



Memorandum



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To: Honorable Mayor Carlos A. Gimenez
Honorable Chairwoman Rebeca Sosa
and Members, Board of County Commissioners, Miami-Dade County

From: Patra Liu, Interim Inspector General 

Date: September 25, 2013

Subject: Transmittal and Abstract of the OIG's Final Report *Audit of PTP-funded Concrete and Asphaltic Contracts Managed by the Miami-Dade County Department of Public Works and Waste Management*; IG11-15

Attached please find the above-captioned final audit report issued by the Office of the Inspector General (OIG). This report covers concrete and asphaltic contracts awarded under the People's Transportation Plan (PTP) between 2004 and 2010, which were administered by the Public Works and Waste Management Department (PWWM).¹ The results of the OIG's audit were presented to the department in July 2013. Thereafter, this report, as a draft, was provided to PWWM for its official review and comment. PWWM provided a written response, which is included in report Appendix A.

Overall, PWWM agreed that it must improve its current record keeping procedures "in order to provide the general public with a clear and more transparent record of services being delivered, and how public funds are being expended." In addition, PWWM provided a number of explanatory accounts describing its processes and clarified some of the pay item variances noted in our report. Lastly, PWWM agreed with two out of the three report recommendations related to improving its record keeping practices. PWWM disagreed with one recommendation claiming that it may lead to increased costs for the County. For the two agreed upon recommendations, PWWM stated that it will "develop authoritative documentation" for its work order estimates (Recommendation 1), and that it "will immediately implement authoritative documentation" for contingency usage and will prepare the County's contingency use form (Recommendation 3). Accordingly, pursuant to Section 2-1076(d)(2) of the Code of Miami-Dade County, the OIG requests that PWWM management provide a status report in 90 days specific to these Recommendations 1 and 3. We request to receive this report on or before December 27, 2013.

Lastly, the OIG would like to thank PWWM personnel for making available their records and time during the course of its review. For reading convenience, a one-page abstract of the report follows.

Attachment

cc: Members of the Citizens' Independent Transportation Trust
c/o Charles Scurr, Executive Director
Alina T. Hudak, Deputy Mayor, Office of the Mayor
Antonio Cotarelo, Interim County Engineer/Assistant Director of Construction, PWWM
Frank Aira, Acting Chief, Traffic Signal and Signs Division, PWWM
Alejandro Martinez-Esteve, PTP Coordinator, PWWM
Cathy Jackson, Director, Audit and Management Services Department
Charles Anderson, Commission Auditor

¹ The Mayor's reorganization of County government in October 2011 unified the Public Works Department and the Department of Solid Waste Management into the Department of Public Works and Waste Management (PWWM). Our audit scope included PTP contracts awarded and administered by the former Public Works Department prior to this reorganization. Notwithstanding, in this report we will refer to PWWM as the cognizant agency.

ABSTRACT — FINAL AUDIT REPORT IG11-15

This OIG audit report contains a number of observations and comments, followed by three recommendations. The OIG observed that the subject PWWM contracts, whether single-site or countywide (work order), often had significant pay item variances when comparing their estimated quantities to actual quantities used. There are two issues with this condition: one issue is why these variances occurred, and another is why they are unexplained in PWWM project files. The accuracy of PWWM project estimating of pay items and associated item quantities is important because accurate estimating establishes a baseline for evaluating the effectiveness of PWWM's estimating capabilities and contractor performance. Conversely, inaccurate estimating may affect prospective contractor bid prices or percentage factors (i.e., overhead and profit mark-up) and can influence PWWM's efficient and timely use of PTP funds.

OIG Auditors evaluated five site-specific contracts ranging in individual value from \$971,539 to \$24,060,890. These contracts contained 585 individual pay items that contained from 41 items to 171 items per contract, out of which 454 items (77.6%) were inaccurately estimated. Within these contracts, there was a wide range of variances, including 172 pay items that were under-estimated (29.4% of total pay items) by anywhere from 0.23% to 6406.49% and 190 pay items that were over-estimated (32.5% of total pay items) by anywhere from 0.01% to 99.47%. The monetary impact of the 172 under-estimated pay items requiring additional quantities resulted in increased project costs totaling \$3,379,996. Mitigating this monetary impact were 190 over-estimated pay items requiring less quantities, resulting in decreased project costs totaling \$5,089,640. Similarly, decreased project costs also resulted from 92 pay items whose costs were included in the original work order estimate, totaling \$1,007,509, that were not used at all.

In addition, OIG Auditors looked at 14 (out of the 49) work orders issued under six of the countywide contracts that we sampled. The total value of the six contracts is \$6,310,000 and the 14 work orders were issued for \$1,826,395. These 14 work orders ranged in value from \$6,018 to \$308,906 and contained 308 individual pay items that ranged from eight to 30 items per work order, out of which 295 items (95.78%) were inaccurately estimated. Within these work orders, there was a wide range of variances, including 47 pay items that were under-estimated (15.26% of total pay items) by anywhere from 0.41% to 6548.61% and 74 pay items that were over-estimated (24.03% of total pay items) by anywhere from 0.48% to 99.31%. The monetary impact of the 47 under-estimated pay items requiring additional quantities resulted in increased project costs totaling \$169,978. There were also increased project costs, totaling \$412,350, resulting from adding 103 pay items to the original work scope. Mitigating this monetary impact were 74 over-estimated pay items requiring less quantities, resulting in decreased project costs totaling \$448,754. Similarly, decreased project costs also resulted from 71 pay items whose costs were included in the original work order estimate, totaling \$384,441, that were not used at all.

Regarding PWWM's contract and work order contingency usage, we recognize the practicality of having a contingency allowance account in any type of construction project. Its mere existence, however, should not be a welcome sign to use it without documented justification. Contingency usage may be directly borne from a truly unforeseen circumstance but it, just as well, may be used to cover PWWM estimating errors or contractor misuse leading to unnecessary costs. Explanatory documentation specifically describing such uses, including management's approval thereof, must be maintained in PWWM project files.

In conclusion, whether related to pay item variances or contingency uses, it is readily apparent that PWWM needs to improve its project planning and the timely and accurate completion of project records documenting project conditions, its own performance, and that of the contractor.

Miami-Dade County

Office of the Inspector General



Final Audit Report

**Audit of PTP-funded Concrete and Asphaltic Contracts Managed by the
Miami-Dade County Department of Public Works and Waste Management**

IG11-15

September 25, 2013

MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL
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I. INTRODUCTION

This report presents the results of the Office of the Inspector General's (OIG) audit of concrete and asphaltic contracts awarded under the People's Transportation Plan (PTP) between 2004 and 2010, which are administered by the Miami-Dade County (County) Public Works and Waste Management Department (PWWM).¹ The PTP, which was approved by the voters in November 2002, imposes a half-penny surtax for transportation and transportation-related projects and programs throughout the County. Projects and programs funded by the PTP surtax include free Metromover service; free public transportation for seniors over age 65; Metrorail extension projects; traffic signalization upgrades; various municipal projects; and highway, roadway and neighborhood improvements throughout the County. The OIG selected the aforementioned concrete and asphaltic contracts for review as part of our oversight of the PTP in general and as part of our charge to randomly select County contracts for audit.

II. TERMS USED IN THIS REPORT

BCC	Board of County Commissioners
County	Miami-Dade County
CSBE	Community Small Business Enterprise Program
LPF	Lowest Percentage Factor
LRB	Lowest Responsive Bid
MCC	Miscellaneous Construction Contracting Program (includes MCC 7040 Plan and MCC 7360 Plan contracts)
OIG	Office of the Inspector General
PTP	People's Transportation Plan
PWWM	Public Works and Waste Management Department
RPQ	Request for Price Quotation
SBD	Small Business Development (a division of the Regulatory and Economic Resources Department)

III. OIG JURISDICTIONAL AUTHORITY

In accordance with Section 2-1076 of the Code of Miami-Dade County, the Inspector General has the authority to make investigations of County affairs; audit, inspect and review past, present and proposed County programs, accounts, records, contracts, and transactions; conduct reviews and audits of County departments,

¹ The Mayor's reorganization of County government in October 2011 unified the Public Works Department and the Department of Solid Waste Management into the Department of Public Works and Waste Management (PWWM). Our audit scope included PTP contracts awarded and administered by the former Public Works Department prior to this reorganization. Notwithstanding, in this report we will refer to PWWM as the responsible agency.

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offices, agencies, and boards; and require reports from County officials and employees, including the Mayor, regarding any matter within the jurisdiction of the Inspector General.

IV. RESULTS SUMMARY

Based on the 21 contracts selected for review, we observed that contract and work order estimated pay item quantities were often either under- or over-estimated by large margins when compared to actual usage quantities. In addition, we observed during our review of project files:

- questionable/non-existent documentation supporting original single-site contract work and work order pay items and estimated quantities; and
- questionable/non-existent documentation supporting (material) changes to original contract/work order pay items and estimated quantities, including the use of contingency funds.

Frequent, large, and undocumented pay item variances are “red flags” that require management’s attention. The accuracy of PWWM project estimating of pay items and associated item quantities is important because:

- accurate estimating establishes a baseline for evaluating the effectiveness of PWWM’s estimating capabilities and contractor performance; and
- inaccurate estimating may affect prospective contractor bid prices or percentage factors (i.e., overhead and profit mark-up) and can influence PWWM’s efficient and timely use of PTP funds.

In summary, the OIG believes that PWWM needs to improve its project planning and the timely and accurate completion of project records documenting project conditions, its own performance, and that of the contractor.

V. AUDITEE RESPONSE AND OIG REJOINDER

We provided a copy of this report, as a draft, to PWWM for its discretionary written response to our audit. A response was received from ASD and it is attached to this report, as Appendix A. Overall, PWWM agreed that it must improve its current record keeping procedures, “in order to provide the general public with a clear and more transparent record of services being delivered, and how public funds are being expended.” In addition, PWWM provided a number of explanatory accounts describing its processes and clarified some of the pay item variances noted in our report. Lastly,

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PWWM agreed with two out of the three report recommendations related to improving its estimating and record keeping practices. PWWM disagreed with one recommendation claiming that it may lead to increased costs for the County. For the two agreed upon recommendations, PWWM stated that it will “develop authoritative documentation” for its work order estimates (Recommendation 1), and that it “will immediately implement authoritative documentation” for contingency usage and will prepare the County’s contingency use form, an example of which was attached to its response (Recommendation 3).

The OIG is pleased with the PWWM’s response and encourages it to promptly implement its proposed actions.

VI. BACKGROUND: CONTRACTING OVERVIEW

PWWM uses both capital construction contracts and miscellaneous construction contracts to obtain the needed construction services for its PTP projects.

Capital Construction Contracts

Capital construction contracts are used for larger dollar value (>\$5,000,000) site-specific projects and are awarded based on an open, competitive solicitation bid process (i.e., an Invitation to Bid). Contract awards are typically based on the lowest responsive bid, most often resulting in a not-to-exceed lump-sum contract value that is payable on a percentage of completion basis.

Miscellaneous Construction Contracts

The County’s Miscellaneous Construction Contracting Program² (MCC) is designed to facilitate construction contracts whose maximum contract value is five million dollars (<\$5,000,000).³ The MCC program includes two specific plans, as described below:

- **MCC 7040 Plan:** A 100% set-aside for Community Small Business Enterprise (CSBE) firms. The 7040 contractor pool consists of firms certified by and registered with the County’s Small Business Development Division (SBD) as having met certain pre-qualification requirements. The pool is

² The MCC Program was originally managed by the Office of Capital Improvements (OCI); however, the Program was transferred to the Procurement Division of the Internal Services Department in October 2011, as part of the County Mayor’s Reorganization Plan.

³ Five million is the current contract limit; earlier these contracts were limited to \$2.5 million.

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designed to affect the maximum distribution of work among qualified firms, in accordance with the contractor's license and abilities to do the work.

- **MCC 7360 Plan**: This plan is used only when federal funding is involved or when a 100% CSBE goal is not attainable, due to the unavailability of certified vendors in the required trade. The 7360 is an open pool accessible to all vendors and requires that contractors be registered with SBD prior to the award of a Request for Price Quotation (RPQ).

County departments seeking to procure construction services under the ceiling threshold may access the plans. Depending on the construction services specified by the department, the resulting contract could be for a discrete, stand-alone project; it could be for an indeterminate number of individual small construction, repair, or alteration activities; or it could be for open contracts that are work order based and where no specific item quantities have been determined prior to bid.

PWWM's PTP Contracting Practices

For the PTP concrete and asphaltic contracts, PWWM specifies the work scope in its RPQs as either site-specific or countywide. The latter, described as countywide locations, typically list a few work sites that are expected to be completed under the contract, but disclaim that the list is subject to change. Furthermore, the RPQs specify the manner in which the contract will be awarded. The two award methods are by lowest responsive bid (LRB) or by lowest percentage factor (LPF). To arrive at these determinations, the RPQ lists all the expected construction tasks (i.e., pay items) that the department believes may be necessary to complete the work scope. Estimated quantities associated with each may or may not be included in the RPQ.

For an LRB contract award, the lowest cost is determined by taking PWWM's pay items and quantities multiplied by the unit prices provided by the contractor, and then totaling the extended amounts into one contract "bid" amount.

For an LPF contract award, a unit price for each pay item is pre-established by PWWM and listed in the RPQ. Each prospective contractor bids a multiplier (covering its overhead, profit, etc.) that will be applied to the pre-established unit prices. The contract award is based on the contractor bidding the lowest multiplier. The product of the pre-established unit price and the contractor's multiplier is the amount that PWWM will then pay for that item.

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Estimating Process for Site-specific Contracts and Countywide Work Orders

PWWM personnel told the OIG that their estimating process, in part, includes an in-house drawings review; at times a field engineering survey; or an in-house transfer of requirements from another PWWM division, such as Traffic and Engineering. The result is a project estimate showing the expected pay items and their associated quantities. This information is formalized by way of a contract RPQ or work order estimate awarded/issued to the contractor that will be performing the work. PWWM's payment process includes, in part, verification of actual quantities used by way of on-site field inspections and a *Certificate of Completion* prepared by a PWWM Project Manager and approved by various PWWM personnel, including the Construction Coordinator and the Chief of Construction.

VII. OBJECTIVES, SCOPE, AND METHODOLOGY

For PTP-funded concrete and asphaltic contracts that were awarded between October 1, 2004 and September 30, 2010, OIG Auditors:

- assessed PWWM's administration of aforementioned contracts from contract solicitation to contract close-out, and all the steps in between including work order issuance and payment processing; and
- determined whether PTP funds were managed and expended in accordance with guidelines set forth in the PTP ordinance and related authoritative documentation.

Our audit scope included 55 PTP roadway resurfacing improvement; intersection improvement; ADA sidewalk accessibility; miscellaneous concrete, bike path, and related contracts totaling \$128,466,745 that were solicited and awarded between 2004 and 2010, from which we selected 21 contracts totaling \$64,122,495 to be evaluated for contract/work order administration practices and that PTP funds were spent appropriately. These 21 contracts included five site-specific contracts totaling \$44,075,405 and 16 countywide contracts totaling \$20,047,090. Within the countywide contracts, we also performed a detailed examination of 14 individual work orders totaling \$1,826,395 that were issued under six of these contracts that have a total award value of \$6,310,000.

We examined these contracts and work orders for such issues as estimating accuracy (i.e., quantity/price variances), payment processing durations (in particular for 7040 contracts), and Request for Price Quotation (RPQ) solicitation practices (use of 7040 and 7360 contractor pools). The 55 contracts and the 21 selected sample contracts are comprised of the following:

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Table 1 Contract Population and Sample

	7040 (CSBE)	7360 (Open)	Capital Construction	Totals
Contract Population				
Quantity	15	23	17	55
Amount	\$5,989,174	\$24,556,118	\$97,921,453	\$128,466,745
Contract Sample				
Quantity	3	11	7	21
Amount	\$2,126,539	\$12,403,485	\$49,592,471	\$64,122,495
The 21 contracts include those that are:				
Countywide	2	10	4	16
	\$1,155,000	\$10,914,000	\$7,978,090	\$20,047,090
Site-specific	1	1	3	5
	\$971,539	\$1,489,486	\$41,614,380	\$44,075,405
The 21 contracts include those that have:				
RPQ specified sites	3	9	3	15
	\$2,126,539	\$10,101,486	\$41,641,380	\$53,842,405
No RPQ specified sites	0	2	4	6
	\$0	\$2,302,000	\$7,978,090	\$10,280,090
The 21 contracts include those that have:				
RPQ estimated quantities	3	7	7	17
	\$2,126,539	\$7,799,486	\$49,592,470	\$59,518,495
No RPQ estimated quantities	0	4	0	4
	\$0	\$4,604,000	\$0	\$4,604,000
The 21 contracts include those awarded to the bidder with:				
Lowest percentage factor	2	10	0	12
	\$1,155,000	\$10,914,000	\$0	\$12,069,000
Lowest responsive price	1	1	7	9
	\$971,539	\$1,489,486	\$49,592,470	\$52,053,495

Source: PWWM's automated recordkeeping *Public Works System* and contract files.

To accomplish our objectives, we obtained and reviewed PTP-related ordinances and PWWM procedures, supporting documentation, and records. To understand PWWM's internal procedures for administering PTP projects, we conducted walk-throughs and interviewed PWWM personnel who oversee the program. We also prepared various flow charts that depict the contract award and work order issuance processes. We obtained and reviewed PWWM's internally generated report of all PTP projects.

Additionally, we independently obtained PTP project information from the Capital Improvement Information System (CIIS) database and extracted data related to all PTP contracts managed by PWWM. To assess PWWM's planning prior to issuing a site-specific RPQ or issuing a work order, we prepared a contract/work order pay item usage analysis and prepared schedules detailing the noted variances between the estimated contract/work order pay items and the pay items actually used.

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Our analysis was prepared using a project's latest *Project Requisition & Payment Certificate* (i.e., contractor payment requisition) processed by PWWM.

This audit was conducted in accordance with the Principles and Standards for Offices of Inspector General promulgated by the Association of Inspectors General. The AIG Principles and Standard are in conformity with the Government Auditing Standards issued by the Comptroller General of the United States (December 2011 Revision).

VIII. OIG OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

A. *Project Planning and Administration*

PWWM includes in its RPQs, at times, pay items and item quantities for pricing purposes only. However, while the items may be those commonly used, the pay items themselves and their quantities, as shown in the RPQs, do not correlate to any specific project or projects. Thus, there are no measurable variances when comparing original pay items and their original estimated item quantities to actual usage. However,

- For site-specific contracts with RPQ estimated quantities and for countywide contracts with listed sites with RPQ estimated quantities, there should be some authoritative documentation supporting the estimated pay items and their item quantities contained in the RPQ. To the extent that, if at project completion, there are large variances occurring between the estimated pay items and/or their quantities and actual usages or use of contingency funds, such variances and uses should be explained and supported by authoritative documentation.
- For countywide contracts without RPQ designated sites, the later issued individual work orders showing estimated pay items and quantities should be supported by authoritative documentation supporting the estimates for the specified project. To the extent that, if at project completion, there are large variances occurring on these work orders between the estimated pay items and/or their quantities and actual usages or use of contingency funds, such variances or uses should be explained and supported by authoritative documentation.

PWWM project files did not contain authoritative support for original contract RPQ and work order estimates; nor later, contain authoritative support explaining pay item variances and contingency uses. Variance measures can be:

- under-estimated pay items or over-estimated pay items,

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- estimated pay items and associated quantities equal to used pay items and associated quantities [0% variance],
- estimated pay items not used at all [100% variance], or
- added pay items (i.e., those pay items not in the original estimate).

In addition, contract and work order variances can be calculated on total contract or work order estimated dollar value versus actual contract/work order value (without regard to individual types of pay item changes and/or pay item quantity variances).

1. Site-specific contracts

The five site-specific contracts ranged in individual value from \$971,539 to \$24,060,890. These contracts contained 585 individual pay items that contained from 41 items to 171 items per contract, out of which 454 items (77.6%) were inaccurately estimated. Within these contracts, there was a wide range of variances, including:

- 172 pay items that were under-estimated (29.4% of total pay items) by anywhere from 0.23% to 6406.49%
- 190 pay items that were over-estimated (32.5% of total pay items) by anywhere from 0.01% to 99.47%
- 92 pay items that were estimated (15.73% of total pay items) but not used at all.

Table 2 Site-specific Contract Pay Item Quantity Variances

Contract Pay Items	# of Pay Items	Percent	Quantity Variance Range	Average Item Variance
Under-estimated	172	29.40%	0.23% - 6406.49%	288.03%
Over-estimated	190	32.48%	0.01% to 99.47%	34.29%
Not used	92	15.73%	N/A	N/A
Subtotal	454	77.61%		
Estimate = Actual	131	22.39%	N/A	N/A
Total	585	100.00%		

The monetary impact of the 172 under-estimated pay items requiring additional quantities resulted in increased project costs totaling \$3,379,996. Mitigating this monetary impact were 190 over-estimated pay items requiring less quantities, resulting in decreased project costs totaling \$5,089,640. Similarly, decreased project costs also resulted from the 92 pay items whose costs were included in the original work order estimate, totaling \$1,007,509, that were not used at all. These monetary impacts,

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depicted in terms of gross variances in relation to the original estimated costs, are charted in the table below.

Table 3 Site-specific Contract Pay Item Cost Variances (Based on Original Estimated Cost)

Contract Pay Items	Original Estimated Cost	Percent of Original Estimated Cost	Actual Cost	Percent of Actual Cost	Gross Variance	Percent of Gross Variance
Under-estimated	\$14,164,036	32.14%	\$17,544,030	42.42%	\$3,379,996	35.66%
Over-estimated	\$21,823,382	49.51%	\$16,733,752	40.46%	\$5,089,640	53.70%
Not used	\$1,007,509	2.29%	\$0	0.00%	\$1,007,509	10.64%
Subtotal	\$36,994,927	83.94%	\$34,277,782	82.88%	\$9,477,145	100.00%
Estimate = Actual	\$7,080,477	16.06%	\$7,080,477	17.12%	\$0	N/A
Total	\$44,075,404	100.00%	\$41,358,259	100.00%	\$9,477,145	21.51%

2. Countywide (Work Order) contracts

OIG Auditors looked at 14 (out of the 49) work orders issued under six of the sampled countywide contracts. The total value of the six contracts is \$6,310,000 and the 14 work orders were issued for \$1,826,395. These 14 work orders ranged in value from \$6,018 to \$308,906 and contained 308 individual pay items that ranged from eight to 30 items per work order, out of which 295 items (95.78%) were inaccurately estimated. Within these work orders, there was a wide range of variances, including:

- 47 pay items that were under-estimated (15.26% of total pay items) by anywhere from 0.41% to 6548.61%
- 74 pay items that were over-estimated (24.03% of total pay items) by anywhere from 0.48% to 99.31%
- 103 pay items that were added, i.e., contract pay items that were not included in the original work orders (33.44% of total pay items)
- 71 pay items that were estimated (23.05% of total pay items) but not used

Table 4 Countywide (Work Order) Pay Item Quantity Variances

Work Order Pay Items	# of Pay Items	Percent	Quantity Variance Range	Average Item Variance
Under-estimated	47	15.26%	0.41% - 6548.61%	433.54%
Over-estimated	74	24.03%	0.48% - 99.31%	44.92%
Added	103	33.44%	N/A	N/A
Not used	71	23.05%	N/A	N/A
Subtotal	295	95.78%		
Estimate = Actual	13	4.22%	N/A	N/A
Total	308	100.00%		

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The monetary impact of the 47 under-estimated pay items requiring additional quantities resulted in increased project costs totaling \$169,978. There were also increased project costs, totaling \$412,350, resulting from adding 103 pay items to the original work scope. Mitigating this monetary impact were 74 over-estimated pay items requiring less quantities, resulting in decreased project costs totaling \$448,754. Similarly, decreased project costs also resulted from the 71 pay items whose costs were included in the original work order estimate, totaling \$384,441, that were not used at all. These monetary impacts, depicted in terms of gross variances in relation to the original estimated costs, are charted in the following table.

Table 5 Countywide (Work Order) Pay Item Cost Variances (Based on Original Estimated Cost)

Work Order Pay Items	Original Estimated Cost	Percent	Actual Cost	Percent	Gross Variance	Percent of Gross Variance
Under-estimated	\$132,322	7.24%	\$302,300	19.19%	\$169,978	12.01%
Over-estimated	\$1,303,697	71.38%	\$854,943	54.26%	\$448,754	31.70%
Added	\$0	0.0%	\$412,350	26.17%	\$412,350	29.13%
Not used	\$384,441	21.05%	\$0	0.0%	\$384,441	27.16%
Subtotal	\$1,820,460	99.67%	\$1,569,593	99.62%	\$1,415,523	100.0%
Estimate = Actual	\$5,937	0.33%	\$5,937	0.38%	\$0	N/A
Total	\$1,826,397	100.0%	\$1,575,530	100.0%	\$1,415,523	100.0%

B. Contingency Use

OIG Auditors determined that contingency usage was directly related to the poor contract and work order estimating practices described above.

1. Site-specific Contracts

PWWM's standard contract, in part, describes the contract contingency allowance account as reserving funds to pay for PWWM-directed work "that is beyond the scope of established pay items." Moreover, "[t]he Contractor shall perform such work only upon receipt of an executed Miami-Dade County Contingency Allowance Account Expenditure Form from the [PWWM] Engineer." This form shall document such work and the authorization to use the contract contingency allowance.

Our examination of the five sampled site-specific contracts found that the contingency allowance account was utilized in each case; however, in none of the five contract files did we find the required executed *Miami-Dade County Contingency Allowance Account Expenditure Form(s)*. Nevertheless, we did locate a *Negotiation Acceptance Memorandum(s)* documenting PWWM's approval of unit pricing for the "added" pay items, but these records did not contain information that would allow us to determine why the items were needed and what were the needed quantities.

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Table 6 Site-specific Contract Contingency Use

Contract	20090095	20090238	20070487	20070575	20070626
Base Contract Amount	\$1,359,620	\$892,308	\$6,891,832	\$21,922,463	\$9,129,634
Contingency	\$129,865	\$79,231	\$654,387	\$2,138,428	\$877,636
Total Contract Value	\$1,489,485	\$971,539	\$7,546,220	\$24,060,891	\$10,007,270
Base Contract Expenditures	\$1,258,137	\$816,953	\$6,794,885	\$22,852,139	\$8,293,239
Contingency Use	\$55,619	\$1,296	\$158,591	\$663,202	\$464,188
Total Expenditures	\$1,313,756	\$818,249	\$6,953,476	\$23,515,342	\$8,757,427
% Contingency Used	43%	2%	24%	31%	53%
% of Total Expenditures	4%	0.2%	2%	3%	5%

2. Countywide (Work Order) Contracts

For work orders issued under the countywide contracts, a contingency allowance was often added to the original work order estimate even though this practice is not described in the contract documents. Moreover, the OIG typically observed contingencies ranging between 5 to 15 percent of the estimated work order amount. In a few instances, we found work orders issued without a contingency, and in a few other cases found contingencies exceeding 15%.

We analyzed contingency usage on four work orders in detail. We noticed that PWWM needed to use the work order contingency to pay for under-estimated pay item quantities and for adding other pay items that were not included in the original work order estimate. We have two issues regarding this practice. The first issue is that even with PWWM's typical practice of over-estimating needed pay items and associated quantities, as we noted earlier, PWWM still needed additional funds to pay for the completed work. The second issue, also similar to what we noted earlier, is PWWM's failure to prepare written documentation supporting its use of contingency funds.

PWWM explained that it uses a work order contingency to pay for unforeseen pay item overruns or to add pay items not included in the work order estimate (but are items listed in the contract's RPQ). This use differs somewhat from how PWWM explains its use of a contract contingency. However, we note that in its work order estimates, PWWM uses the same nomenclature (pay item number 999-02 and line item description Contingency Allowance) that it uses in its site-specific contract listing of pay items. Similarly, too, is that PWWM does not document why it needs to add pay items or add quantities to existing pay items. The following Table 7 summarizes contingency use under four work orders issued under two contracts.

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Table 7 Work Order Contingency Use

Contract #	20090314	20090314	20100427	20100427
Work Order #	16	18	4	11
Original Work Order Estimate	\$148,658	\$182,068	\$263,979	\$280,824
Contingency Allowance Added	\$14,866	\$18,207	\$39,597	\$28,082
Total Work Order Amount	\$163,523	\$200,275	\$303,576	\$308,906
Actual Work Order Pay Item Expenditures	\$162,682	\$193,851	\$275,767	\$290,200
Original Work Order Estimate	\$148,658	\$182,068	\$263,979	\$280,824
Actual Work Order Pay Item Expenditures	\$162,682	\$193,851	\$275,767	\$290,200
Net Over Expenditures Not Including Contingency Use	\$14,025	\$11,783	\$11,789	\$9,376

Our analysis of these four work orders is as follows:

Contract # 20090314, Work Order # 16: \$63,330 (42.60%) of the \$148,657 original work order estimate (not including contingency funds) was the result of over-estimated pay item quantities, including estimated but not used pay items. In other words, these pay items and quantities were not needed to complete the work order. They included \$41,380 (27.84%) of pay items with excess quantities and \$21,950 (14.77%) of pay items with no estimated quantities used at all.

- At completion, \$77,355 (47.55%) of the \$162,682 actual work order expenditures (including the use of \$14,025 of contingency) were for under-estimated pay item quantities and for added pay items. Only \$85,327 (52.45%) of the \$162,682 final work order expenditure represented pay items included in the original work order estimate, which also included 94.34% (\$14,025 / \$14,866) of the original work order contingency.

Contract # 20090314, Work Order # 18: \$48,805 (26.81%) of the \$182,068 original work order estimate (not including contingency funds) was the result of over-estimated pay item quantities, including estimated but not used pay items. In other words, these pay items and quantities were not needed to complete the work order. They included \$38,055 (20.90%) of pay items with excess quantities and \$10,750 (5.90%) of pay items with no estimated quantities used at all.

- At completion, \$60,587 (31.25%) of the \$193,851 actual work order expenditures (including the use of \$11,783 of contingency) were for under-estimated pay item quantities and for added pay items. Only \$133,263 (68.75%) of the \$193,851 final work order expenditure represented pay items included in the original work order estimate, which also included 64.72% (\$11,783 / \$18,207) of the original work order contingency.

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Contract # 20100427, Work Order # 4: \$59,418 (22.51%) of the \$263,979 original work order estimate (not including contingency funds) was the result of over-estimated pay item quantities, including estimated but not used pay items. In other words, these pay items and quantities were not needed to complete the work order. They included \$59,418 (22.51%) of pay items with excess quantities.

- At completion, \$71,207 (25.82%) of the \$275,767 actual work order expenditures (including the use of \$11,789 of contingency) were for under-estimated pay item quantities and for added pay items. Only \$203,980 (73.97%) of the \$275,767 final work order expenditure represented pay items included in the original work order estimate, which also included 29.77% (\$11,789 / \$39,597) of the original work order contingency.

Contract # 20100427, Work Order # 11: \$136,635 (48.66%) of the \$280,824 original work order estimate (not including contingency funds) was the result of over-estimated pay item quantities, including estimated but not used pay items. In other words, these pay items and quantities were not needed to complete the work order. They included \$136,635 (48.66%) of pay items with excess quantities.

- At completion, \$146,011 (50.31%) of the \$290,200 of the actual work order expenditures (including the use of \$9,376 of contingency) were for under-estimated pay item quantities and for added pay items. Only \$143,516 (49.45%) of the \$290,200 final work order expenditure represented pay items included in the original work order estimate, which also included 33.39% (\$9,376 / \$28,082) of the original work order contingency.

We recognize the practicality of having a contingency allowance account in any type of construction project. Its mere existence, however, should not be a welcome sign to use it without documented justification. Contingency usage may be directly borne from a truly unforeseen circumstance. It could also be (very likely be) the direct result of poor project planning. In the present cases, our analysis shows that it is directly related to poor work order estimation.

C. *OIG Commentary*

We believe that the frequent, large, and undocumented pay item variances that we observed are “red flags” that require management’s attention. We acknowledge that our observations are based on a small sample and that we only performed simple comparisons between estimates and actuals, and looked for documented explanations when there were differences. However, the prevalence of these conditions indicates

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that they are likely representative of the typical results of PWWM's standard practices applied to other comparable contracts.

PWWM's original contract/work order estimates should represent both a not-to-exceed value and an approved scope of work as prescribed by PWWM's choice of pay items and associated item quantities. What we observed, however, is that most often they appear to represent only not-to-exceed values. While actual project expenditures were typically within the total work order authorization amount (including contingency), we observed a significant number of changes to the original pay items—and/or to their estimated quantities—without written justification.

We assume that PWWM personnel evaluated the project work scope, including the means and methods to get the job done, in order to determine those pay items and the quantities needed. However, PWWM files did not contain authoritative support for original RPQ and work order estimates, nor did they contain authoritative support explaining later pay item variances. We acknowledge that PWWM personnel, when queried about variances, often could explain what happened; however, their explanations never made it into the project files.

Notwithstanding the value of such personal knowledge, complete project files should provide the necessary records to document accountability and transparency of PWWM's project administration. PWWM should possess authoritative records showing that it actively managed the project—not just passively observed it. If a PWWM estimate is (materially) inaccurate, for whatever reason, PWWM should make the effort to determine why the estimate was inaccurate and justify why changes were necessary.

Moreover, it should include this information in the project file. This effort should be contemporaneous with the occurrence of the change. But if it did not get done then, it should at least be done as part of a post-project evaluation. Such efforts would go a long way in demonstrating PWWM's commitment to being a responsible custodian of PTP (or any other public) funds, as well as its commitment to a "continuous improvement" process governing its contract administration activities. Having more accurate baseline data would positively affect future RPQ forecasting, which in turn would provide prospective contractors with a more accurate basis on which to submit their bids.

The consistent over-estimating of pay items and their associated quantities gives rise to a pool of unexpended funds that the contractor, apparently with PWWM's knowledge, can use to re-scope the project work plan; whether to better suit the project needs or its needs (e.g., increased profit) we do not know. Re-scoping is shown by the number of over-estimated pay items, decreases to their quantities and by the addition of pay items not originally included in the estimate, as well as by the number of under-

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estimated pay items with corresponding increases to their estimated quantities. As noted earlier, evidence shows that often this leads to lower project costs and a showing of good performance by the contractor because it completed a project for less money than anticipated.

Lastly, we note that PWWM pays only for actual usage, as verified by field inspection, so there is some assurance that the pay items paid for, in fact, were actually used. However, the observed changes in pay items and their quantities indicate that PWWM and the contractor had two different visions about how to complete the work scope. It appears that the work scope when completed was not done so in the same manner and/or with the same materials as contemplated by PWWM. The contractor's showing of good performance (i.e., staying within the authorized total work order amount) is tempered by the fact that it may be mostly, if not entirely, due to PWWM's poor estimating. It is not possible to measure performance when the baseline measure is corrupted by bad data.

If in fact the contractor's good performance is attributed to its correctly re-scoping the project's means and methods, then a question arises about PWWM's apparent lack of information (or ability) that caused it to inaccurately estimate the work scope in the first place. In conclusion, given the evidence, it is readily apparent that PWWM needs to improve its project planning and the timely and accurate completion of project records documenting project conditions, its own performance, and that of the contractor.

IX. RECOMMENDATIONS

1. PWWM should ensure that a comprehensive pre-award on-site engineering inspection is completed and documented before issuing a work order.

PWWM Response – *Similar to the estimates provided by signed and sealed drawings on site specific projects, PWWM will develop authoritative documentation for the estimation of work order driven contracts.*

2. PWWM should consider adding a requirement that the contractor conduct its own on-site inspection and drawings review that would result in a contractor-submitted estimate. PWWM would then compare this contractor estimate to its own estimate to arrive at a final agreed upon value.

PWWM Response – *The bid documents typically include provisions which require that the contractor*

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conduct a site investigation prior to submitting a bid. Failure on the part of the bidder to completely or properly evaluate any factors of costs prior to bidding shall not form a basis for additional compensation if awarded a Contract. An additional requirement that the contractor provide an estimate would potentially lead to additional costs which would presumably be passed on to the County.

3. PWWM should maintain an audit trail when there is a material change in contract/work order estimates and/or contingency use. For contingency use, PWWM should prepare a *Miami-Dade County Contingency Allowance Account Expenditure Form* and maintain an executed copy in its files.

PWWM Response — *PWWM will immediately implement authoritative documentation clearly explaining discrepancies which exceed a 10% variance in the actual use of pay items versus the estimated amount. Additionally, PWWM will immediately implement the use of the Miami-Dade County Contingency Allowance Account Expenditure Form to document the use of a contract's contingency allowance account. This document will be used in conjunction with the existing Negotiated Acceptance Memorandum currently used to document the need for additional pay items, and the contractor's acceptance of the associated unit pricing.*

* * * * *

Pursuant to Section 2-1076(d)(2) of the Code of Miami-Dade County, the OIG requests that PWWM management provide a status report in 90 days specific to the forms to be implemented as discussed in PWWM's responses to Recommendations 1 and 3. We request to receive this report on or before December 27, 2013.

Lastly, the OIG would like to thank PWWM personnel for making available their records and time during the course of its review.

Miami-Dade County

Office of the Inspector General



OIG Final Audit Report

Appendix A

Public Works and Waste Management Department Response

Audit of PTP-funded Concrete and Asphaltic Contracts Managed by the Miami-Dade County Department of Public Works and Waste Management

IG11-15

Memorandum



Date: September 5, 2013

To: Patra Liu, Interim Inspector General
Office of the Inspector General

From: Kathleen Woods-Richardson, Director 
Public Works and Waste Management Department

Subject: Response to OIG Draft Audit Report IG11-15

I would like to thank you and your staff for conducting a thorough audit of the Public Works and Waste Management Department's (PWWM) management of concrete and asphaltic contracts funded under the People's Transportation Plan (PTP) between 2004 and 2010. The purpose of the audit was to determine PWWM's compliance with applicable legal and statutory requirements in the administration of contracts. The determination of compliance included testing expenditures for propriety, and assessing internal controls over record keeping and financial reporting. I was encouraged by discussions during your office's presentation of the audit findings on July 25, 2013, and I am pleased to note that the draft audit report does not show any findings demonstrating a lack of internal controls, or that funds have been misused, misappropriated, or mismanaged. I would respectfully request that this be made clearer in the final version of the report. Additionally, several statements within the draft audit report which seemingly imply a certain level of mismanagement or negligence by staff require further clarification. Specifically, statements referencing "questionable/non-existing" documentation should be removed. As discussed during the presentation, and as explained in the balance of this Memorandum, project files include supporting documentation for variances and the use of contingency funds. What PWWM will improve is the providing of this information in a more readily available format.

The following section of this Memorandum will respond to comments, statements, and conclusions included in the draft audit report, in the same sequence in which they are presented in the report.

Project Planning and Administration

The Draft Audit Report provides that based on the 21 contracts selected for review, it was observed that a number of the estimated pay items were often under or over estimated by large margins when compared to actual quantities utilized. These variances are the main subject matter of the draft audit report. PWWM does not disagree with the observations and acknowledges that there are deviations between the estimated quantities and the actual utilization of certain pay items. This is inherent in the planning process of roadway projects, where initial estimations are based on anticipated project limits and basic assumptions of existing conditions, and can be undertaken months to years prior to the implementation of a project. For site specific projects, estimated costs and quantities are supported by design plans that are meticulously prepared after much evaluation of site conditions such as land elevations, soil type, and utility locations, and plans are signed and sealed by a professional engineer. This process takes nine (9) to 12 months for a one-mile roadway capacity improvement project after it has been awarded to a consultant for design services. Estimates for work order contracts (e.g., roadway resurfacing, sidewalk improvements) are prepared by staff based on an analysis of above ground observations of existing conditions, utility clearances (no as-built drawings), and experience by PWWM staff, and do not include signed and sealed design plans. This process is followed in order to expedite smaller projects that can be successfully implemented through this design/estimation process. Therefore, a greater variability of the quantities will occur for Countywide work order based contracts than for site-specific contracts. Nonetheless, in either case, the actual quantities utilized, and any variances from the estimated quantities, are directly impacted by many factors such as: changes in project limits, value engineering decisions, changes in construction methods, unforeseen field

conditions, public input, projects undertaken by others in the vicinity of the planned work, and maintenance of traffic. Notwithstanding this, work is customarily completed under budget, and as referenced in the Draft Audit Report, "PWWM pays only for actual usage, as verified by field inspection, so there is some assurance that the pay items paid for, in fact, were actually used."

Finally, in order to better document this inherent variability, PWWM will immediately implement authoritative documentation clearly explaining discrepancies which exceed a 10% variance. Additionally, similar to the estimates provided by signed and sealed drawings on site specific projects, PWWM will develop authoritative documentation for the estimation of work order driven contracts.

1. Site-specific Contracts

For site specific contracts, PWWM personnel will immediately begin to provide documentation to account for changes to pay items and estimated quantities when the need to use the contingency allowance becomes necessary. Every time the contingency allowance is to be used, a Miami-Dade County Contingency Allowance Account Expenditure Form (attached) will be completed along with written explanation to the project file documenting the reason(s) for adding pay items or adding quantities to existing pay items. Additionally, variances exceeding 10% between the estimated quantities and actual usage or use of contingency funds will be fully detailed by project managers with approval of their supervisors once the project is completed. These instances are typically based on sound engineering judgment and are documented in the project's files. For example, the pay items referenced on Page 8 of 16 with the largest variances were due to:

- **Variance – 6,406.49% under estimated (Barricades)**

The increase was necessary to maintain the safety on the job site. The barricades were increased due to the need to detour traffic as a result of adjacent ongoing projects by others. Furthermore, this variance while significant when seen as a percentile change, only represented a \$36,517.00 difference on a contract with an awarded value of \$24.06 million (0.16% of contract value).

- **Variance – 4,464.00% under estimated (Staked Silt Fence)**

The variance was caused by the need to address the approximate one (1) mile of construction which fronted a highly sensitive and designated Natural Forest Community, requiring a staked silt fence protection as stipulated in the DERM Permit secured after award of the contract. Furthermore, this variance while significant when seen as a percentile change, only represented a \$8,928.00 difference on a contract with an awarded value of \$971,538.71 (0.92% of contract value).

2. Countywide (Work Order) Contracts

As stated above, some degree of variation between estimated and actual usage of pay items is customary in the construction industry as the implementation of projects adjusts to field conditions. An acceptable threshold for such a variation is 10%, with instances above this percentage typically due to unforeseen conditions which only arise during construction. This also accounts for the need to add a pay item or not use a pay item originally contemplated in the work. In all cases adjustments are based on sound engineering judgment and are documented in the project's files. For example, the pay items referenced on Page 9 of 16 with the largest variances were due to:

- **Variance – 6,548.61% under estimated (Milling Asphalt Pavement)**

This was as a result of actual work including the full milling of the roadway, when only partial milling was considered at the time the estimate was prepared. The reason full milling was not originally considered was based on the roadway in question not having concrete gutters, which typically allows for the possibility of placing new asphalt as an overlay, increasing the structural

value of the road. This variance while significant when seen as a percentile change, represents a \$31,119.00 difference on a work order with an estimated value of \$258,829.27 (12.15% of work order value).

- **Variance – 3,183.60% under estimated (Bituminous Material Adjustment)**

The Bituminous Material Adjustment is paid based on a formula and values provided by the Florida Department of Transportation on a monthly basis. The values vary based on the market price of oil, which affect the pricing of asphalt. PWWM has no control over this variance. This variance while significant when seen as a percentile change, only represents a \$6,367.20 difference on a work order with an estimated value of \$200,274.98 (3.18% of work order value).

It is important to note that for Countywide work order contracts supporting documentation for pay items and quantities exist in the project file. Variances of estimated pay items and quantities are reflected in the daily report, weekly report, field diary, and in some cases photographs. Moving forward, this information will be supplemented by the use of authoritative documentation providing justification for deviations from estimated quantities as well as the need to add pay items to a work order. Additionally, as referenced above PWWM will immediately utilize authoritative documentation for the estimation of work order driven contracts.

3. Contingency Use

Although not expressly stated within the Draft Audit Report, PWWM's use of the contingency allowance account is in accordance with Miami-Dade County Code and all applicable rules and regulations.

Site-Specific Contracts

PWWM will immediately implement the use of the *Miami-Dade County Contingency Allowance Account Expenditure Form* to document the use of a contract's contingency allowance account. This document will be used in conjunction with the existing *Negotiated Acceptance Memorandum* currently used to document the need for additional pay items, and the contractor's acceptance of the associated unit pricing.

Countywide (Work Order) Contracts

For Countywide Work Order Contracts, the contingency allowance account estimated for each individual work order is based on the complexity of the work. The summation of use of the contingency allowance account for all work orders issued under a particular contract is not to exceed 10% of the overall contract award as specified in the contract documents. Any exceedance in this amount is documented and accounted through the Change Order process. Moving forward, PWWM will immediately implement the use of the *Miami-Dade County Contingency Allowance Account Expenditure Form* to document the use of a contract's contingency allowance account. This document will be used in conjunction with the existing *Negotiated Acceptance Memorandum* currently used to document the need for additional pay items, and the contractor's acceptance of the associated unit pricing.

Conclusion

PWWM acknowledges that existing record keeping procedures must be improved in order to provide the general public with a clear and more transparent record of the services being delivered, and how public funds are being expended. However, the statements provided within the draft audit report give the impression that a certain level of compliance is not in place. PWWM project files contain documentation supporting the quantities estimated for projects, as well as documentation as to changes in the actual work performed. As discussed in the Audit Exit Meeting, documentation regarding changes within projects, including the use of contingency funds was found by the OIG in the audit process. The comments were limited to the time and effort required by the auditors to search the

project records and project managers' daily reporting logs to obtain the necessary information. The appropriate concern to be noted is the extent to which a person needs to review project records to find the needed detail or explanation for the complete project information is unreasonable. Such a burden creates an adverse impact on the public's perception and greatly hinders the general public's ability to readily evaluate PWWM's performance on a given project.

Finally, PWWM will address the OIG's three (3) recommendations as follows:

1. **OIG Recommendation** - *PWWM should ensure that a comprehensive pre-award on-site engineering inspection is completed and documented before issuing a work order.*

PWWM Response - Similar to the estimates provided by signed and sealed drawings on site specific projects, PWWM will develop authoritative documentation for the estimation of work order driven contracts.

2. **OIG Recommendation** - *PWWM should consider adding a requirement that the contractor conduct its own on-site inspection and drawings review that would result in a contractor-submitted estimate. PWWM would then compare this contractor estimate to its own estimate to arrive at a final agreed upon value.*

PWWM Response - The bid documents typically include provisions which require that the contractor conduct a site investigation prior to submitting a bid. Failure on the part of the bidder to completely or properly evaluate any factors of costs prior to bidding shall not form a basis for additional compensation if awarded the Contract. An additional requirement that the contractor provide an estimate would potentially lead to additional costs which would presumably be passed on to the County.

3. **OIG Recommendation** - *PWWM should maintain an audit trail when there is a material change in contract/work order estimates and/or contingency use. For contingency use, PWWM should prepare a Miami-Dade County Contingency Allowance Account Expenditure Form and maintain an executed copy in its files.*

PWWM Response - PWWM will immediately implement authoritative documentation clearly explaining discrepancies which exceed a 10% variance in the actual use of pay items versus the estimated amount. Additionally, PWWM will immediately implement the use of the *Miami-Dade County Contingency Allowance Account Expenditure Form* to document the use of a contract's contingency allowance account. This document will be used in conjunction with the existing *Negotiated Acceptance Memorandum* currently used to document the need for additional pay items, and the contractor's acceptance of the associated unit pricing.

C: Alina T. Hudak, Deputy Mayor, Office of the Mayor
Antonio Cotarelo, P.E., Interim County Engineer, PWWM
Frank Aira, P.E., CFM, Acting Chief, Traffic Signals and Signs Division, PWWM
Alejandro Martinez-Esteve, RA, LEED AP, PTP Coordinator, PWWM



Miami-Dade Public Works and Waste Management Department

CONTRACT CONTINGENCY ALLOWANCE EXPENDITURE AUTHORIZATION

Contract Title: _____
 Contract No.: _____ Work Order No.: _____ Date: _____
 Proposal Item No.: _____
 Contract Contingency: _____ Previously Approved: _____ Balance: _____
 This Contingency Allowance No.: _____
 To Contractor: _____

You are hereby requested to make the following changes in the plans and specifications for this project and to perform the work accordingly, subject to all contract stipulations and covenants.

Description of work authorized: (Continue on Page 2 if necessary)

Total Contingency Allowance (this order) : _____

This payment authorization includes not only all direct costs of the contractor such as labor, material, job overhead, and profit markup but also includes all costs for modifications or changes in sequence of work to be performed, delays, rescheduling, disruptions, extended direct overhead or general overhead, acceleration, material or other escalation which includes wages, and other impact costs.

CONTRACT DESCRIPTION

SEE ATTACHED JUSTIFICATION

Accepted for Contractor, By: _____

Title: _____ Date: _____

Recommended: _____ Approved: _____
 Construction Manager Signature Chief, Construction Signature

Approved: _____ Approved: _____
 A / E of Record Signature Director Signature

Contract No.: [REDACTED]

Contingency Allowance

Authorization No.: [REDACTED]

CONTRACT CONTINGENCY ALLOWANCE

DESCRIPTION of work authorized (continued)

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JUSTIFICATION

The above described change in plans and/or specifications is necessary for the following reasons:

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TIME EXTENSION

--