2	26.740	3.693	0.000	3,454.0	477.0	0.0
Bolts in bdp2	Sdwk Panels E, AB	FB3-FB4	1			26.740	3.693	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels E, AB	FB3-FB4	1		75.3	26.740	3.689	0.000	2,014.8	278.0	0.0
Bolts in bdp9	Sdwk Panels E, AB	FB3-FB4	1			26.740	3.689	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels E, AB	FB3-FB4	1		607.1	26.740	3.977	0.000	16,233.0	2,414.3	0.0
Weld M Bars to Plate pk	Sdwk Panels E, AB	FB3-FB4	1			26.740	3.966	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels E, AB	FB3-FB4	1		21.5	26.740	3.841	0.000	575.7	82.7	0.0
Weld at M Bars with Trim Bars	Sdwk Panels E, AB	FB3-FB4	1			26.740	3.841	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels E, AB	FB3-FB4	1		21.0	26.740	3.841	0.000	560.6	80.5	0.0
Cut in Plate pk	Sdwk Panels E, AB	FB3-FB4	1		-1.7	26.740	3.977	0.000	-44.7	-6.6	0.0
M Bars	Sdwk Panels D, AA	FB3-FB4	1		755.1	22.688	3.767	0.000	17,131.9	2,844.5	0.0
C Bars	Sdwk Panels D, AA	FB3-FB4	1		53.6	22.688	3.877	0.000	1,216.3	207.9	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels D, AA	FB3-FB4	1		62.9	22.688	3.629	0.000	1,427.0	228.2	0.0
Bolts in bdp32, bdp33	Sdwk Panels D, AA	FB3-FB4	1			22.688	3.629	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels D, AA	FB3-FB4	1		129.2	22.688	3.619	0.000	2,930.6	467.5	0.0
Bolts in bdp2	Sdwk Panels D, AA	FB3-FB4	1			22.688	3.619	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels D, AA	FB3-FB4	1		75.3	22.688	3.615	0.000	1,709.5	272.4	0.0
Bolts in bdp9	Sdwk Panels D, AA	FB3-FB4	1			22.688	3.615	0.000	0.0	0.0	0.0
Plate pk	Sdwk Panels D, AA	FB3-FB4	1		607.1	22.688	3.903	0.000	13,773.2	2,369.4	0.0
Weld M Bars to Plate pk	Sdwk Panels D, AA	FB3-FB4	1			22.688	3.892	0.000	0.0	0.0	0.0
Trim Bar b8	Sdwk Panels D, AA	FB3-FB4	1		21.5	22.688	3.767	0.000	488.4	81.1	0.0
Weld at M Bars with Trim Bars	Sdwk Panels D, AA	FB3-FB4	1			22.688	3.767	0.000	0.0	0.0	0.0
Trim Bars b21, b22	Sdwk Panels D, AA	FB3-FB4	1		21.0	22.688	3.767	0.000	475.7	79.0	0.0
Cut in Plate pk	Sdwk Panels D, AA	FB3-FB4	1		-1.7	22.688	3.903	0.000	-37.9	-6.5	0.0
M Bars	Sdwk Panels C1, C7	FB3-FB4	1		755.1	18.636	3.686	0.000	14,072.2	2,783.3	0.0
C Bars	Sdwk Panels C1, C7	FB3-FB4	1		53.6	18.636	3.796	0.000	999.1	203.5	0.0
Boltdown Plates, bdp32, bdp33	Sdwk Panels C1, C7	FB3-FB4	1		62.9	18.636	3.548	0.000	1,172.1	223.2	0.0
Bolts in bdp32, bdp33	Sdwk Panels C1, C7	FB3-FB4	1			18.636	3.548	0.000	0.0	0.0	0.0
Boltdown Plate bdp2	Sdwk Panels C1, C7	FB3-FB4	1		129.2	18.636	3.538	0.000	2,407.2	457.0	0.0
Bolts in bdp2	Sdwk Panels C1, C7	FB3-FB4	1			18.636	3.538	0.000	0.0	0.0	0.0
Boltdown Plate bdp9	Sdwk Panels C1, C7	FB3-FB4	1		75.3	18.636	3.534	0.000	1,404.2	266.3	0.0

	Bolts in bdp9	Sdwk Panels C1, C7	FB3-FB4	1			18.636	3.534	0.000	0.0	0.0	0.0
	Plate pk	Sdwk Panels C1, C7	FB3-FB4	1	607.1		18.636	3.822	0.000	11,313.3	2,320.2	0.0
	Weld M Bars to Plate pk	Sdwk Panels C1, C7	FB3-FB4	1			18.636	3.811	0.000	0.0	0.0	0.0
	Trim Bar b8	Sdwk Panels C1, C7	FB3-FB4	1	21.5		18.636	3.686	0.000	401.2	79.4	0.0
	Weld at M Bars with Trim Bars	Sdwk Panels C1, C7	FB3-FB4	1			18.636	3.686	0.000	0.0	0.0	0.0
	Trim Bars b21, b22	Sdwk Panels C1, C7	FB3-FB4	1	21.0		18.636	3.686	0.000	390.7	77.3	0.0
	M Bars	Sdwk Panels B, Z	FB3-FB4	1	755.1		14.584	3.596	0.000	11,012.5	2,715.4	0.0
	C Bars	Sdwk Panels B, Z	FB3-FB4	1	53.6		14.584	3.706	0.000	781.9	198.7	0.0
	Boltdown Plates, bdp32, bdp33	Sdwk Panels B, Z	FB3-FB4	1	62.9		14.584	3.458	0.000	917.3	217.5	0.0
	Bolts in bdp32, bdp33	Sdwk Panels B, Z	FB3-FB4	1			14.584	3.458	0.000	0.0	0.0	0.0
	Boltdown Plate bdp2	Sdwk Panels B, Z	FB3-FB4	1	129.2		14.584	3.448	0.000	1,883.8	445.4	0.0
	Bolts in bdp2	Sdwk Panels B, Z	FB3-FB4	1			14.584	3.448	0.000	0.0	0.0	0.0
	Boltdown Plate bdp9	Sdwk Panels B, Z	FB3-FB4	1	75.3		14.584	3.444	0.000	1,098.9	259.5	0.0
	Bolts in bdp9	Sdwk Panels B, Z	FB3-FB4	1			14.584	3.444	0.000	0.0	0.0	0.0
	Plate pk	Sdwk Panels B, Z	FB3-FB4	1	607.1		14.584	3.732	0.000	8,853.5	2,265.6	0.0
	Weld M Bars to Plate pk	Sdwk Panels B, Z	FB3-FB4	1			14.584	3.721	0.000	0.0	0.0	0.0
	Trim Bar b8	Sdwk Panels B, Z	FB3-FB4	1	21.5		14.584	3.596	0.000	314.0	77.4	0.0
	Weld at M Bars with Trim Bars	Sdwk Panels B, Z	FB3-FB4	1			14.584	3.596	0.000	0.0	0.0	0.0
	Trim Bars b21, b22	Sdwk Panels B, Z	FB3-FB4	1	21.0		14.584	3.596	0.000	305.8	75.4	0.0
	Cut in Plate pk	Sdwk Panels B, Z	FB3-FB4	1	-1.7		14.584	3.732	0.000	-24.4	-6.2	0.0
	M Bars	Sdwk Panels A, Y	FB3-FB4	1	503.4		11.196	3.516	0.000	5,636.1	1,770.0	0.0
	C Bars	Sdwk Panels A, Y	FB3-FB4	1	35.3		11.196	3.626	0.000	395.5	128.1	0.0
	Boltdown Plates, bdp02, bdp17	Sdwk Panels A, Y	FB3-FB4	1	41.4		11.196	3.368	0.000	463.8	139.5	0.0
	Bolts in bdp02, bdp17	Sdwk Panels A, Y	FB3-FB4	1			11.196	3.368	0.000	0.0	0.0	0.0
	Boltdown Plate bdp1	Sdwk Panels A, Y	FB3-FB4	1	86.2		11.196	3.368	0.000	965.3	290.4	0.0
	Bolts in bdp1	Sdwk Panels A, Y	FB3-FB4	1			11.196	3.368	0.000	0.0	0.0	0.0
	Boltdown Plate bdp7	Sdwk Panels A, Y	FB3-FB4	1	50.3		11.196	3.364	0.000	563.1	169.2	0.0
	Bolts in bdp7	Sdwk Panels A, Y	FB3-FB4	1			11.196	3.364	0.000	0.0	0.0	0.0
	Plate pa	Sdwk Panels A, Y	FB3-FB4	1	408.4		11.196	3.652	0.000	4,572.4	1,491.5	0.0
	Weld M Bars to Plate pa	Sdwk Panels A, Y	FB3-FB4	1			11.196	3.641	0.000	0.0	0.0	0.0
	Trim Bar b1	Sdwk Panels A, Y	FB3-FB4	1	36.0		9.834	3.483	0.000	353.6	125.2	0.0
	Trim Bars b21, b22	Sdwk Panels A, Y	FB3-FB4	1	13.8		11.196	3.516	0.000	154.6	48.5	0.0
	Weld at M Bars with Trim Bars	Sdwk Panels A, Y	FB3-FB4	1			11.196	3.516	0.000	0.0	0.0	0.0
	Trim Bars b4	Sdwk Panels A, Y	FB3-FB4	1	14.4		11.196	3.516	0.000	160.9	50.5	0.0
	Cut in Plate pa	Sdwk Panels A, Y	FB3-FB4	1	-1.7		11.196	3.652	0.000	-18.7	-6.1	0.0
	10" Roadway Grid Stub	At FB3	FB3-FB4	1	-900.4		26.916	2.956	0.000	-24,235.2	-2,661.6	0.0
	10" Stringer Stubs	At FB3	FB3-FB4	1	-262.5		26.916	1.935	0.000	-7,065.5	-507.9	0.0
	Cope in Top Flange	At FB3	FB3-FB4	1	-72.3		26.916	2.574	0.000	-1,946.3	-186.1	0.0
	Cope in Web	At FB3	FB3-FB4	1	-29.7		26.916	2.411	0.000	-800.3	-71.7	0.0
Subtotal	Bay 6 Steel (FB3 to FB4)				36,616.4		18.661	2.752	0.000	683,315.2	100,766.8	0.0
	1.1.5 Floor Beam FB-4E											
	Floorbeam 36WF300		FB4	1	18,387.5		10.500	0.739	0.000	193,068.8	13,588.4	0.0
	Cut in Flange at Girder Connection		FB4	1	-317.4		10.500	0.739	0.000	-3,332.4	-234.5	0.0
	Top Cover Plate		FB4	1	5,145.0		10.500	2.342	0.000	54,022.5	12,049.6	0.0
	Bottom Cover Plate		FB4	1	4,501.9		10.500	-0.719	0.000	47,269.7	-3,236.8	0.0
Subtotal	Floor Beam FB-4E				27,717.0		10.500	0.800	0.000	291,028.6	22,166.6	0.0

	SUBTOTAL	BASCULE STEEL				131,977.5	28.853	2.476	0.045	3,807,916.7	326,741.6	5,891.0
1.2	SPAN LOCKS											
	1.2.1	Span Lock Machinery										
		Operator with Lock Bar	Girder				59.313	2.978	0.000	0.0	0.0	0.0
		Guide Support Plate	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		Bolts in Support Plate	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		1/2" Shims	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		1/2" Backer Plate	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		Vertical Plate	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		Stiffeners	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		Guide Shoe	Girder				61.667	2.978	0.000	0.0	0.0	0.0
		Receiver Support Plate	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
		Bolts in Support Plate	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
		1/2" Shims	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
		Vertical Plate	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
		Stiffeners	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
		Guide Shoe	Roadway Center Line				61.667	1.790	-0.750	0.0	0.0	0.0
	Subtotal	Span Lock Machinery				0.0	0.000	0.000	0.000	0.0	0.0	0.0
	1.2.2	Platform										
		Short Angle	Girder	1		67.6	52.000	0.096	0.000	3,516.2	6.5	0.0
		Bolts in Angle	Girder	1		6.5	52.000	0.096	0.000	337.0	0.6	0.0
		Long Angle	Girder	1		189.6	56.210	0.096	0.000	10,660.0	18.2	0.0
		Bolts in Angle	Girder	1		3.2	56.210	0.096	0.000	182.1	0.3	0.0
		Angle Posts	Girder	1		177.6	56.210	1.463	0.000	9,983.5	259.8	0.0
		Bolts in Angle	Girder	1		13.0	56.210	1.463	0.000	728.5	19.0	0.0
		Angle Handrail	Girder	1		189.6	56.210	2.829	0.000	10,660.0	536.5	0.0
		Weld for Handrail	Girder	1		4.8	56.210	2.989	0.000	269.2	14.3	0.0
		Angle Bracket	Girder	1		66.2	52.000	2.596	0.000	3,441.1	171.8	0.0
		Bolts in Angle	Girder	1		6.5	52.000	2.596	0.000	337.0	16.8	0.0
		Steel Grating	Girder	1		1,076.2	56.210	0.096	0.000	60,493.9	103.3	0.0
		Connection Plates for Angle Brackets	Girder	1		46.4	52.000	2.596	0.000	2,412.6	120.4	0.0
	Subtotal	Platform				1,847.3	55.770	0.686	0.000	103,021.1	1,267.6	0.0
	SUBTOTAL	SPAN LOCKS				1,847.3	55.770	0.686	0.000	103,021.1	1,267.6	0.0
SUBTOTAL	1	REMOVALS				133,824.7	29.224	2.451	0.044	3,910,937.9	328,009.2	5,891.0

Steel Removal - Item 589.01

Approach Spans (Both sides included in calculations as they were the same)

Stringer Removals	Type	#	Width (in)	Thickness (in)	Length (ft)	Unit Wt (pcf)	Wt (lbs)
Roadway Stringers	14WF68	18.00	---	---	26.00	68.00	31,824.00
						Σ	31,824.00

Diaphragm Removals	Type	#	Width (in)	Thickness (in)	Length (ft)	Unit Wt (pcf)	Wt (lbs)
Rear Diaphragms	10C30	16.00	---	---	6.50	30.00	3,120.00
Intermediate Diaphragms	12B16.5	16.00	---	---	6.50	16.50	1,716.00
Front Diaphragms	10WF33	16.00	---	---	6.50	33.00	3,432.00
						Σ	8,268.00

CWT Maintenance Platform Removal	Type	#	Width (in)	Thickness (in)	Length (ft)	Unit Wt (pcf)	Wt (lbs)
Outside Stringers	8C13.5	4.00	---	---	19.00	13.50	1,026.00
Center Stringer	8B18.4	2.00	---	---	19.00	18.40	699.20
Bottom Transverse Beams	8WF17	6.00	---	---	5.50	17.00	561.00
Tall Post	L3x3x3/8	6.00	---	---	12.00	7.20	518.40
Short Post	L3x3x3/8	8.00	---	---	6.50	7.20	374.40
Hand Railing	.6x3 1/2x5/16	4.00	---	---	19.00	9.80	744.80
Bottom Diagonal	L3x3x3/8	4.00	---	---	8.52	7.20	245.38
Top Diagonal	L3x3x3/8	4.00	---	---	8.84	7.20	254.59
						Σ	4,423.77

Approach Hatch Framing Removal	Type	#	Width (in)	Thickness (in)	Length (ft)	Unit Wt (pcf)	Wt (lbs)
Outter Longitudinal Frame	10C15.3	2.00	---	---	2.67	15.30	81.60
Inner Longitudinal Frame	9C15	4.00	---	---	2.67	15.00	160.00
Transverse Frame	10C15.3	4.00	---	---	2.50	15.30	153.00
						Σ	394.60

Total Sum: 44,910.4

EXHIBIT F

From: Roseman, Kevin <kmr5@westchestergov.com>
Sent: Friday, May 25, 2018 8:40 AM
To: Maffei, Raymond Jeff <jmaffei@eecruz.com>; Nick Rahaniotis <nrahaniotis@verdeelectric.com>; Dupuy, Karl <KDupuy@eecruz.com>
Cc: Fatigate, Michael <MFatigate@eecruz.com>; 'Michael Sweeney' <msweeney@verdeelectric.com>; 'Khaled Hajjeh' <Khaled.Hajjeh@hdrinc.com>; 'JohnPaul Cunningham' <JohnPaul.cunningham@hdrinc.com>; Statini, James <jmsc@westchestergov.com>
Subject: FAB - Fulton Ave Bridge - 5/25/18 Successful Milestone Testing

After a bumpy start last night we achieved the Milestone of operating the bridge under normal conditions on the main motor from the operators house. We went 10 out of 10 in half the allotted time.

Next week (Tuesday - Thursday Nights), Jim's staff will do training with the goal of the County assuming operations by Friday June 1. We will allow traffic in between openings to create more realistic training.

This does not constitute final acceptance testing or assumption of maintenance. Operators will not have bypass keys and if there are any issues they will call EEC or Verde for help.

Prior to Tuesday night we request operation of the control house internal 3-way light dimmer, connection of the CCTV, marine radio and if Verizon shows telephone. The issue with the hot box leak also needs to be taken care with the water turned back on.

Thank you and congratulations to everyone involved.

Kevin

-------- Original Message --------
From: "Maffei, Raymond Jeff"
Date: Thu, May 24, 2018 2:44 PM -0400
To: Nick Rahaniotis , "Dupuy, Karl"
CC: "Fatigate, Michael" , 'Michael Sweeney' , "Roseman, Kevin" , 'Khaled Hajjeh' , 'JohnPaul Cunningham'
Subject: RE: Verde 5935 - Fulton Ave Bridge - 5/23/18 Successful Main Bridge Operation

Nick
On behalf of EEC great news and we all look forward to a successful operation tonight.
Tonight please update us on the following:

1. Marine Radio
2. Horn, We do know it works
3. Fire Alarm----------proper phone #
4. CCTV
5. Police Phone #

Thanks Jeff

From: Nick Rahaniotis [mailto:nrahaniotis@verdeelectric.com]
Sent: Thursday, May 24, 2018 2:40 PM
To: Dupuy, Karl
Cc: Maffei, Raymond Jeff ; Fatigate, Michael ; 'Michael Sweeney' ; kmr5@westchestergov.com; 'Khaled Hajjeh' ; 'JohnPaul Cunningham'
Subject: Verde 5935 - Fulton Ave Bridge - 5/23/18 Successful Main Bridge Operation

All,

As you all may have heard already, after last night's testing procedures the bridge is in full main operation with all interlocks working. All limit switches are set/adjusted to proper settings (cams will be adjusted to final 70 degree settings when steel interference is resolved). To address the issue of brakes, there are/were NO issues with brakes locking/binding. All the brakes were inspected and cleaned of any debris. The covers remain off for anyone to inspect during tonight's demonstrations and will be put on after. The issue was with VFD parameter settings and relay timing. The brakes now smoothly engaged and disengage. We preliminarily ran the full sequence successfully 9 consecutive times with no faults. If anyone has any questions before tonight's shift please let me know. Thank you.

Nicholas Rahaniotis

VERDE

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www.verdeelectric.com

BOARD OF LEGISLATORS
COUNTY OF WESTCHESTER

Your Committee is in receipt of a transmittal from the County Attorney, pursuant to Section 158.11(5) of the Westchester County Charter for the adoption of an Act which, if adopted by this Board, would authorize the Westchester County Attorney to settle the claims of E.E. Cruz & Company, Inc. ("Cruz") against the County of Westchester (the "County") for additional compensation under Contract No. 11-503-REV (the "Contract") for Rehabilitation of the Fulton Avenue Bridge over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor (the "Project").

By a resolution approved on May 12, 2016, the Board of Acquisition and Contract awarded the Contract for the Project to Cruz for the sum of $14,816,000.00. The scope of work for the Project included the removal and replacement of the steel bridge deck, stringers and bracing, sidewalk panels and various secondary members of the Fulton Avenue Bridge (the "Bridge"), a bascule movable bridge over the Hutchinson River.

On or about February 2, 2020, Cruz submitted to the Commissioner of the Department of Public Works and Transportation (the "Commissioner") a verified statement in the form of a "Final Application for Payment," along with accompanying materials for this consideration, listing the following two (2) separate claims for additional compensation with respect to work performed by Cruz on the Project seeking additional payment under Contract Item Nos. 589.01, 800.23 and 800.34 for the total sum of $1,744,719.00 (the "Claims"):

1. Removal of Existing Steel – Contract Item 589.01.

This claim concerns the removal of existing steel from the Bridge. For Contract Item 589.01, the County's engineering consultant, Henningson, Durham & Richardson Architecture and Engineering, in association with HDR Engineering Inc. ("HDR"), provided the approximate

quantity of 178,684 pounds of existing steel to be removed from the Bridge with the "Pay Unit" being measured in pounds. In its bid for the Project, Cruz provided a "Unit Bid Price" of $8.00 per pound resulting in an "Amount Bid" of $1,429,472.00 for the removal of existing steel from the Bridge. To date, Cruz has been paid $1,429,472.00 for the removal of 178,684 pounds of steel; however, Cruz seeks an additional payment of $1,292,000.00 from the County, claiming that it removed a total of 340,184 pounds of existing steel from the Bridge, or 161,500 pounds over and above the amount approximated by HDR.

2. Floorbeam 5 Interferences – Item Nos. 800.23 and 800.34.

This claim concerns in-field modifications along the upper and lower flanges of the Bridge's Floorbeam 5. The in-field modifications were required when the upper and lower flanges made contact with separate joints during test operations on November 13, 2017 and February 15, 2018, respectively. Cruz claims that the interferences were the result of errors in the design documents prepared by HDR, and claims that it is entitled to additional compensation in the total sum of $452,718.00 for the resulting in-field modifications.

Your committee has been informed that the Commissioner issued a determination (the "Determination") with respect to the Claims for additional compensation under Contract Item No. 589.01, 800.23 and 800.34 on August 27, 2020, finding as follows:

1. Removal of Existing Steel – Item 589.01.

The total amount of existing steel Cruz removed from the Bridge was 311,402.2 total pounds—an overrun of 132,718.2 pounds from the original estimate provided by HDR. Applying the $8.00 per pound figure bid by Cruz, Cruz is entitled to additional payment of $1,061,745.60 for the removal of existing steel from the Bridge pursuant to the terms of the Contract.

2. Floorbeam 5 Interferences – Item Nos. 800.23 and 800.34.

Cruz is not entitled to additional compensation for the in-field modifications performed by Cruz with respect to Contract Item Nos. 800.23 and 800.34.

3. Disincentive Assessment – Item No. 698.93940015.

Under Contract Item No. 698.93940015, substantial completion of the project was required on or before November 22, 2017. The work was not substantially complete until May 24, 2018—183 days beyond the substantial completion date. Accordingly, pursuant to a Special Notice annexed to the Project's bid specification, a disincentive assessment of $2,000.00 per day must be applied, reducing the sum due Cruz under Contract Item No. 589.01 to $695,745.60 (183 days x $2,000/day).

Cruz, thereafter, advised that it disagrees with the Commissioner's determination and intends to challenge the determination via an Article 78 proceeding.

The Department of Law, the Department of Public Works, and the principals of Cruz have engaged in negotiations in order to avoid the potential additional expense of litigation. These negotiations have resulted in a proposed agreement (the "Settlement Agreement") to settle Cruz's Claims, conditioned on this Honorable Board's approval. Pursuant to the proposed Settlement Agreement, the County is to pay Cruz the sum of $850,000.00 in full and final satisfaction of its Claims. The County's engineer for the Project, HDR, is to contribute $154,254.40 to the $850,000.00 settlement amount with Cruz via direct payment to the County pursuant to a separate agreement with the County, which is the subject of separate legislation being submitted to your Honorable Board for approval simultaneously with this legislative package. In consideration of the $850,000.00 payment to Cruz, Cruz and the County will release each other from all claims

related to Cruz's Claims, and the County will rescind and retract the disincentive assessment made within the Commissioner's Determination, identified as Item No. 698.93940015.

Your Committee has come to the determination that entering into the Settlement Agreement, without incurring the potential additional expense of further litigation, hearing, or adjudication of any issues of fact or law, is in the best interest of the County.

Your Committee recommends that this Board approve the accompanying Act authorizing the County to settle the Claims of Cruz.

An affirmative vote of a majority of the Board is required to pass this legislation.

Dated: White Plains, New York
_____, 2021

ACT NO.: -2021

AN ACT authorizing the County Attorney to settle on behalf of the County of Westchester the claims of E.E. Cruz & Company, Inc. against the County for additional compensation under Contract No. 11-503-REV for Rehabilitation of the Fulton Avenue Bridge over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor, New York.

BE IT ENACTED by the Board of Legislators of the County of Westchester as follows:

Section 1. The County Attorney is hereby authorized to settle the claims of E.E. Cruz & Company, Inc. for additional compensation under Contract No. 11-503-REV for Rehabilitation of the Fulton Avenue Bridge over Hutchinson River (BIN 3348220), City of Mount Vernon and Village of Pelham Manor, New York, (the "Contract") alleged by Cruz in its verified statement in the form of a "Final Application for Payment," dated February 2, 2020, revised July 2, 2020, with respect to Contract Item Nos. 589.01, 800.23 and 800.34 (the "Claims"), by the payment of $850,000.00 in full and final satisfaction of the Claims, with the County's engineer for the Project, Henningson, Durham & Richardson Architecture and Engineering, in association with HDR Engineering, Inc., contributing $154,254.40 of the $850,000.000 payment, and Cruz and the County releasing each other from all claims related to Cruz's Claims, and the County rescinding and retracting the disincentive assessment made in the Commissioner of Public Works and Transportation's Determination, dated August 27, 2020, identified as Item No. 698.93940015.

§2. The County Attorney, or his designee, is hereby authorized to execute and deliver all documents and take such actions as the he deems necessary and desirable to accomplish the purposes hereof.

§3. This Act shall take effect immediately.

FISCAL IMPACT STATEMENT

SUBJECT: COW v EE Cruz ☐ NO FISCAL IMPACT PROJECTED

OPERATING BUDGET IMPACT

To Be Completed by Submitting Department and Reviewed by Budget

SECTION A - FUND

☒ GENERAL FUND ☐ AIRPORT FUND ☐ SPECIAL DISTRICTS FUND

SECTION B - EXPENSES AND REVENUES

Total Current Year Expense $ 850,000

Total Current Year Revenue _____

Source of Funds (check one): ☒ Current Appropriations ☐ Transfer of Existing Appropriations

☐ Additional Appropriations ☐ Other (explain)

Identify Accounts: 366-46-RB2UU-00-6210 : $296,000 ;
366-46-RB03S-01-6210: $281,000 ;
101-46-6000-4310: $273,000

Potential Related Operating Budget Expenses: Annual Amount _____

Describe: _____

Potential Related Operating Budget Revenues: Annual Amount _____

Describe: _____

Anticipated Savings to County and/or Impact on Department Operations:

Current Year: _____

Next Four Years: _____

Prepared by: Michael Dunn

Title: Assistant Budget Analyst

Department: Budget

Date: March 5, 2021

Reviewed By: _____
Budget Director

Date: 3/5/21