

**Thames River Bridge Project
Grouting Program Contract Modifications**

Final Report



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Report Addressed To:

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Report Issued By:

**NATIONAL RAILROAD PASSENGER CORPORATION
OFFICE OF INSPECTOR GENERAL - AUDITS
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WASHINGTON, DC 20002**

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Thames River Bridge Project

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Executive Summary

We completed an audit of contract modification costs submitted by [REDACTED] for pier grouting activities on the Thames River Bridge Span Replacement [REDACTED] is the prime construction contractor hired by the National Railroad Passenger Association (Amtrak) for this project. Construction contract, [REDACTED] between Amtrak and [REDACTED] was modified in order to stabilize two bridge piers that began to move during construction [REDACTED] certified grouting program costs, for the cost plus modifications, totaled [REDACTED]

The objective of this audit was to determine whether the cost or pricing data submitted by [REDACTED] in support of the grouting program was accurate, complete, and current. The audit was performed at [REDACTED] facilities in [REDACTED] and, at the project office in [REDACTED]. The audit scope encompassed all cost accounting and financial information necessary to accomplish the audit objective.

We started this audit in the spring of 2008 by reviewing [REDACTED] first submission of grouting program costs totaling [REDACTED]. We questioned \$376,209 of the original submission due to overstated subcontractor material costs, incorrect subcontractor equipment rates, and incorrectly allocated direct and indirect labor charges. We discussed the questioned items with [REDACTED] and Amtrak project management [REDACTED] agreed to an initial reduction of \$290,175 which was removed from [REDACTED] final certification of grouting program costs.

We completed the audit in February 2009 after [REDACTED] submitted its final certified costs for the grouting program in the amount of [REDACTED]. The results of our audit [REDACTED] final certified costs indicated that the [REDACTED] of final costs included \$86,034, which we had previously questioned. The \$86,034 represents the amount of subcontractor overbilling for incorrect equipment rates. As a result, we are recommending that Amtrak seek an additional price reduction for the grouting program in the amount of \$86,034.

**Thames River Bridge Project
Grouting Program Contract Modifications**

Final Report # 308-2007

TABLE OF CONTENTS

	PAGE
I. BACKGROUND	1
II. OBJECTIVE	1
III. SCOPE.....	1
IV. SPECIAL CIRCUMSTANCES AFFECTING THIS EVALUATION.....	2
V. METHODOLOGY	2
VI. EVALUATION OF INTERNAL CONTROLS	3
VII. PRIOR AUDIT COVERAGE.....	3
VIII. FINDINGS AND RECOMMENDATIONS	3
Appendix A:.....	5

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

I. BACKGROUND

In September 2005, the National Railroad Passenger Corporation (Amtrak) executed contract number [REDACTED] with [REDACTED] to replace the movable span on the Thames River Bridge in [REDACTED]. Due to an emergency situation, Amtrak modified the contract to add a grouting program designed to stabilize two bridge piers that unexpectedly started to move during construction. Pier movement had to be corrected in order properly support the new movable span. The grouting program was developed by [REDACTED] a subcontractor to [REDACTED] Amtrak's construction manager for the project. Amtrak added the grouting program to the contract in November 2006; approving Modification number [REDACTED] for [REDACTED]. Four additional modifications were subsequently approved, resulting in a total grouting program not-to-exceed amount of [REDACTED]. The grouting program delayed the bridge construction completion date from February 28, 2008 to September 19, 2008.

A clause included in Amtrak's contract with [REDACTED] entitled "*Changes in the Work*" (Section 41.8) requires the prime contractor and subcontractors to certify that the cost or pricing data submitted in support of a modification is accurate, complete, and current. This clause also states that in the event that the contractor certified cost or pricing data is subsequently found to be inaccurate, incomplete, or not current, Amtrak is entitled to a reduction in the modification price equal to the difference between the modification price and the price that the change order would have been, had the contractor submitted accurate, complete, and current data.

II. OBJECTIVE

The objective of this audit was to determine if the [REDACTED] submitted cost data for the grouting program was accurate, complete and current.

III. SCOPE

The scope of our audit encompassed the costs for the five contract modifications for the Thames River Bridge grouting program. A [REDACTED] official certified final grouting costs of [REDACTED] as accurate, current and complete on February 12, 2009. The grouting program took place during 2007. The audit scope encompassed all cost accounting and financial information necessary to accomplish the audit objective.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

IV. SPECIAL CIRCUMSTANCES AFFECTING THIS EVALUATION

On April 23, 2008, Amtrak's construction manager, [REDACTED] provided us a technical evaluation as to the quantitative and qualitative aspects of [REDACTED] submitted grouting program costs. [REDACTED] summarized its opinion by stating, [REDACTED] confirms that all the amounts and quality of the labor, equipment and material for the submitted costs were necessary to perform the required grouting program."

However, the audit found that [REDACTED] did not adhere to contract provisions for equipment charges [REDACTED] billed Amtrak more than [REDACTED] for roughly 100 pieces of equipment. The general provisions section 42.5(c) of the contract required [REDACTED] to bill Amtrak equipment charges based on the actual hours that the equipment was used on the grouting program. [REDACTED] did not bill actual hours, and instead, billed Amtrak an amount equal to 40 hours per week for the equipment assigned to grouting program. In discussing this issue with Amtrak on-site representatives we learned that there was an informal agreement between [REDACTED] and Amtrak that allowed [REDACTED] to deviate from the contract provision which required the billing of actual equipment hours. Amtrak representatives stated that the project benefited from this agreement because some of the equipment was used 24 hours per day for 7 days per week, and that equipment overtime hours were not billed to Amtrak. Amtrak contracting personnel also believe that the project benefited from the informal agreement.

We are not recommending any adjustments relating to the quantitative aspects to the equipment charges due to the fact that we could not determine actual hours used for each piece of equipment; together with the fact that Amtrak management and construction manager representatives believe that Amtrak benefited from the 40 hour per week agreement.

V. METHODOLOGY

Our methodology included a review of documentation submitted in support of the claimed costs, as well as, interviews of Amtrak project personnel and [REDACTED] representatives. The audit was performed in two phases. We started this audit in the spring of 2008 by reviewing [REDACTED] first submission of grouting program costs totaling [REDACTED]. We questioned \$376,209 of the original submission due to overstated subcontractor material costs, incorrect subcontractor equipment rates, and incorrectly allocated direct and indirect labor charges. We discussed the questioned items with [REDACTED] and Amtrak project management. [REDACTED] agreed with \$290,175 of the questioned costs and removed this amount from its final certification of grouting program costs.

We completed the audit in February 2009 after [REDACTED] submitted its final certified costs for the grouting program in the amount of [REDACTED].

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

VI. EVALUATION OF INTERNAL CONTROLS

We did not review [REDACTED] system of internal controls. We concluded that the audit objective could be achieved more efficiently by performing substantive audit testing. However, we performed sufficient audit work to determine that [REDACTED] cost accounting system provided adequate segregation of costs for the grouting program from costs incurred for the base contract.

VII. PRIOR AUDIT COVERAGE

The Office of Inspector General completed an audit of a [REDACTED] contract modification (Audit Report Number 306-2006) which was executed to perform concrete borings needed to evaluate bridge piers. Cianbro's submitted cost data for the concrete boring modification was not considered entirely accurate, complete, or current. We questioned \$16,000 which included overstated material, labor, equipment, and subcontractor costs.

VIII. FINDINGS AND RECOMMENDATIONS

Finding 1 [REDACTED] Submitted Cost or Pricing Data Include Questionable Subcontractor Equipment Costs

Discussion

[REDACTED] certified final grouting program costs of [REDACTED] in February, 2009. The submitted amount was not considered entirely accurate, complete, or current as required by General Provisions Section 41.8 since it included subcontractor non-discounted equipment charges resulting in an overcharge of \$86,034.

Our earlier review of [REDACTED] cost submission of [REDACTED] identified \$376,209 of audit adjustments. [REDACTED] agreed with \$290,175 of these adjustments and eliminated them from their February, 2009 final certified submission of [REDACTED]. However, \$86,034 of questioned costs related to overstated subcontractor equipment charges are included in [REDACTED] final submission. As a result, it is our opinion that Amtrak is still due a price reduction of \$86,034 from [REDACTED] final submittal of [REDACTED]. Details of the recommended adjustments are presented in the Appendix of this report.

Recommendation

Amtrak should pursue a price reduction in the amount of \$86,034.00 from [REDACTED] submitted grouting program price of [REDACTED] in accordance with contract general provisions section 41.8.

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

Management Response:

The Contracting Agent, Procurement and Materials Management responded to the draft audit report stating that "An exception is taken to an additional price reduction of \$86,304.00 for the subject grouting program." Several documents were attached to management's response explaining rationale for this exception taken.

One of the attachments contained a detailed analysis of [REDACTED] actual equipment usage on the grouting program indicating that [REDACTED] did not invoice [REDACTED] for all of the hours that the equipment was used and had [REDACTED] done so; the costs would have been approximately \$179,000 more than billed which would more than offset the \$86,304.00 questioned costs. Another attachment indicated that the [REDACTED] percent equipment rate reduction requirement contained in [REDACTED] contract with Amtrak would not apply to [REDACTED] since [REDACTED] (Subcontractor) was not even a party to the initial Contract with [REDACTED] (the prime) at the time the contract was awarded. Therefore, no flow down Contract provisions existed at the time between [REDACTED] and [REDACTED]

Auditor's Conclusion:

After considering management's response we believe that the finding should stand. It is our opinion that clauses in the prime contract should flow down to any subcontractors that are subsequently employed by the prime contractor regardless of when the prime and subcontractors enter into their agreements. It is also our opinion that the prime contractor has a responsibility to ensure that any subcontractors brought onto the project comply with the provisions of the prime contract. It should be noted that [REDACTED] complied with all other aspects of the contract equipment provisions except for [REDACTED] equipment rate reduction. As a result, we recommend that Amtrak attempt to leverage [REDACTED] noncompliance with the equipment rate reduction when negotiating a final settlement. With regards to [REDACTED] underbilling of hours, we can only state that we have no evidence that would lead us to conclude that [REDACTED] is not entitled to the additional hours, however, it should be noted that [REDACTED] had the opportunity to submit these costs in the course of the project.

This concludes our report.

Audit Staff:

Supervisor - Audits



Roy Wiegand

Senior Director - Audits

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

Appendix A:

**Grouting Program Contract Modifications
Analysis of Modification Price**

<u>Cost</u>	[REDACTED]	<u>Costs</u>	<u>Audit</u> <u>Recommended</u>	<u>Notes</u>
<u>Element</u>	<u>Submitted Costs</u>	<u>Questioned</u>	<u>Costs</u>	
Direct Material				
Direct Labor				
Labor Indirect Costs				
[REDACTED] Equipment				
Subtotal				
Overhead @				
Subtotal				
Profit @				
[REDACTED] Own Costs				
Subcontractor Costs		[REDACTED]		2
Mark-up on Subs @		[REDACTED]		3
Rental Equipment				
Totals		<u>\$86,033.85</u>	\$	1

* off by \$.01 due to rounding

Thames River Bridge Project
Grouting Program Contract Modifications
Report Number 308-2007

Notes:

1. [redacted] final certified submitted price for the grouting program of [redacted] does not include the following items which were identified in an earlier submission. [redacted] agreed to reduce their costs by \$290,174.90 as follows:

Unallocable Material (Performance Bond)	[redacted]
Overstated Extended Overhead Labor	[redacted]
Labor Indirect Costs	[redacted]
Overhead	
Profit	
Overstated Subcontracts	[redacted]
Mark-up	
Total	<u>\$290,174.90</u>

2. [redacted] contract with Amtrak requires that equipment charges be computed using rates published in the *Rental Rate Blue Book*. The contract calls for the published monthly/hourly rates to be discounted by [redacted] percent. Our analyses indicated that [redacted] complied with the equipment rate computation clause and discounted published rates by [redacted] percent; however its subcontractor [redacted] did not comply with this requirement and charged 100 percent of the hourly rates to the grouting program. Although [redacted] contract with [redacted] did not specifically address the [redacted] percent equipment rate discount; [redacted] contract required all work performed be in accordance with [redacted] contract with Amtrak. [redacted] agreed that [redacted] did not discount equipment rates per contract terms, however Cianbro stated that [redacted] did not bill for equipment overtime hours which would offset the failure to discount the blue book rates. (It should be noted that [redacted] did not bill Amtrak for overtime equipment hours for grout work either; however, [redacted] did discount the equipment blue book rates per contract terms.) Neither [redacted] nor [redacted] provided equipment documentation to prove any offset. Therefore, we continue to question these costs.

3. The submitted costs were based on applying the [redacted] % mark-up rate per contract terms to submitted subcontractor costs. The cost questioned amount of [redacted] represents the difference between the submitted amount of [redacted] and audit recommended subcontractor amount of \$ [redacted] derived by applying the contract mark-up rate to audit recommended subcontracting amount.