

**CITY OF MIAMI BEACH**  
**OFFICE OF THE INSPECTOR GENERAL**



**FINAL REPORT**

**OIG Report No. 20-07**

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*Management of the Palm & Hibiscus Neighborhood Infrastructure Improvement Project*

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**February 8, 2021**

## **AUTHORITY**

The City of Miami Beach's Inspector General shall have the power to report and/or recommend to the City Commission and/or City Manager whether a particular project or program is, or was, necessary and, if deemed necessary, whether the method used for implementing the project or program is, or was, efficient both financially and operationally.

Any review of a proposed project or program shall be performed in such a manner as to assist the City Commission and City Manager in determining whether the project or program is the most feasible or efficient solution to a particular need or problem. Monitoring of an existing project or program may include reporting whether the project is on time, within budget, and in conformity with plans, specifications, and applicable law.

Function authority and powers  
Office of the Inspector General  
City of Miami Beach Code  
Section 2-256 (d) (5)

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## Aerial photograph of west Palm Island in April 2020



Palm & Hibiscus Islands



04-27-20

*Figure 1 Aerial photograph of west Palm Island, with view of North and South Coconut Lanes and Palm Island Avenue taken April 27, 2020 by Smith Aerial Photos and submitted to City of Miami Beach by Lanzo Construction Co. Fla.*

## I. ABBREVIATIONS AND ACRONYMS USED IN THIS REPORT

ACM	Assistant City Manager
CIP	Capital Improvement Projects Office
CAS	Craig A. Smith & Associates
DCP	Design Criteria Package
EOR	Engineer of Record
FFE	First Floor Elevation
DERM	Miami-Dade Division of Environmental Resources Management
GMP	Guaranteed Maximum Price
HOA	Homeowners Association Star, Palm and Hibiscus Islands
NAVD	North American Vertical Datum
OIG	Office of Inspector General
SFWMD	South Florida Water Management District

## **II. RELEVANT LAWS, REGULATIONS, AND AUDIT CRITERIA**

- Florida Statutes Title XIX (Public Business) Chapter 287.055 “Consultant Competitive Negotiation Act” applies to the selection by local governments of a design professional to prepare the Design Criteria Package (DCP) and serve as the agency’s representative during the award of a design-build construction contract
- Florida Status Title XXXII (Regulation of Professions and Occupations) Chapter 471 (Engineering) establishes legal requirements for licensing of professional engineers in Florida, authorizes a Board of Professional Engineers and the discipline for professional misconduct.
- Florida Administrative Code (FAC) 61G15 establishes the Florida Board of Professional Engineers and the Board’s Professional Responsibility Rules. The rules describe the roles and obligations of an Engineer of Record (EOR) “in responsible charge” of preparing construction plans for submission to regulatory agencies to obtain permits.
- Miami Dade County Code Chapter 24 (Environmental Protection) Sec. 24.48.(1 -11) This section of the MDC Code provides the applicable local law for the permitting of stormwater drainage systems that empty into bodies of water in Miami-Dade County and the basis of DERM requirement for permit applications.
- Internal Standards for the Federal Government, U. S. Government Accountability Office, provides generally accepted standards for operating an effective system of internal controls and audit criteria for identifying risks to internal controls that can prevent help government agencies from achieving their objective, including management override of internal controls.

### III. EXECUTIVE SUMMARY

This report was prepared in response to requests by City Commissioners Michael Gongora and Mark Samuelian that the Inspector General investigate the unpermitted construction of drains on public and private property during the Palm and Hibiscus Neighborhood Infrastructure Improvement Project (“the project”), and the increase in the cost and complexity of the unfinished project. Their requests followed statements made during public hearings in October 2019 about the prolonged delay in the City’s efforts to resolve a cease and desist order issued by the Miami-Dade Division of Environmental Resources Management (DERM) that stopped work on the project

During the project, the City of Miami Beach ("City") and Lanzo Construction Co. Florida (“Lanzo”) were jointly and severally responsible for obtaining a Class II permit from the Division of Environmental Resource Management (DERM), within the Miami-Dade County Department of Regulatory and Economic Resources (RER), to construct a stormwater drainage system in compliance with the Miami-Dade County Code. The City and Lanzo also were responsible for obtaining an Environmental Resources Permit from the South Florida Water Management District (SFWMD). The City’s contract with Lanzo made the design-builder responsible for preparing permit application on behalf of the City as owner and permittee and obtaining the permits. An Engineer of Record for the stormwater drainage system was responsible for preparing, signing, and sealing construction plan and submitted the application.

Beginning in November 2015, the City and Lanzo directed two engineering firms and engineers – Craig A. Smith & Associates (CAS) with Orlando Rubio, and Wade Trim with Holly Kremers – to develop distinctly different construction plans for different purposes. Rubio finished plans based on a standard design to give to the permitting agencies. Kremers was assigned to revise those plans to provide connections for private-side yard drains in each lot on west Palm Island. The City and Lanzo obtained a Class II permit from DERM, and an Environmental Resources Permit from the SFWMD in May 2016 after submitting outdated, revised, and superseded construction plans and technical documents that described a standard right-of-way drainage system. Unbeknownst to the regulatory agencies, the plans and documentation the City and Lanzo

submitted with the permit applications did not describe the stormwater drainage system that the City intended to build.

After Lanzo's design engineers had prepared nearly finished construction plans for a standard right-of-way drainage system, the City Administration decided in early October 2015 to require a design change that added a foot or more to the elevation of North and South Coconut Lanes. This decision significantly increased the risk that building up the pavement to that height would create a dam-like barrier that would trap floodwaters on adjacent private lots at lower elevations. To counter this risk, the responsible City officials made a second decision. They decided to build a public right-of-way drainage system with a different design and intended purpose that included permanent connections for privately owned yard drains in every residential lot on west Palm Island. ("private-side yard drains"). After making this decision, the responsible City officials and the Lanzo design-build team knew, or had reason to know, that such a drainage system could result in a more complicated and prolonged environmental permitting process and could present other issues that might delay the project.

Under pressure to begin construction from the City's political leaders and the Homeowners Association that represented residents on Palm and Hibiscus Islands, the Capital Projects Improvement (CIP) office directed the two engineering firms, CAS and Wade Trim, to work on different versions of construction plans for the drainage system to be used for different purposes. CAS Senior Engineer Rubio was assigned to complete the nearly-finished his plans for a standard right-of-way drainage system that would be used to obtain permits ("Rubio plans"). Wade Trim Vice President Kremers was assigned to re-engineer, redesign, and revise the Rubio plans based on a non-standard and unprecedented conceptual design for a municipal drainage system in Miami-Dade County that Wade Trim's engineers were not sure DERM would permit ("Kremers plans").

The permitting review process by DERM and the SFWMD took nearly seven months. During that period, CIP and Lanzo actively managed the parallel efforts of the two engineering firms and the City staff approved two different "100% Final Design" plans for building the drainage system on west Palm Island. The plans by Rubio were used to obtain permits. After the permits were issued, the plans by Kremers would replace and supersede the permitted plans and thereafter be used to build the essential infrastructure for a non-standard drainage system that could be connected in the future to yard drains in residential lots.

The environmental permits issued by SFWMD and DERM were based on the superseded construction plans by Rubio that did not accurately describe the stormwater drainage system the City intended to intended to construct. During the permitting review process, this legally significant change in responsibility for the plans was not disclosed to the regulatory agencies. Between December 2015 and May 2016, the CIP and Lanzo oversaw and approved the parallel work by Rubio, Kremers and their respective engineering firms on separate versions of construction plans for the same project. During this period, the City approved a final version of the standard plans by Rubio for a right-of-way drainage system that was submitted to the SFWMD in December 2015 and to DERM in March 2016 as part of City's environmental permit applications.

At that point, the permit applications, and the supporting documentation submitted to the agencies did not truthfully describe the stormwater drainage system that the City and Lanzo intended to construct. During the seven months review process, the SFWMD and DERM remained under the impression that Rubio was the Engineer of Record for the project and relied on his representations on behalf of the City. During most of this period, CIP, Lanzo and Wade Trim knew that Rubio had ceased to perform most of the functions of an Engineer of Record set forth in Florida law and that Kremers was performing the critical functions of approving engineering decisions that impact public, health and safety.

On May 5, 2016, the SFWMD unwittingly issued an Environment Resources Permit for the project based on the revised and superseded Rubio plans. On May 27, 2016, DERM did the same, unwittingly issuing a Class II permit based on plans signed and sealed by Rubio that the City did not intend to use. In both instances, the regulatory agencies relied on permit applications, construction plans, and technical documents that showed the proposed system meet water quality standard that omitted material facts and contained information that was untrue and misleading.

Once the permits were issued based on the Rubio plans, the City and Lanzo replaced those plans with the revised and different Kremers plans, that she signed and sealed in June 2016 and which the City's Public Works Department approved in July. For the next two years, the City and Lanzo used the Kremers plans to build a stormwater drainage system which included pipes that extended laterally from the mainline drainage system at the edge of the right-of-way in front of each house on west Palm Island.

The purpose of these permanent right-of-way drainpipes and stubouts was to provide connections for the future installation of yard drains in each private lot on west Palm Island. The

array of lateral pipes that extended from the main drainage pipe were fitted with connection tees or stubouts (which together comprised the stubouts) were not on the Rubio plans and were not approved by the permits issued in 2016. At no time did the City, Lanzo and Wade Trim advise the SFWMD or DERM of the significant changes in design and construction or submit the plans signed and sealed by Kremers and approved by the Public Works Department for approval.

In early 2018, the City directed Lanzo and Wade Trim to begin the design work for installing private-side yard drains in dozens of private lots. This new phase of construction would complete the City's plan to install one or more private-side yard drains in each lot using the permanent right-of-way drainpipes to connect private-side yard drains to the public drainage system. This work was not included in the City's contract with Lanzo and was not covered by the existing permits, which had been issued for construction of a drainage system in the right-of-ways. On or before February 2018, the City and Lanzo began the initial efforts for extending the drainage system onto private property. During this period, Wade Trim recommended that the City and Lanzo notify DERM and SFWMD of this new phase of construction and obtain a modification of the existing Class II permit from DERM and the Environmental Resources Permit from SFWMD. The agencies received no such notification.

In May 2018, the project's two-year Class II permit expired. When the City and Lanzo applied to DERM for a new permit, they did not disclose the Kremers plans. Instead, they misled DERM a second time by claiming that the new application for a permit was based on the long-since superseded and unused Rubio plans. The City new application for a permit was accompanied by correspondence from a Wade Trim engineer that omitted material facts and contained information that false or misleading about the drainage system under construction. The misrepresentations included a statement that significant changes had not been made to the original Rubio plans, and other statements that reinforced the fiction that the City and Lanzo were still using the Rubio plans. On May 29, 2018, DERM again unwittingly issued a new Class II permit based on the outdated construction plans prepared by Rubio.

The deception of the SFWMD and DERM continued for 31 months. It ended after a whistleblower sent the agency an email with photographs of the installation of a private-side yard drain on a residential lot on Palm Island that was connected to an unpermitted drainpipe in the right-of way. The permanent right-of-way drainage pipe was connected to the City's new stormwater drainage system that emptied into Biscayne Bay.

The circumstances and organizational pressures that led to the misleading of the SFWMD and DERM can be traced to two causes. The first was the well-intentioned efforts by former Mayor Philip Levine to accelerate the City's efforts to reduce flooding. The investigation developed no evidence that Mayor Levine ever directed or intended that CIP or Public Works not comply with state and counter permitting requirements. Levine's initial efforts achieved significant results. They included the construction of pumping stations and drainage projects that materially reduced flooding in low-lying parts and earned the City national recognition for taking innovative step to counter the threat of sea level rise. In the case of the Palm and Hibiscus project, the sustained emphasis resulted in City officials cutting corners and neglecting critical tasks the project's planning, design, and construction.

The second cause was the concurrent and equally well-intentioned efforts of the Mayor's Blue Ribbon Committee on Sea Level Rise to incorporate changes in the design criteria of stormwater drainage and neighborhood infrastructure improvement projects to counter the existential threat of climate change. The Mayor's Committee and its consulting engineer developed changes in design criteria, revisions to the City's Building Code, and justification for stormwater bond issues that, collectively, ensured a comprehensive and essential overhaul of the City's defenses against climate change. In the case of the Palm and Hibiscus project, however, the pressure and imperative to incorporate new road elevation design criteria into the project's construction led City officials to make decisions that created the circumstances and incentives contributed to the permitting violations.

The combined pressure to accelerate the project's planning and execution, and to also incorporate aggressive road elevation criteria resulted in serious override of the City's internal controls. Ultimately, these pressures reached a tipping point in October 2015, when the City made an eleventh-hour decision at the end of the project's design phase that dramatically increased the project's cost and technical difficulty. This resulted in ill-considered decisions by the responsible City staff to proceed with construction of the Palm and Hibiscus project before they had developed engineering solutions to the technical challenges, finished preparing construction plans and obtained proper permits. The City staff members managing the project who were involved in those decisions have contended that, because Lanzo was contractually responsible for obtaining permits, they had no responsibility to insure that the permit applications were accurate, complete, and in compliance with the Miami-Dade County Code requirements for such permits.

As set forth in this report, the City decided to raise North and South Coconut Lanes to a height at or near the minimum crown-of-road elevation of 3.7 feet NAVD (a measurement of sea level) at the end of the project's design phase. The City made this decision knowing that this would create a dam-like barrier that could cause new flooding and trap stormwater on dozens of private lots. To mitigate the new flood risk, the City then approved a hurriedly developed engineering solution that involved the installation of 135 yard drains in private lots. The City's approval of this solution in November 2015 required a complete revision of the near-finished plans prepared by Rubio for a drainage system with a standard design.

The City staff in charge knew the revision of the Rubio plans would require months of engineering work that could delay permitting of the project. Under pressure to proceed, the City staff decided not to wait for a new set of construction plans. In January 2016, the City Commission awarded Lanzo a \$36.5 million contract, plus 10% contingency. At the time of the award, the City did not have finished construction plans for building the stormwater drainage system, drainage studies verifying the system's expected performance, or a reliable basis for determining how much the non-standard system would cost or how long it would take to build.

Given the unprecedented nature of the system's design, Wade Trim engineers did not know whether DERM would issue a Class II permit for a public drainage system that was designed to connect to private-side system. But they did know or should have known that Section 24-48 of the Miami-Dade Code would require a separate Class II permit for the construction of each private-side drain that emptied into a body of water such as Biscayne Bay.

To be clear, this investigation developed no evidence that Mayor Levine or Blue Ribbon Committee Chairman Robins directed City staff to mislead permitting agencies. During his campaign for Mayor, Levine contended that the routine flooding of City streets was a public emergency, which it was. He was elected with a strong mandate from voters to accelerate and expand the City's efforts to reduce flooding and modernize the stormwater drainage system. During his two terms as Mayor, the record shows that he and the responsible City officials made significant progress on those objectives.

Nevertheless, the evidence compiled in this report establishes that the cumulative effect of Levine's "Get it Done" management approach set a tone at the top of City government that was translated by some City staff to justify or rationalize ill-considered decisions and actions in the case

of the Palm and Hibiscus project, that made the Mayor's primary objective of accelerating completion of the project impossible to achieve.

Design changes, cost escalation, schedule delays, and disputes with regulatory agencies are common occurrences in public works construction projects. In the case of the Palm and Hibiscus project, however, the evidence established that the project's prolonged delay and increased costs stem from serious acts of commission and omission by the City staff and Lanzo that overrode the City's internal controls and violated the Miami-Dade County Code regarding the construction of stormwater drainage systems.

This report takes a critical look at the management of a single City of Miami Beach public works project designed to reduce flooding and counter the future effects of sea level rise. The official actions and decisions that gave rise to the circumstances and pressures that culminated in DERM's enforcement action occurred over a period of seven years. While this report describes an extensive history of the project, and includes background on related topics that provide context for understanding the causes of the project's difficulties, the focus of this investigation is on the actions by City and contract staff leading to the permitting violations, the DERM enforcement action and related managerial problems.

Given the importance of an engineering background for an understanding of the project's development, the Office of Inspector General (OIG) retained a consulting engineer extensive experience in the planning, design, permitting, and managing of construction projects by local governments to assist with review of technical documents and construction plans. The consulting engineer's report is included in the Appendix. To be clear, this report does not question the quality of the engineering services provided by Wade Trim and CAS during the project; the Commission's decision to ultimately approve the connection of private-side yard drains to the system; or alleged any an critical act.

The purpose and scope of this investigation was to examine the decisions and acts that resulted in a prolonged enforcement action by DERM that has delayed completion of the project, increased its cost, and caused residents and members of the Commission to question the City Administration's capacity to manage large-scale investments to reduce flooding and counter the effects of sea level rise. The findings are focused on actions during the permitting process in 2016 and 2018 that were not consistent with the requirements of DERM and the SFWMD and an override of the internal controls, policies, and procedure that CIP uses to manage design-build

contracts. As required by ordinance, a draft report was provided to the named entities and individuals who were allowed 30 working days to provide written responses. Where appropriate, information from these are responses are were incorporated in the report.

The City received a Joint Response, and individual statements, from Assistant City Manager Eric Carpenter, Capital Improvement Projects (CIP) office Director David Martinez, and Public Works Director Roy Coley. In sum, the Joint Response contended the changes made to the permitted plans by Rubio in 2016 and shown in the Kremers plans were “immaterial” and could be disclosed to regulators at the end of the project in As-Built plans; and, further, that the City’s decision in early 2018 to begin installing private-side yard drains did not require modification of the project’s Class II permit issued by DERM and an Environmental Resources Permit (ERP) issued by SFWMD that authorized construction of a drainage system in the right-of-ways. The Joint Response said this report “demonstrates a fundamental misunderstanding of the standard procedures and practices surrounding drainage permits...Once the project is completed, the engineer of record submits signed and sealed as-built drawings, certifies the installation, and requests closure of the permit.

The Office disagrees with this view. The report applies provisions of the Miami-Dade Code 24.48 and SFWMD regulations and conditions of each permit. Since initiating the enforcement action, DERM issued Class II permits for each of the installed private-side yard drains connected the drainage system. Having first learned of the changes to the Rubio plans during a review of the draft report, SWFMD staff said the agency will require a modification of the City’s permit. During an interview with OIG staff, SFWMD Division Director Jill Creech said, “The extent of the difference between the two plans certainly would have been appropriate to have a modification.”

The Palm and Hibiscus project was always going to present the City and its design-builder with hard problems of design, engineering, and construction. Recently, City staff stated that they anticipate completion and permitting of the project within four months. In providing written responses to the draft findings of this report, they submitted emails from residents of Palm and Hibiscus Island that hailed the efforts of Public Works and CIP and infrastructure improvements made to their neighborhoods.

While this report summarizes evidence of poor judgment, professional misconduct and disregard for applicable, the laws, regulations, and professional standards, the findings and recommendations are made with two caveats in mind.

First, that the records and testimony gathered during this investigation supports a conclusion that, in the matters described in this report, the responsible City officials believed they were acting with the knowledge and approval of the City's political and administrative leadership and in the best interests of the City. There is no evidence that they acted unilaterally or with corrupt or wrongful intent.

Secondly, the evidence supports a conclusion that the responsible personnel with the design builder Lanzo, and the engineering firms Wade Trim and CAS, believed they were acting at the direction of CIP and Public Works and with the approval of the responsible City officials. The evidence establishes that the incentives and pressures for their actions originated with the City, and were largely the result of frequent changes in the project's design and the pressure to expedite work and hold down costs. On this subject, it bears noting that DERM has taken no actions against Lanzo, Wade Trim or the design engineers in connection with the unpermitted construction. On this subject, DERM Director Lee. N. Hefty said in an interview, "A contractor working for the government, I don't expect, is going to do things for free. They're going to make sure whatever they're doing, they're going to get paid for. So in my estimation, the responsibility and the direction must have been coming from the City because why would a contractor do this additional work without assurances that it was being paid for...that's what leads us to believe that the City is the one that was behind the desire and directions for this additional work."

Regarding the excuse proffered by City staff that it was not responsible for the permitting of the project, it is correct that Lanzo was assigned the role of preparing and submitting the permits under its contract with the City. It is our conclusion, however, that the denial of responsibility by City staff to ensure the proper permitting of this now projected \$50 million project reflects a glaring weakness in internal controls. The City is both owner of the project and the actual permittee, and must provide signatory approval of the permit conditions, as well as oversee the work performed by its contractors. City staff members involved in the project, including well-qualified engineers familiar with the project details, should not consider themselves passive spectators in the permitting process. As public servants and the City's representatives, they have an obligation to protect the City's interests and to ensure its compliance with environmental regulations.

#### **A NOTE ON CONTEXT**

As already indicated, this report takes a critical look at the management of an important City of Miami Beach flood prevention project. The scope of the report includes the project history in detail, but focuses on managerial decisions leading to the permitting issues and their consequences. It is not intended to be a critique on the City's policy choices or the engineering decisions or methods used, which are outside of the scope of the report. It also does not purport to pass judgment on success of the project as a whole. We have been informed by some City staff members that the Palm/Hibiscus project is nearing completion, and that the serious problems identified in this report have been addressed and may at last be getting resolved. The Engineering Division of the Public Works Department has assumed responsibility for permitting and the DERM has advised that the working relationship has dramatically improved. We hope these improvements are sustained. If they are, then the hard work of the City Administration that has been done to move past these issues will deserve credit. It is well understood that the City's efforts at stormwater control have been recognized as innovative and groundbreaking. Despite the emergency conditions under which these projects have been undertaken, and the novel problems they have presented, City staff members overall have performed well in confronting these challenges.

#### IV. INTRODUCTION

The genesis of DERM's enforcement action can be traced to a whistleblower's emails that contained photographs of construction work on a private lot in west Palm Island.

On the morning of Sept. 20, 2018, Maria Molina, supervisor of DERM's Water Control Section, opened an email photographs attached to a message expressing disbelief that the City was allowing the discharge of pollutants into Biscayne Bay. When she opened the attachments, Molina saw photographs of an open trench in the front yard of a residence at 253 North Coconut Lane. In the trench was a newly laid PVC pipe connected to a 12-inch drainpipe in the right-of-way with two 12-inch drains in the front yard and garage. (Figure #2)

DERM's Water Control Section is responsible for enforcing Section 24-48 of the Miami-Dade Code and issuing Class II permits for the construction of stormwater drainage systems that empty into bodies of water.

Article VI, Section 24-48 of the Miami-Dade Code makes it "unlawful for any person to perform work or authorize, allow, suffer or permit work to be performed ...[on] the construction of a drainage system for any project anywhere in Miami-Dade County" without a valid Class II permit from the Miami-Dade County Division of Environmental Resources Management (DERM). DERM's Water Control Section is responsible for enforcing Section 24-48 and issuing Class II permits.

Molina sent one of her staff to inspect the building site, but the inspection was unavailing. The construction work was finished and the trench closed. Given DERM's mission of enforcing environmental protection laws and issuing construction permits, it is not uncommon for the agency to receive complaints that a property owner is having construction done without a permit. In this instance, a single phrase set this complaint apart. It included an earlier email to City Manager Jimmy Morales that complained about the City "allowing private properties to connect to the storm water system," apparently on Palm and Hibiscus project.



*Figure 2. Photographs a whistleblower sent to DERM Sept. 20, 2018 that resulted in the discovery of more than 80 unpermitted drainpipe or stubs out in the right-of-way and the agency's enforcement action against the City*

Molina was familiar with the City's ambitious efforts to respond to sea level rise with innovative engineering solutions. DERM's Water Control Section had played a small but pivotal role in the City's efforts by permitting the City's growing portfolio of projects to modernize its drainage system. She and her staff attended monthly meetings with City officials to review the status of ongoing projects; they met often with the City's contractors to discuss the permitting of new pumping stations and stormwater drainage construction projects.

Despite this working relationship, there had previously been tensions between the City and DERM over compliance with permitting requirements. In one instance, a DERM enforcement action had derailed a signature project in the City's sea level rise initiative. In August 2017 another whistleblower had tipped off DERM to the removal of mangrove plants along a section of the Indian Creek project, prompting the agency to direct the contractor to stop work. When former City Manager Jimmy Morales learned of DERM's action, he sent an Aug. 30, 2017 email to former City Engineer Bruce A. Mowry and Assistant City Manager Eric Carpenter that said, "Bruce and Eric, we cannot proceed on this basis. I recognize that this is an emergency, but that does not authorize us to do work on properties we do not own and to do so without a permit."

A primary objective of DERM's enforcement actions is to obtain compliance with permitting regulations, using the leverage of its authority to stop work on a project. In the case of the Indian Creek sea wall issue, DERM began working with the City to provide a modification of the permit. While these negotiations were underway, the project's contractor emailed Mowry asking if the company could resume construction. In a reply email on Sept. 14, 2017, Mowry said the work could proceed, adding, "The City will address all issues with DERM. We are working under an emergency condition that was declared by the City for this project, Thanks."

Four days later, DERM discovered that construction had resumed and notified the City that it was violating the cease and desist order. This episode triggered additional enforcement actions by the SFWMD and the U. S. Army Corps of Engineers. The City canceled the project's contract; Mowry agreed to leave his position with the City.

Now, little more than a year after those events, DERM's staff was faced with another whistleblower complaint about another high-profile project in Miami Beach. Molina and her staff were well-versed in the Palm and Hibiscus project. In May 2016, Molina had issued a two-year Class II permit to the City to build a stormwater drainage system in the public right-of-way as part of a neighborhood infrastructure improvement project on both islands. In May 2018 she had issued another Class II permit so that work on the project could be completed. In both instances, engineers

in the Water Control Section had relied on construction plans for building a standard right-of-way drainage system. Those plans had said nothing about connecting the new system to foot-wide drains in private property.

What Molina had never done was to issue a Class II permit for the construction of a privately-owned stormwater drainage system at 253 North Coconut Lane or approve a modification of the City's Class II permit allowing connections of yard drains on private property to the public drainage system. DERM had the authority to permit such connections, but only after approving construction plans and the results of computer modeling of the new drainage system's expected performance.

Perplexed, on Oct. 5, 2018 Molina forwarded the chain of emails and photographs to the City's Assistant Director of the Environment & Sustainability Department, Margarita Wells, with an email that said, "We just want to check if the city allowed this connection (if it is a connection) from this private property to the City system."

After consulting with other officials, Wells sent a response on October 9, 2018 that said, "Yes, there are a few isolated circumstances where private properties have historically depended on the public right-of-way for surface water drainage. As we raise the adjacent road to the minimum crown of road elevation approved by City Commission (to 3.7 feet NAVD), the conditions at these properties are reviewed by Public Works and allowed, through a permit, to connect temporarily via a yard drain to our (drainage system) in order to reduce their risk of flooding."

Molina was surprised by this response. No municipality in Miami-Dade County has the legal authority to issue permits for the construction of stormwater drains that ultimately empty into a body of water. Molina responded with an email that reminded Wells of the legal requirements under Sec. 24-48 in a message that said, "By connecting to the City's system, the home is now connected directly to a system that outfalls to a water body. I would need a CLII permit from this home." Molina closed with the admonition that the same requirement would apply to other unpermitted privately-owned stormwater drains connected to the City's drainage system: "Keep in mind all the private home connections will require a CLII permit."

DERM Senior Engineer Mayra De Torres had conducted the agency's seven-month review of the City's original application for a Class II permit to build the right-of-way stormwater drainage system on Palm and Hibiscus islands. When she saw whistleblower's photographs, what caught her eye was the 12-inch drain in the right-of-way, the pipe that appeared to have been used to connect the private-side yard drains at 254 North Coconut Lane to the public drainage system.

DERM's review of the City's application had included a close examination of the project's construction plans and a drainage study report, both signed and sealed by the project's CAS engineer Rubio, the Engineer of Record for the drainage system. The right-of-way drainpipe in front of 253 North Coconut Lane had not been shown on the plans by Rubio that had served as the basis of the Class II permit.

De Torres arranged to meet with a construction manager from Lanzo Construction Co. Florida ("Lanzo"), the general contractor for the Palm and Hibiscus project, at 253 North Coconut Lane to examine the drain in the right-of-way. During the inspection, the contractor disclosed that Lanzo had installed more than 80 12-inch right-of-way drainpipes and stubouts that were not shown on the construction plans DERM had approved and not authorized by the City's Class II permit. As needed, the unpermitted stubouts and right-of-way drainpipes were being put to temporary use during construction to drain stormwater trapped in adjacent lots by the newly elevated roads.

Twelve months passed. During the next twelve months, DERM inspectors confirmed that, at the City's direction, Lanzo had installed a right-of-way drainpipe in front of each house on West Palm Island and that eight private-side yard drains had been connected to the drainage system. In July 2019 the agency issued a "cease and desist" order and directed the City to obtain a modification of its existing Class II permit. This enforcement action disrupted a \$775,000 effort by the City to install approximately 90 private-side yard drains and to connect those privately-owned drains to the public drainage system. As the months passed, the Homeowners Association that represents Palm and Hibiscus Island became concerned about the lack of progress.

In September 2019 their complaints reached Commission Mark Samuelian of the chairman of the Sustainability and Resiliency Committee, which raised the issue at a Sept. 25, 2019 hearing. During the hearing, CIP Director David Martinez said the project's contractors were preparing construction plans for the construction of 60 to 70 private-side yard drains. He said, "We are providing that same information to DERM for them to tell us how they're going to do it...everything's predicated on DERM letting us run loose with the work that we have to do." During the hearing, former Commissioner John Elizabeth Aleman contended that DERM staff was reluctant to approve the use of private-side yard drains and suggested that City Manager Morales raise the issue with more senior County officials and determine "the capacity of DERM...in terms of turnaround for projects."

Intent of resolving the impasse, Samuelian invited DERM officials to a hearing of the committee on Oct. 23 to explain the delay in issuing permits. During that session, DERM Director Lee N. Hefty rejected the suggestion that the agency was holding up completion of the project. He said DERM was still waiting for the City to provide construction plans so new permits, or modification of the existing permit, could be issued.

During the hearing Hefty said, "What we need from the City is details on how they want their drainage system to be designed. To submit those to us with the proper certification so that we can review and approve it." He observed that permit violation had been pending for months, and, he continued, "We want the City to come into compliance. Work was done without a permit, and we need that work to be done under a permit."

During the hearing, Carpenter said:

I would tell you that Palm Island is certainly much more challenging because I think that's where we have about 88 of the hundred and eight properties or connections that we're talking about, particularly on the Coconuts. That's where we installed a number of temporary construction drains. As we were going through the process, **we realized that raising the roads up could potentially put some of these properties in a little bit different situation during construction activity. So we installed approximately 88 temporary construction drains while we were out there.** Those are ultimately going to either get converted to a private property drain or if we can't resolve the harmonization issue with the private property owner, then we would permit those as a permanent drainage structure. (Emphasis added)

A week later, during the City Commission meeting on Oct. 30, Samuelian summarized the new information from Hefty and likened the situation to the permitting violation that had stopped work on the Indian Creek seawall. "Like we had in Indian Creek, we now have unpermitted work, and we are in violation," Samuelian said. Among the questions he said he wanted answered was, "How did this happen?"

Carpenter was present for the City Commission hearing and had prepared a presentation. He was accompanied by Kremers, who had replaced Rubio as the Engineer of Record after DERM issued the Class II permit. Carpenter said DERM's enforcement action stemmed from a difference of opinion about when the City and Lanzo should have notified DERM about the right-of-way drainpipe connections and obtained a modification of the Class II permit.

Carpenter said the project had "gone through an evolution" since DERM had issued a Class II permit for the project. He said that when changes were made to a project's plans during

construction, it was customary for general contractors to notify DERM at the end of a project when they submitted “As-Built” construction plans showing additions. Carpenter said, "It is a judgment call of DERM as to when is the most appropriate time to go through that modification process."

Carpenter invited Kremers to explain why the right-of-way drains had not been disclosed to DERM as part of the City’s application for a permit. Reiterating Carpenter’s earlier explanation, she said the right-of-way drainpipes were not disclosed because they were “temporary” construction drains that were never intended to be a permanent part of the drainage system. She said the “88 drains that you've been hearing about, these are temporary construction drains. There was one installed in the right-of-way in front of each property on North and South Coconut.”

Kremers said the drainpipes were installed as a temporary precaution because “we wanted to make sure that we had that in place...in case any flooding issues were to occur during construction.” She explained that, “The intent was that when the project was complete and before the stormwater system was placed in service, that those drains would be...abandoned, and the permanent drainage system would be in place at that time.”

City Manager Jimmy Morales summarized the Administration’s response by reiterating that the 88 pipes and drainage connections Lanzo had installed in the right-of-ways in front of each lot on west Palm Island were temporary drains for use during construction; and, further, that the City had adopted a policy to allow property owners to connect to the City’s drainage system. Morales concluded that City staff had identified 98 properties on both islands that qualified for installation of private-side yard drains.

At the close of the discussion, Gongora observed that the City Commission had provided "tens of millions of dollars over the past two years" for the Palm and Hibiscus and the Indian Creek projects, and "yet the work doesn't really get done." Further, he expressed frustration with the City Commission's inability to obtain information about the status of the projects. He concluded by asking the City Clerk to convey a request to the Inspector General that the office conduct an investigation to "find out what went wrong with permitting. Why we budgeted so much money and it's gone over budget? Why these projects aren't working correctly, why the residents are waiting years and years and years with no results?"

## V. THE BEGINNING

### A. (2010—2013) The City updates its Stormwater Management Master Plan and approves and begins planning the Palm and Hibiscus Project

Ten years ago, former Mayor Matti Bower and members of the City Commission made decisions that put the City of Miami Beach in the front ranks of waterfront municipalities in the United States that were awake to the existential threat climate change, frustrated with street flooding during storms, and prepared to invest in public works projects to reduce flooding and to counter the future effects of sea level rise.

In 2010 the City awarded a \$600,000 contract to the engineering firm CDM-Smith to update the City's 15-year-old Stormwater Management Master Plan. During the next three years, they approved more than \$50 million in new stormwater drainage projects. One of those was Neighborhood No. 13 Palm and Hibiscus Right-of-Way Infrastructure Improvement Project ("project").

In August 2012, Mayor Bower and the City Commission approved the new stormwater master plan and increased the Level of Service (LOS) for the expected performance of the City's stormwater drainage system. The process of establishing, or raising, the service level for the City drainage system required striking a balance between how much flood protection the City could afford to build over 20 years versus the maximum flood levels that the City was prepared to accept. The decision entailed adopting design criteria that comprised the Level of Service.

Several of these design criteria that are used to establish the City service level are material to understanding the the history of the Palm and Hibiscus project. As set forth below, changes in the design criteria made under former Mayor Levine play an important role in the decisions that contributed to the project's permitting issue.

In adopting a new Level of Service (LOS), or changing the criteria that are part of the service level, the Commission under Mayor Bower was establishing the expected standard of performance for new drainage systems. When the City builds a new stormwater drainage system, it

awards a contract for the construction of a system that can prevent maximum flooding up to the Level of Service. As noted in City's 2011 Stormwater Drainage Master Plan, "LOS decisions will directly affect the size and cost of proposed improvement alternatives." Higher levels of service provide more protection against flooding, but also entail higher construction costs. In 2013, the Commission adopted a \$200 million, 20-year plan of investments.

One critical design criteria is known as the tailwater boundary, or groundwater criteria. It is based on the North American Vertical Datum of 1988 or NAVD, which is equivalent to local sea level. The tailwater boundary criteria sets the elevation baseline that is used to design new stormwater drainage systems and has an impact on the cost of a new drainage system. Generally, raising the tailwater boundary criteria means raising the elevation of gutters, roads, and swales. Under former Mayor Bower, the Commission used an intermediate estimate of the rate of sea level rise developed by the U. S. Army Corps of Engineers and raised the tailwater boundary criteria from .04 feet NAVD to .67 feet).

The design basis storm is a criteria that is based on estimated rainfall during 24-hour period. It is used to design the capacity of a drainage system. Like the tailwater boundary criteria, the design basis storm criteria can be adjusted, depending on the level of service. A project's design basis storm criteria is included in the DCP and is used to design the drainage system, and prepare construction plans. It is also used to conduct computer modeling and simulation evaluations known as drainage studies.

Drainage studies verify the expected performance of the drainage system. In reviewing permit applications, DERM and the SFWMD require the submission of finished construction plans and drainage studies based on those plans. They use the results of the studies to verify that a new drainage system can handle the quantity of stormwater expected during the design basis storm and meet water quality standards for stormwater discharged into bodies of water.

Concurrent with raising these design criteria, the Commission authorized \$50 million in new construction, including the Palm and Hibiscus neighborhood improvement project.

On June 11, 2011, the City issued Request For Qualifications (RFQ) #35-11 for a consultant to produce a "Design Criteria Package for Palm and Hibiscus Island as well as a Master Design Criteria Package to be used as a template for other City horizontal right of way projects." It would be the City's first effort to apply the new design criteria to a neighborhood infrastructure project. It also was the City's first use of a variation of the standard design-build construction contract. The

new approach, known as a progressive design-build contract, would give the City a more direct role in shaping the construction plans.

In January 2012, after failing to reach agreement with the highest ranked firm, CIP asked the second ranked firm, C3TS (which later became Stantec Consulting), to submit a proposal. C3TS Senior Project Manager, Jeffrey Crews, who later represented Stantec, submitted a Scope of Work that included the following description:

The term Progressive Design Build is defined as a methodology where the Design-Build Team is hired predominantly on the basis of qualifications without identifying an ultimate project cost. As the project develops through the Design Phase, the Design Builder will provide a Guaranteed Maximum Price (GMP) for the project. At the end of the Design Phase, the City has the option to accept the GMP and continue with the Design Builder through the Construction Phase or may utilize the plans developed for continuation with some other means of project delivery without further involvement from the Design Builder.

**B. The City’s Progressive Design-Build contract with Lanzo; role of Public Works; CIP’s process for managing construction contracts**

Within City government, Public Works was considered the owner of the Palm and Hibiscus project and would operate the drainage system once it was built. CIP was responsible for managing all aspects of the construction for Public Works. City Engineer Mowry was responsible for approving the project’s design criteria package and mid-construction changes to the criteria. Public Works would approve the construction plans for the stormwater drainage system. Mowry reported to Public Works Director Carpenter. Both Public Works and CIP had successfully managed numerous stormwater drainage projects. The two agencies had overlapping roles and responsibilities.

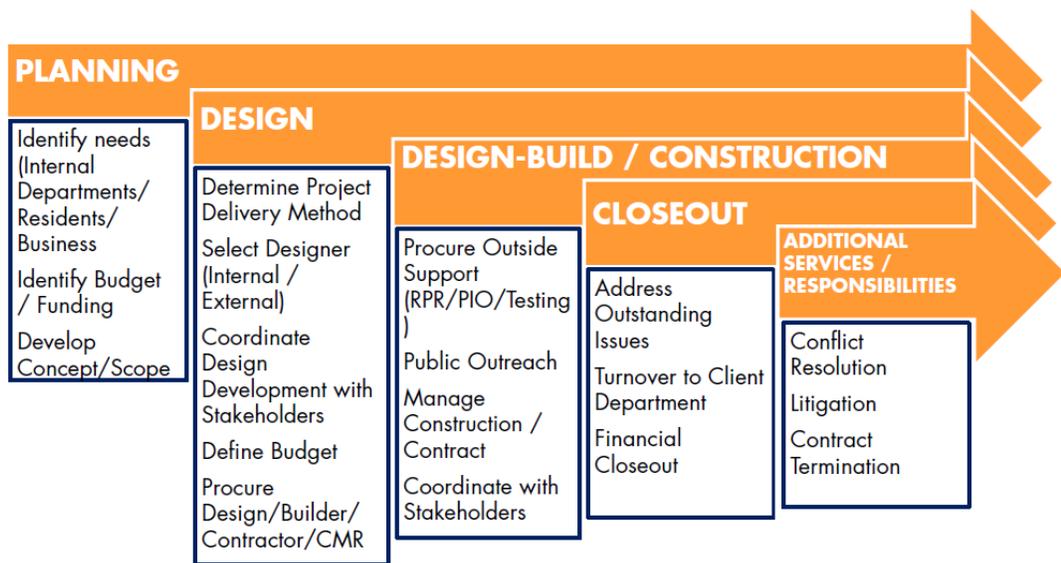
Public Works did not have the resources to manage a portfolio of large-scale design-build construction projects, but CIP had both the mission and the resources to do that job. Over a decade of operations, CIP had built an integrated process for managing every phase of a large-scale construction project. CIP Director Martinez and his predecessors had assembled a staff of experienced project managers, engineers, and subject-matter experts, many with degrees in

architecture, construction management, project management, environmental engineering, and other technical specialties.

As an organization, CIP's policies, practices, operations, and software were aligned with the stages of the design-build contracting process. To manage a dozen or more projects a year, CIP used eBuilder, a high-end, web-based dashboard that was specially configured for design-build contracts. Additionally, CIP integrated into each project an outside architecture and engineering firm to handle the myriad of technical and administrative aspects of large construction projects. These tasks included conducting daily field inspections, monitoring the general contractor's compliance with permitting requirements, and managing the Request for Information process that documented large and small changes in a project.

Several distinctive aspects of the design-build contracting process are material to this investigation. Title XIX, Section 287.055, Florida Statutes ("Consultants' Competitive Negotiation Act") prescribes the design-build contract model for public construction projects by local agencies and identifies the critical elements. Several of these relate to the issues that arose during the Palm and Hibiscus project.

# PROGRAM PROCESS



*Figure # 3: CIP slide that shows the end-to-end process the office used to manage design build projects.*

For example, the Act describes the signal importance of beginning the process by developing a Design Criteria Package (DCP). The primary purpose of a DCP is to clearly communicate to the general contractor and its engineers how the owner (in this case the City) wants the project built. A finished DCP provides the project’s design engineers with “specified performance-based criteria for the public construction project, including...schematic layouts and conceptual design criteria,” according to the Act. Because design engineers use the DCP’s specifications and directions to draw construction plans, a DCP should provide "a clear, concise, performance-oriented outline specification of the requirements of the project which defines the design constraints and the time and budgetary constraints to be achieved," according to F.A.C. Rule 13D-23.002(6).

An equally important purpose of the DCP is to give the owner and general contractor a reasonable basis for estimating the costs and the technical difficulty of preparing the construction plans, and, ultimately, negotiating a lump sum price for the project’s design phase. Section (2)(J) of

the Act says, “The purpose of the design criteria package is to furnish sufficient information to permit design-build firms to prepare a bid or a response to an agency’s request for proposal, or to permit an agency to enter into a negotiated design-build contract.”

Given the DCP’s pivotal importance to the success of a design-build project, Florida law directs a local government to retain its own engineer or architect to prepare the DCP. Subsection (9)(b) of the Act says, “The design criteria package must be prepared and sealed by a design criteria professional employed by or retained by the agency.” For the Palm and Hibiscus project, the City selected Stantec Consulting engineer Jeffrey Crews as the project’s designated Design Criteria Professional.

To ensure that the construction plans reflect the DCP’s directions, design-build contracts provide for a periodic review of the construction plans by the owner at the 30%, 60%, 90% and 100% stages of completion. Changes to the project’s design, specifications and construction plans occur during both phases, and can have financial, legal or operational implications for the owner and builder. To document and manage changes during a project, CIP uses an online Request for Information form that is uploaded to eBuilder. In the Palm and Hibiscus project, Lanzo Construction Manager Bob Beaty and Wade Trim Engineer Daniel Garcia submitted RFI’s with queries or proposed solutions. Crews managed the RFI process and responded on behalf of CIP.

Florida law and the Miami-Dade Code govern the construction of stormwater drainage systems that empty into bodies of water. Like those of CIP and most general contractors, the procedures and practices of the SFWMD and DERM also closely align with the design-build process. To ensure the integrity and reliability of the permitting process, Florida law and Section 24-48 of Miami-Dade Code also govern the role of a design-build project’s Engineer of Record. Pursuant to the Florida Administrative Code, the professional responsibility rules for licensed engineers require that an Engineer of Record “personally makes engineering decisions or reviews and approves proposed decisions prior to their implementation, including the consideration of alternatives, whenever engineering decisions which could affect the health, safety and welfare of the public are made.”

For a stormwater drainage system, the Engineer of Record’s primary responsibility is to prepare, sign, and seal the final plans at the end of the project’s design phase, and certify to permitting agencies that the plans are accurate and, in particular, that they do not cause harmful flooding or negatively impact adjacent property. In order to perform this responsibility, the rules

require that the Engineer of Record “shall be completely in charge of, and satisfied with, the engineering aspects of the project,... shall have the ability to review design work at any time during the development of the project,” and should make final decisions about the “selection of engineering alternatives.”

The Palm and Hibiscus project was the City first attempt to use a “Progressive Design-Build” project delivery model. This approach is a variation of the standard Design-Build contracting process. According to a primer published by the Design Build Institute of America (DBIA), the Progressive Design Build model is an “excellent option when an owner wants to use design-build but remain actively involved in the design decisions” and also wants greater control and “transparency into the design-builder’s proposal cost (including the pricing for risk and contingencies) and the ultimate cost for final design and construction.”

The project is awarded in two phases. During the Pre-Construction Design phase, the design build team’s engineers prepare construction plans based on the DCP. According to the DBIA:

At the point in time where the design has been advanced to an appropriate level of definition that aligns with the owner’s requirements, the design-builder will provide a formal commercial proposal (including the overall contract price) for Phase Two services. The proposal is often established when the design is approximately 40 to 60 percent complete, but it can occur anytime (including as late as 90 to 100 percent design completion), depending on the amount of control the owner desires to maintain over the design definition.

The Final Design and Construction phase is awarded based on a lump sum Guaranteed Maximum Price (GMP). According to the DBIA primer, “Once the owner and design-builder agree upon commercial terms (including the project’s price and schedule), the design-builder will complete the design and construction of the facility in accordance with those commercial terms.”

The City’s contract with Lanzo provided CIP with the maximum period of control over the design of the construction plans. The Phase I Preconstruction and Design Phase required submission of construction plans at the 30%, 60%, 90% and 100% stage of completion milestones. It said final payment would be withheld until all permits were issued based on a final 100% plans signed and sealed by the Engineer of Record. Further, the City’s contract made Lanzo responsible for obtaining all permits. It said, “The Design-Builder shall be responsible for obtaining all necessary licenses and permits not being provided by the City, and for complying with Applicable Laws in connection with the prosecution of the Work.”

As set forth below, the responsible City officials said in interviews that they were not responsible for obtaining permits or complying with the requirements of DERM and SFWMD. In an interview, Assistant City Manager Eric Carpenter, who signed the City's permit applications, said, "The permit submittal process is one that is required of the design-builder. The design-builder puts together the design, puts together the permit packages, and then typically would submit those permit packages to the City. The city, as the owner needs to execute the permit before DERM will review it."

**C. (Feb. – March 2012) The City selects an engineering firm to prepare a Design Criteria Package (DCP) for the Palm and Hibiscus project**

On Feb 8, 2012, the City Commission awarded a contract to Stantec to produce a Design Criteria Package (DCP) for the project. Crews was the project's designated Design Criteria Professional. Under Florida law, cities that use design-build contracts for public construction projects are required to begin the process by developing a Design Criteria Package (DCP). The DCP is a foundational document in which the City spells out what it wants the general contractor to build. The law requires that a DCP "must specify performance-based criteria for the public construction project" and provide "...conceptual design criteria of the project, cost or budget estimates, design and construction schedules" and other metrics.

The DCP is used at every stage of a design-build project: by the City to solicit Request for Qualification proposals from general contractors; by design-build firms to prepare bids for the pre-construction design phase contract; by design engineers to prepare construction plans; and by Design Criteria Professionals to verify a project was built to the City's specifications.

Given its importance to the success of a design-build project, Florida law requires that cities retain their own Design Criteria Professional to prepare the document and "to serve as the agency's representative" to assist in supervising and approving "detailed working drawings of the project; and for evaluation of the compliance of the project construction with the design criteria package."

The City's contract with Stantec included tasks that are material to this investigation, including the clarity of the DCP's criteria and the obligation to obtain the approval of permitting agencies. For example, it required Stantec to finalize all design criteria (clearly defining the entire

scope of work to be performed) to be utilized by the contractor to bid, design and construct the Project. The contract further required Stantec to address issues related to infrastructure design analysis and performance specifications. More specifically, the contract required that in preparing the DCP, Stantec “shall seek the approval of the DCP” from the permitting agencies including DERM and SFWMD.

On March 22, 2012, Crews met with engineers in DERM’s Water Control Section to describe the Palm and Hibiscus project and determine the types of drainage solutions the agency would be inclined to permit on islands surrounded by Biscayne Bay. He also inquired about the type of drainage studies DERM would require for the project. A drainage study measures the performance of a drainage system, including its ability to prevent flooding. Engineers use software approved by the Federal Emergency Management Agency (FEMA) to model the expected hydrologic and hydraulic performance of a proposed drainage system during a hypothetical extreme weather event known as a design basis storm.

Drainage studies produce two measurements that regulators use to approve drainage systems. The first measures the total quantity or volume of stormwater the proposed system could be expected to remove during a 24-hour storm. The second measures the capacity of the system to retain the first inch of rain during a storm, considered the most polluted, and prevent its discharge into a body of water.

After his meeting with DERM, Crews produced minutes that said in part, “The area considered for water quality is the footprint of the Right-of-Way. Contributions from the properties do not need to be considered.” The minutes indicated that DERM was open to the use of a relatively new water technology that enabled the use of pumping stations equipped with water quality treatment systems instead of methods like traditional gravity wells to retain the first inch of stormwater on site. The minutes said, “Stormwater treatment units (centrifugal) is an option for the County but SFWMD (South Florida Water Management District) is still reviewing them. They have accepted one specific unit that includes filtration as part of the treatment.”

**D. (Dec. 2012) Stantec drainage study concludes it is “not possible” to raise the elevations of North and South Coconut Lanes because of low elevations of adjacent houses**

Stantec and Crews used the City's newly updated tailwater boundary design criteria to develop a DCP and initial 30% construction plans for Palm and Hibiscus Islands. The starting point was a voluminous Design Basis study of the two islands. It explained that the pre-construction stormwater drainage system on west Palm Island, which the City intended to replace, had used North and South Coconut Lanes to collect stormwater runoff from private lots and channel it to drains and catch basins.

The Design Basis study said, "Coconut Lane is a two-way road that extends around Palm Avenue on the west half of the island. It is surrounded by residential properties and outlined with a flush concrete curb through its entire length. The pavement has an inverted crown section that slopes toward the center, where runoff from the right-of-way and adjacent areas is collected by intermittently located catch basins."

The design of the existing stormwater drainage system before construction is material to this investigation. The original system was outdated and routinely overwhelmed by severe storms and seasonal king tides. However, because the elevation of North and South Coconut Lanes was generally lower than the adjacent houses, the inverted centerline of those roads allowed the "positive" flow of stormwater from private lots into right-of-ways and roads for collection by the drainage system. Before DERM can issue a Class II permit to build a new public or private drainage system, Miami-Dade Code 24-48 requires a project's Engineer of Record to certify that the new drainage system will not create a "Harmful obstruction or undesirable alteration of the natural flow of the water within the area of the proposed work" or harm to adjacent property.

Crews and his colleagues at Stantec produced a DCP and prepared a 30% set of construction plans. Thereafter, they conducted drainage studies of the proposed drainage system to determine if its expected performance would meet regulatory standards. The results were summarized in a December 2012 Drainage Analysis report that described the terrain and geological challenges of building a stormwater drainage system on west Palm Island. It said, "Soil permeability within the project site is poor and the site has extremely low ground elevations. High ground water and tidally influenced groundwater levels lead to flooding the site under minimal rainfall. High tidal elevations during Proxigean spring tides (two weeks during spring and fall) often compound the issue by forcing seawater back into the drainage system and over the pavement surface."

Ultimately, Stantec and Crews designed a modern stormwater drainage system with larger pipes, new catch basins, refurbished swales, rebuilt curbs and gutters, and resurfaced roads. The construction plans included one automated pumping station equipped with a water treatment unit and injection wells to handle the first inch-and-a-half of rainfall (providing for either on-site retention or treatment of stormwater before discharge. The DCP said:

All road right-of-ways within the limits of the Project shall receive upgraded drainage to include new piping, catch basins, manholes, outfalls, centrifugal treatment units and pumped drainage wells...The proposed drainage improvements for Palm Island consist of a collection system of catch basins, manholes and conveyance pipes along the long axis of the island. At either end of the island, the collection system connects into stormwater pump stations discharging into pressurized drainage wells. Existing outfalls are maintained as existing and interconnected to the new system. Each outfall and well is protected with tide-flex valves and stormceptor units for quality treatment.

However, the one option that Stantec and Crews firmly ruled out was raising the elevation of roads on Palm Island by more than two inches. The Drainage Analysis report said, “Palm Island has extremely low road elevations below Proxigean spring high tides...Some areas will be raised minimally (up to 2”) but major grade changes in this area were not possible due to the low elevations of yards, garages and even finished floor elevations of the adjacent homes.”

**E. (July – Dec. 2013) City approves DCP by Stantec and Crews; selects Lanzo as qualified general contractor for Palm and Hibiscus project; estimates total cost at \$9.4 million**

From the outset, the City’s Capital Improvement Projects (CIP) office managed the project for Public Works. Stantec and Crews helped CIP draft the Request for Qualification solicitation based on the DCP. Five contractors submitted proposals. Two members of the Homeowners Association representing Palm and Hibiscus Islands served on the committee that selected Lanzo Construction Co. Florida as the highest ranked bidder.

On July 17, 2013, the City Commission authorized CIP to begin negotiations with Lanzo for the project’s design phase or “Phase 1 – Pre-Construction and Design.” In August 2013, CIP notified Lanzo that the City estimated the project’s cost at \$9.4 million dollars, based on the Stantec

DCP and 30% plan. Lanzo countered with a proposed lump sum price of \$10.4 million, including \$599,464 for the project's design phase. In a Letter to the City Commission dated Sept. 18, 2013, City Manager Jimmy Morales provided a timeline for the Palm and Hibiscus project with a completion date in August 2015.

By the end of 2013, the City had approved a 20-year, \$200 million plan to modernize its stormwater drainage system. It had completed projects in the Normandy Shores Neighborhood, Nautilus Neighborhood, Sunset Islands I & II, and South Pointe II, installed pumping stations in Sunset Harbour and other areas, and was managing other projects in various stages of development, among them the Palm and Hibiscus project. On May 3, 2013 the City awarded Lanzo a \$2,040,459 contract to upgrade three existing pumping stations in Sunset Harbour.

Nevertheless, flooding of streets from storms and seasonal king tides remained a frequent and frustrating part of life in Miami Beach. During the 2013 mayoral race, Philip Levine made the issue of combatting sea level rise the centerpiece of his campaign and was elected with a strong mandate to accelerate the City's efforts to reduce current flooding and counter the future effects of climate change.

**F. (Jan. – Feb. 2014) Mayor Philip Levine elected with mandate to accelerate and expand the City’s efforts to reduce flooding**

On January 6, 2014, newly elected Mayor Philip Levine sent an email to City Manager Morales and members of the City Commission wishing them a Happy New Year and declaring, “Because the flooding epidemic on Miami Beach is of such great importance and must be tackled on an emergency basis, I have formed a Blue Ribbon Panel on Flooding Mitigation consisting of qualified Miami Beach residents.”

Attached was a memorandum establishing an advisory board that Levine vested with the mission, authority, funding, and staff to become involved in all aspects of planning, designing, and funding stormwater drainage and neighborhood infrastructure projects. The chairman of the panel was Scott Robins, a successful developer in Miami Beach. Under “Powers and Duties,” the memorandum said the Committee shall report directly to the Mayor; use the services of a consulting engineer and City Attorney’s Office; and contact staff at all levels of City government. City Engineer Mowry was the City’s liaison to the Committee.

During the next three years, both Levine and Robins developed a close working relationship with Mowry, who functioned as the intellectual author and advocate for recommendations by the Committee that were later approved by the City Commission. The Committee held frequent meetings and required the attendance of the responsible City officials including Carpenter, Mowry, and CIP Director David Martinez. The City awarded a \$7 million contract to the global engineering firm AECOM, which provided the Committee with its own consulting engineer, Thomas McGowan.

On January 30, 2014, in response to a query from an engineering contractor, Mowry wrote an email about prospective changes in the City’s design criteria that he copied to Morales, Carpenter, and Martinez. It said, “We will be making several changes to the criteria over the next several months...The position of using mean sea level data is not appropriate because the tide has peak elevations that cause flooding. A peak tide event should be used in a design of any drainage system in the City...The City Commission, at their next meeting, will be considering the adoption of tailwater criteria of 2.7 feet NAVD for all projects in the City.”

On February 12, 2014, the City Commission approved a resolution based on a recommendation to raise the tailwater boundary criteria to 2.7 feet above mean sea level. The resolution included the following:

WHEREAS, the City's Stormwater Management Master Plan (SWMMP) takes into account climate change and estimates of projected sea level rise over the next 30 years and, as a result, for all new projects, a sea level elevation of 2.7 feet NAVD88 (based upon the South Florida Climate Change Compact projection) is being used for stormwater design purposes and an elevation of 5.7 feet NAVD88 ( a vertical control datum established in 1991 used to define elevations) is being used as a minimum for public seawall elevations;

Typically, formal recommendations of the Mayor's Blue Ribbon Committee on matters of policy or design criteria were presented at meetings of the Flooding Mitigation Committee and forwarded to the Commission for action without a Letter to the Commission. This process bypassed the City Administration's usual process and did not require review and approval by former City Manager Morales or his input. During an interview with OIG staff, Morales said, "Your observation is correct. The Blue Ribbon committee was very proactive, met frequently, worked with staff, and their recommendations usually went straight to the Commission. But in fairness, with the analysis done usually by the City staff and AECOM."

In addition to recommending policy changes to the Commission, the Mayor's Committee also weighed in on decisions about specific projects. According to CIP Director Martinez, the Mayor's Committee operated on two levels, recommending policy to the Commission and weighing in on decisions about specific projects. Martinez said in an interview, "then it became 'What projects do we implement that on? I believe that part of those things really only came from a directive from the panel through Public Works to CIP saying, 'OK, on this project, we're not going to implement the road raising, and we're only going to do this on this one. We're going to do it all on this one.'" (Emphasis added)

During meetings with City staff, the Committee discussed the risk that elevating roads in Palm and Hibiscus and other low lying neighborhoods would cause new flooding and create a need for change in City policy to allow privately-owned, or private-side, stormwater drains to connect to the City drainage system. Consistent with the authority Levine had vested in the Committee, Robins communicated directly with Carpenter, Martinez and Mowry and was consulted about how and to what extent the new design criteria should be applied to specific neighborhoods.

To the extent that Robins was viewed as Levine's representative, his frequent interaction with Public Works staff and AECOM consultant McGowan lends credence to statements by former

City Manager Morales that he was not aware during 2015 and 2016 that the drainage system on Palm Island was at that time being designed to accommodate private-side yard drains.

During an interview with OIG staff Morales said, "I think Palm and Hibiscus was the first project where we did road raising in a single-family neighborhood. And that highlighted the issue then of, as we're raising the road, how we are impacting the properties. So the requirement to, I believe, connect individual properties to our system was well into the project. It was not something that had been part of the original project." When shown the exhibits described below, including the Kremers plans, Morales said, "I had no idea...the engineers and the team, whatever, whoever it was, already had that in mind from day one and lied to DERM about it. That's news to me."

Meanwhile, CIP and Lanzo were still negotiating a price for the design phase of the Palm and Hibiscus project. On Feb. 27, 2014, Lanzo proposed a lump sum price of \$599,464 for the project's design phase based on the DCP developed by Stantec's Crews that did not take into consideration the new design criteria for local sea level.

**G. (Jan. – Sept. 2014) The City and Lanzo struggle to incorporate new road elevation design criteria over fears that raising roads will cause new flooding; under pressure from Homeowners Association, City awards Lanzo a contract for the project's design phase without a finished DCP**

On July 1, 2014, at a pre-design meeting, Mark Tomczyk, CIP's Senior Project Manager for the Palm and Hibiscus Project, explained to Lanzo representatives how the changes in design criteria, based on the Committee's recommendations and the City Commission's consent, would affect the project. During the meeting, he circulated a new version of the DCP that incorporated the new design criteria and included raising roads and installing yard drains.

After the meeting, Crews sent an email to Public Works with his concerns about raising road elevations higher than the finished floors of homes on west Palm Island. Assistant City Engineer Douglas Seaman responded by suggesting the possibility of relaxing the elevation requirements in areas with lower elevations, subject to Mowry's approval: "We will need to look on a case by case basis at any location that cannot meet the above criteria and provide a variance," Seaman wrote.

By August 2014, the Palm and Hibiscus Homeowner Association's CIP Oversight Committee had grown impatient over the delay in awarding Lanzo a contract for the project's Pre-Construction Design or Build phase. On August 17, 2014, HOA President Pierre De Agostini sent a lengthy email complaint to Levine that he copied to Morales, City Attorney Raul Aguila, Assistant City Manager Mark Taxis (who oversaw CIP and Public Works at the time), Martinez, Tomczyk, and others. De Agostini's letter said, "The lack of progress on this negotiation is very disturbing. By now, a contract should be worked out with the firm chosen as the 1<sup>st</sup>. We need to move on with this! Mr. Mayor, please push this contract negotiation to finalization! Our residents would be most grateful."

Levine forwarded the email to Morales with a message that said "Not sure what is going on here but getting really bad feedback from these folks over this situation. Can you please intervene?" Morales emailed City Attorney Aguila with the message, "Let's discuss tomorrow with David," a reference to CIP Director Martinez. Subsequent events indicate that De Agostini's inquiry added pressure on City officials to accelerate work on the project.

One source of delay was a decision to have another engineer assume responsibility for incorporating the new design criteria into the project's DCP. At the direction of the Mayor's Committee, on August 28 the City Administration transferred this task from Stantec's Crews, CIP's Design Criteria Professional, to AECOM's McGowan, the Committee's consultant who was assigned to Public Works.

A significant challenge was developing language that gave the design-build team direction in preparing construction plans that included raising the elevation of roads. Public Works engineers and the engineers on the design team had not developed an engineering solution to prevent newly-elevated roads from flooding adjacent properties. One roadblock was the lack of basic data. While Carpenter, Mowry, and Martinez had discussed the challenge that elevating roads in west Palm Island could cause new flooding of the adjacent private lots, Public Works and CIP had not obtained a survey of the first finished floor elevations (FFE) of houses on North and South Coconut Lanes in that area. Without a current survey, it was difficult to estimate how high roads in west Palm Island could be raised without trapping stormwater on private lots. In a written response, AECOM engineer McGowan said "This information was unavailable at the time the DCP language was requested, therefore, some flexibility in the DCP language was necessary."

In a Given the potential costs and technical difficulty of raising road elevation, and the lack of an engineering solution to mitigate the flood rise, the City and Lanzo did not have sufficient information to estimate the technical difficulty or cost of preparing the project's construction plans or engineering services.

During an interview, former City Manager Morales said, “**there was a lot of political pressure to move these projects along. Mayor Levine got elected in part on a sort of flooding mandate and quickly formed this Blue Ribbon Panel...there was a tremendous amount of pressure to move these projects forward.**”

Under pressure to proceed, the City Administration decided to award a contract based on Lanzo's estimated cost of the outdated DCP that Crews had prepared in 2013, which had not included the elevation of roads, while McGowan continued his work on the revising the DCP. On Sept. 17, 2014, the Commission approved a \$599,464 contract to Lanzo for Pre-Construction Design phase of the project. A Sept. 23, 2014 Scope of Service, which described the tasks Lanzo had agreed to perform, reflected the DCP's unfinished state. For example, it said that "all road right-of-way within the limits of the Project shall be constructed to newly targeted elevations as requested by Owner [City]," but did not specify the targeted elevation. Regarding the minimum grate elevation, the Scope of Work said the lowest grate of storm drain "shall be established where reasonably possible at elevation 2.78' (sic) NAVD.” Regarding the risk that raising roads would obstruct the historic flow of stormwater and cause new flooding, the document said, "Additional design considerations will be made to maintain positive drainage from the private lots," again, without specifying an engineering solution.

The decision to award the design contract to Lanzo without the benefit of a finished DCP placed additional pressure on City staff who were responsible for the project. It also foreshadowed other decisions the City Administration would make to accelerate the contracting process and override contract provisions or internal controls embedded in CIP's process for managing design-build projects. During an interview, CIP Director Martinez said, “There was no saying no,” he said, to the pressure and imperative to accelerate the project. “There were no other options. That was the mandate and that's how it's going to be.”

**H. (Oct. – Nov. 2014) The City approves a DCP that fails to provide clear direction for preparing construction plans; CIP Consulting Engineer Crews warns that some DCP requirements may not be possible**

The Homeowner Association recognized that the Sept. 14, 2014 award of the design contract to Lanzo Sept. 14, 2014 was half-step forward and did not mean the project's design phase and preparation of the construction plans would get underway. Revision of the DCP remained a work in progress. Nevertheless, the residents were eager for that work to begin. On Oct. 6, 2014 Tim Rose, then serving as the group's executive director of the group, pressed CIP Director Martinez for an update in an email that said, "We can't wait. Don't keep us hanging."

In his response, Martinez said, "The extent of design changes, covered by the design criteria package (DCP) is currently being reviewed by the City's consultant." This was a reference to McGowan. His work on the DCP continued through the balance of October. Notwithstanding the DCP's unfinished status, on Oct. 14, 2014, the City Administration proposed adding \$251,016 to Lanzo's award for the design phase.

In a Letter to Commission, Morales attributed the need for more funding to McGowan's work and "subsequent review by the City Engineer's office" that determined "additional modifications to the DCP were required." The following day, the City Commission adopted Amendment #1 to Lanzo's progressive design build contract, bringing the total award for the pre-construction design phase to \$850,480. It said, "the City's Public Works Department has requested that staff implement the enhanced stormwater system criteria and, further, that "upon receipt of AECOM's review comments (October 31, 2014) and a subsequent review by the City Engineer's office (November 3, 2014), it was determined that additional modifications to the DCP were required."

On Nov. 4, 2014, Crews received the approved DCP from Public Works as a fait accompli and found that it still lacked clear guidance for implementing the elevation design criteria. On November 5, 2014, Crews forwarded the DCP to CIP, Lanzo and Wade Trim in an email that said, "Please find attached the final DCP the City is moving forward with. In trying to get final comments from Public Works, they ended up substantially rewriting the Drainage section. The text deviates some from previous intentions...but we have to move forward with the understanding that this document represents the ultimate requirements as dictated by Public Works."

Crews included comments to the sections related to the elevation criteria that indicated McGowan and Public Works had again postponed decisions about whether and how to apply the new road elevation requirements. “Decisions about how to apply the design criteria would be determined after Lanzo had completed a survey of the first finished floor elevations. Crews wrote, “I think many of these implications will become clearer as we get the survey and progress further through the project. In the end, I think these will sort themselves out as we continue through. The City is intending to move forward with this version. Further comments and responses are only going to slow things down and ultimately, we won't know the implications until we get farther.”

The DCP established a new Level of Service that was based on “24 hour storm event totaling 7.5 inches of rainfall” during a design basis storm. The proposed drainage system was required to limit maximum flood levels to an “an elevation not greater than the lowest crown of road elevation within a drainage basin, or be within twelve (12) inches of the lowest habitable FFE within the basin during the design storm event.”

For the purposes of conducting drainage studies and modeling the performance of the drainage system, the DCP established an area that encompassed most of the public land and private property on the islands, with the exception of backyards facing Biscayne Bay that tended to drain over seawalls. The DCP said, “For drainage design and modeling of the piping and pump station system, the drainage area shall be sized to account for, and reflect the actual contributory area – and shall include at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots.” Drainage studies calculated two measures, the quantity of volume of stormwater the system was designed to handle, and the capacity of the system to meet water quality standards.

Regarding the second standard, the DCP said, “Water quality treatment shall be provided for the road right-of-way and adjoining commercial properties and exclude residential lots (treatment area).” Further, it said “Water quality volumes shall be determined based on a treatment depth of 2.5 inches times the percentage of impervious area over the treatment area. This volume shall be increased 150% for discharge into Outstanding Florida Waters,” an increase that meant the system was designed to provide water quality treatment for a larger volume of water. It indicated a system with a large capacity.” The drainage system would treat the stormwater using a stormwater treatment device that would be installed in each pumping station.

The ability to use pumping stations allowed the City to forego the use of traditional methods of retaining the first polluted inch of stormwater onsite. For the purposes of meeting water quality standards, the tributary area was large enough to allow for the collection of stormwater from the

residential lots “excluded” from design criteria. Similarly, the pumping stations were designed and equipped to treat all the stormwater collected from public and private land and meet DERM water quality standards for ultimate discharge into Biscayne Bay. In other words, the drainage system was sized to provide water quality treatment for stormwater from right-of-ways and private residential lots.

The DCP guidance on the project’s Level of Service was subject to change after the new FFE elevation survey. It said, "Flood Stages shall be limited to an elevation not greater than the lowest crown of road elevation within a drainage basin, or be within twelve (12) inches of the lowest habitable FFE within the basin during the design storm event." In his comments, Crews wrote, "This ties the maximum design flood of the 7.5" storm to the FFE. The maximum flood allowed is relaxed to allow full flooding...However the FFE comparison might be more critical. Since we don't yet know the FFE, we don't know how critical this limitation will be."

Notwithstanding McGowan’s efforts and the additional time for revision, the DCP’s guidance on minimum elevations was open-ended and deferred resolution of the most difficult technical challenges. For example, the DCP’s direction for applying the new criteria for stormwater drains said, “Minimum gutter elevation shall be established where reasonably possible at elevation 2.78' (sic) NAVD." The roadways section of the DCP specified, "Where practicable, minimum road crown elevations shall be 3.7 feet NAVD." In his comments, Crews wrote, "This seems more critical than before but is mitigated by the ‘where practicable’ clause." The DCP repeated the admonition that in the process of elevating roads and storm grates, the design-builder should not alter the historic flow of stormwater from the adjacent properties, saying “Additional design considerations will be made to maintain positive drainage from the private lots,” but failed to say how this should be done.

The next sentence in the DCP specified, "The maximum road crown in any given drainage sub-basin shall be twelve (12) inches below the lowest habitable finished floor elevation within the sub-basin." This suggested that an elevated road had to be at least a foot *below* the lowest first finished floor of adjacent houses. In his comments, Crews wrote, "This may not even be possible since the lowest FFE may already be lower than the max existing crown +12". We won't know until the survey. Since we are only really looking to raise the low areas, I don't see a scenario where we would be raising high areas any higher than existing conditions."

The minimum grate elevation, or lowest acceptable elevation for a drain, was 2.7 feet above sea level or (NAVD). Like the minimum crown-of-road elevation criteria, this, too, was qualified in the DCP and left case-by-case discretion of the City Engineer: "Where practicable, minimum catch basin grate elevations shall be set above 2.70 feet, NAVD. Catch basin grate elevations below 1.66 feet, NAVD shall not be permitted without prior approval of the City Engineer." The DCP's delegation to former City Engineer Mowry of the authority to make case-by-case changes in the design criteria would open the door to significant changes in the project's design criteria.

Crew's critique flagged a second issue in the DCP – the proposed use of right-of-ways to construct grass swales that would result in schedule delays and add to the project's cost. Given the generally poor permeability of the soil on both islands, Public Works viewed the creation of grass swales as a priority and essential to minimizing flooding of adjacent private lots. The relatively wide right-of-ways on Hibiscus Island and those alongside Palm Avenue offered one of the few topographic advantages that could be used to mitigate the risk that elevating roads would cause new flooding.

If the DCP's open-ended directions for applying the elevation design criteria and calculating Level of Service lacked specificity, the DCP guidance for designing and building grass swales was unambiguous and clear. The DCP said, "The swales shall be graded gently, sloping from the edge of right of way without mounding or obstruction conveying the runoff into the inlets." And, further, that "The stormwater inlets shall be located on both sides of the streets, placed either in the valley gutter or adjacent to the valley gutter on the swale side of the gutter allowing runoff into the inlet structure." Additionally, the swales were intended to provide backup if a storm with more than 7.5 inches of rain in 24 hours overwhelmed pumping stations and caused maximum flood levels greater than the system's Level of Service. Thus, the DCP said, "The elevation of the swales shall match the elevation of the inlet structures to allow partial storage of excess runoff in the swale during heavy rainfall events."

Given the large number of trees and the hedges along the relatively narrow streets, the DCP allowed for leaving such "encroachments" in place if they did not disrupt the flow of stormwater to drains in the swales. The DCP said, "Placement of inlet structures should take into consideration existing driveways and trees that would remain, if they do not interfere with the street construction, utilities placement or the longitudinal stormwater flow in the swale." The DCP allowed no such accommodation for the many fences, gates and other "encroachments" onto public land. Those

would be removed during construction and "...walls, decorative curbs, hardscape or any other forms of landscaping will not be allowed in the right-of-way."

In his comment, Crews wrote, "In other words, areas of the R/W get cleared if the Encroachment Analysis shows that it needs to be an official swale as part of the design."

Public Works was intent on having Lanzo build an effective stormwater drainage system on the islands. This put a premium on converting the right-of-ways into swales by clearing the right-of-ways as needed. In contrast, CIP was responsible for getting the project built on time and within the budget allocated by the Commission. CIP's process for managing road and stormwater construction contracts includes minimizing the impact on residents. After seeing the DCP, CIP staff anticipated objections from residents who valued their tree-lined streets.

Crews markup of the DCP criteria for swales reflected the views of CIP, Stantec's client. He wrote, "I think this found its way into this document from when they intended to completely clear the swales. The current intent is to discern on a case-by-case basis what can stay or needs to go through the Encroachment Analysis process."

Crews' observation about swales identified a second section in the DCP that would prove problematic. As set forth below, Rubio had completed a near-finished 90% set of plans at the 90% that include extensive use of swales. This required the removal of trees and other encroachments from the right-of-ways. Upon learning of these plans, objections from the Homeowners Association disrupted the project's design phase and resulted in significant changes to those plans.+

## **VI. THE DESIGN PHASE**

### **A. (Feb. – March 2015) Engineer of Record Rubio begins preparing construction plans for the drainage system without clear guidance in the DCP for elevating roads; City tells Lanzo to assume all roads will be raised to 3.7 feet above sea level**

On the afternoon of Feb. 4, 2015, the Lanzo design team filed into a CIP conference room for a team meeting. They were led by Lanzo Construction Manager Bob Beaty. With him was Holly

Kremers, a vice president with the Wade Trim engineering firm and subcontractor to Lanzo, and Orlando A. Rubio, an engineer with the firm Craig A. Smith & Associates (CAS), a subcontractor to Wade Trim. Between January 2014 and the end of 2018, Kremers was the “engineer in responsible charge” or Engineer of Record for all but two sections of the project’s construction plans.

The two exceptions were most important and technically challenging sections of the construction plans. These were known as the "Stormwater" section, which would contain engineering drawings for building the drainage system, including the pumping stations, and the "Hardscape" section, comprised of drawings for roads, right-of-ways, and other above-ground infrastructure. The two sections had to be closely aligned. The design of roads and right-of-ways would determine how well the new drainage system would prevent flooding during a design basis storm with 7.5 inches of rain in 24 hours. Rubio would serve as the Engineer of Record responsible for the two essential tasks of (a) preparing, signing, and sealing the Stormwater and Hardscape sections of the plans and (b) submitting the plans to DERM and SFWMD certifying their accuracy and compliance with applicable laws and regulations. Rubio’s designation as the engineer ‘in responsible charge.’” With this role came the responsibility to approve all changes to the plans that involved public health, safety and welfare.

The Lanzo design team was met by representatives from CIP and Public Works. CIP Senior Project Coordinator Mark Tomczyk and CIP Project Coordinator Olga Sanchez were responsible for managing the design and construction phases of the project with City Engineer Bruce A. Mowry. They were joined by Stantec’s Jeffrey Crews, CIP’s consulting engineer. Minutes of CIP progress meetings with the Lanzo team were prepared by the staff of one of the contractors, approved by CIP, and made part of the project’s record. Some minutes identified speakers; some did not.

Lanzo had not completed the new survey of finished floor elevations (FFE) and garages, but the earlier results had confirmed the fears of Crews and others about the unusually low elevation of houses on west Palm Island. The lowest FEE was 1.64 feet above sea level, more than two feet lower than new design criteria of 3.7 feet above sea level. Road elevations were generally lower. A pre-construction survey recorded existing crown-of-road elevations for South Coconut Lane that ranged from 1.15 feet to 1.83 feet above local sea level. For North Coconut Lane, the range was

1.05 feet to 1.75 feet above sea level; for the western end of Palm Avenue elevations ranged from 2.05 to 2.60 feet above sea level.

During the Feb. 4, 2015 meeting, the City staff discounted the importance of the first finished floor elevations of houses on west Palm island and told the design engineers that they should adhere to the minimum crown-of-road elevation of 3.7 feet above sea level. The minutes said, “City indicated that the road standard per the DCP is to be maintained and that existing FFE will not dictate the proposed road grades.” In addition, the minutes said, “City advised to assume entire roadway design will consist of 3.7' NAVD for minimum crown elevation and 3.7' NAVD sidewalk elevation where practical. City advised that for residences with extremely low finished floor, a formal City ruling process will have to be taken for adjacent roadway design and harmonization treatments.”

The next day, CIP staff and members of the Lanzo design team, including Rubio, the Engineer of Record for the stormwater section of the plans, met with DERM’s Water Control Section staff, including Senior Engineer Mayra de Torres who would conduct the agency’s review of the City’s application for a Class II permit. The Miami-Dade agency encouraged such consultations to avoid permitting delays.

Rubio led the briefing, according to minutes prepared by Wade Trim. He described the City’s plans to use three automated pumping stations equipped with a stormwater quality treatment device known as a Downstream Defender. These devices were a relatively recent innovation in the design of stormwater drainage systems. They were designed to screen out pollutants and solid objects as water passed through the pumping stations. Rubio explained that drainage studies, which estimated the capacity of the proposed system to prevent flooding and meet water quality standards, would be based on 100% of rain in the right-of-ways, 100% of the landlocked lots, and 50% of waterfront lots.

On the morning of Feb. 18, 2015, Lanzo Construction Manager Bob Beaty uploaded RFI #10, “Roadway and sidewalk elevation criteria,” to CIP's eBuilder system with the survey results of first finished floor elevations on west Palm Island attached. RFI# 10 summarized the still-unresolved challenges of incorporating the new elevation design criteria into the project without flooding adjacent properties. RFI #10 said:

The City has directed the Design-Builder to increase roadway crown elevations and sidewalk elevations to a minimum of 3.7' NAVD. The current, ongoing field survey has recorded existing finished floor elevations of residences on Palm and Hibiscus Islands to be

as low as 1.64' NAVD. **In addition, our landscape architect has advised that a significant number of trees will be impacted should a 3.7' NAVD minimum crown and sidewalk elevation be employed throughout the islands...** The challenges resulting from this design criterion which proposes raising roadway and sidewalk elevations including driveways will result in a significant increase in project cost, due to landscaping mitigation as required by permitting with Miami-Dade County, as well as driveway harmonization treatments and stormwater design for drainage basins with lower existing FFE. We request confirmation that it is the direction of the City to raise all roadway crown and sidewalk elevations throughout Palm and Hibiscus Islands to 3.7' NAVD. (Emphasis added.)

Beaty attached a photograph showing the right-of-way along Palm Avenue that contained numerous trees. Based on the new survey data, the City agreed to waive the road elevation design criteria for west Palm Island. Minutes of a CIP progress meeting the same day said, "City willing to accept designs that have elevations less than 3.7' NAVD, but not lower than 2.7' NAVD."

The City also agreed to waive the design criteria elevation requirement for the minimum or lowest elevation (2.7 feet above sea level) for drains or storm grates in the area, which was usually a foot or more below the road. The minutes said, "The freeboard criteria between lowest FFE and lowest grate elevation may be relaxed or compromised on a case by case basis so as long as the minimum road centerline elevation is not below 2.7' NAVD. City will respond to RFI."

To the Lanzo design team and CIP Consultant Crews, this compromise elevation brought the design criteria into closer alignment with actual conditions on west Palm Island. In the days that followed, though, Rubio found that flooding continued to occur at 2.7 feet above sea level and proposed lowering the centerline elevation by another five inches, to 2.2 feet above sea level.

On March 27, 2015, the Lanzo team sent CIP a 30% set of plans with the crown-of-road elevations in west Palm Island at 2.2 feet above sea level. The submission included the results of new drainage studies. Such studies use advanced software to model the expected performance of a proposed stormwater drainage system. The purpose of this computer modeling was to verify that the proposed drainage system would meet regulatory standards for water management to ensure the system (a) did not cause flooding of nearby properties; and (b) would meet standards of water quality to ensure the system would not pollute bodies of water, in this case Biscayne Bay.

The results of the drainage studies showed that the proposed system—with centerline road elevations of 2.2 feet above sea level on west Palm Island, and 3.7 feet for road roads elsewhere—would meet the requirements of the SFWMD and DERM, during a hypothetical severe weather event, known as design basis storm, with 7.5 inches of rain during a 24-hour period. In a report of

the drainage study results, Rubio attributed the results to the lower road elevations, and observed that the City had agreed to allow “flexibility” in using centerline road elevations lower than the minimum crown-of-road elevation of 3.7 feet above sea level.

AECOM’s McGowan, the consulting engineer who was retained to provide the Mayor’s Committee with technical assistance, was assigned to review Rubio’s 30% plans on behalf of Public Works. The department’s official comments on the 30% plans questioned the technical assumptions in Rubio’s drainage studies: “The report suggests a need to relax the LOS (Level of Service) requirement of flood stages not exceeding the low crown of road or 12-inches below the lowest FFE in the basin. There is not enough information on the plans or within the calculations to support such a variance at this time.”

**B. (April 27 - May 26, 2015) The City Engineer Mowry agrees to waive road elevation criteria for North and South Coconut Lanes; City officials reach a consensus about the need for change in policy to allow public drainage systems to collect water from private lots.**

On April 27, 2015, Lanzo Construction Manager Beaty uploaded a copy of Rubio’s hardscape plans that showed road elevations on west Palm Island as part of RFI# 10. It said, “The roadway crown elevations that are below 2.7' NAVD have been highlighted. As can be seen from the Hardscape Key Sheet the low crown elevation locations are concentrated on the west half of Palm Island.” On May 1, Crews provided a response from the City that said, “The City Engineer will evaluate the proposed elevations with City Leadership.”

On May 6, 2015, Mowry responded to a query from Crews with an email that reiterated the City’s willingness to allow the use of lower road elevations on west Palm Island, including 2.2 feet above sea level. The email said, “I have been thinking about the street elevations on the end of Palm Island that is very low. I still have concerns about building road elevations low enough to flood at high tides. I would recommend that we maintain the crown of road in this area only for the project to be designed to elevated to an elevation of 3.7 feet NAVD in the future, but we would set minimum crown of road of 2.2 feet NAVD when necessary to accommodate these low finished

floor homes and yards. We could allow greater than 2% slope from crown to curb, maybe allow up to 3%.”

For the Lanzo design team, the City’s approval of the downward adjustment of an additional five inches in elevation was a critically important milestone. Fixing the minimum height of roads and storm grates was essential to completing other parts of the construction plans. CIP Consulting Engineer Crews said the City’s waiver of the minimum design criteria and approval of a centerline elevation of 2.2 feet above sea level for North and South Coconut Lanes was a considered decision and the result of a successful negotiation between engineers from the City and Lanzo. In an interview with OIG staff, Crews said, “It would have been worse if we went all the way to 3.7. Imagine those roads with another foot and a half. Then it wouldn't be 100...properties that were underwater, it would be two hundred.”

During meetings of the Mayor’s Blue Ribbon Committee in May 2015, the minutes show that the responsible City officials repeatedly discussed the risk that raising roads on west Palm Island to the minimum elevation criteria of 3.7 feet above sea level would cause new flooding and, further, that they discussed changes in City policy that would allow the use of private-side yard drains to mitigate the consequences of road elevation. Minutes of the May 12th meeting show CIP Director Martinez “shared that an upcoming issue for residential neighborhoods will be flooding back onto private property when roads and sidewalks are raised. A policy needs to be adopted by the City Commission. Primarily, interior properties will be affected.”

During an interview with OIG staff, City Engineer Mowry said the need to both raise road elevations would and develop a policy that allowed the collection of stormwater from private lots was a a consensus view that he, Carpenter and Martinez shared and discussed with Robins and members of the Mayor’s Committee and with members of the Flooding Mitigation Committee,, including Commissioner Aleman. Mowry said the following:

I can tell you that people such as Eric Carpenter were fully aware of this and was in agreement that we make these designs...So CIP, the Public Works Director and the City Engineer in the Blue Ribbon Committee, we're all in concurrence of this and that we wanted to be able to have this...This is this was not something done in the dark...CIP would have been very well aware of it and Stantec, who was also doing a review of it, was fully aware of the direction. And this did follow the policy in which I was being directed to implement at the time, because we were anticipating in the future that we would get a direction to be able to take water from private property...we put this in so that we had the flexibility to be able to make that connection in the future.

During an interview with OIG staff, Mowry said he assumed the design changes in October 2015 that required revision of the plans were communicated to DERM and SFWMD, and that he was not involved in the permitting process with either agency. More broadly, he said “there was never any guidance” from Carpenter or Levine suggesting or directing that information be withheld from DERM. “Whenever I talked with any of them, they basically...wanted to be above board on everything. So there was no policy that I was aware of within the City or direction from management saying hide things.”

In a written response to this report’s finding, Carpenter, who oversaw Public Works at the time, denied that he had a conversation with Mowry regarding the decision that the former City Engineer announced Oct. 9, 2019 rescinding the waiver of the elevation design criteria for west Palm Island. In response to a direct question about whether he approved Mowry’s decision, Carpenter’s response was, “To my knowledge I was not involved in discussions regarding the inlet elevations on west Palm Island during this time period.”

Regarding the City’s Oct. 30, 2015 approval conveyed by Mowry of RFI #34 (“Private Drainage Connection Accomodtion”) and Wade Trim’s conceptual plans to build a drainage system with connection for private-side yard drains, Carpenter’s written response was, “More than four years after the fact, I am not sure of when the initial discussions took place in relation to the Oct. 30, 2015 date but I was consulted about building the drainage system to connect with private-side yard drains. But I was consulted on the need to provide stubouts to allow the possibility of future connections without disturbing work that needed to be done on the roadway.”

During a CIP progress meeting May 14, 2015, the City staff reiterated that Rubio could set the centerline elevation of roads on west Palm Island as low as 2.2 feet above sea level. But when Beaty followed up with an RFI to confirm this commitment, the City’s response came with a caveat. The answer from Crews said: “As noted, it was agreed to place segments of the roadway in the vicinity of low lying homes at a minimum centerline elevation at 2.2 feet...The agreement was to design the 90% plans with this criteria at which time the City will evaluate the impacts further. Please proceed accordingly.”

During a May 26, 2015 meeting of the Mayor’s Blue Ribbon Panel the discussion returned again to the likelihood that elevating roads on west Palm Island would cause new flooding to adjacent homes. The minutes related as follows: “Chair Robins said that there are 20 homes on Palm and Hibiscus Islands that are below the proposed new street elevation. If the streets are rebuilt

at the current elevation the homes will end up below water and will also in time have to deal with ground water intrusion.”

**C. (June 2015) Lanzo submits 60% and 90% plans with west Palm Island road elevations at 2.2 feet above sea level; Lanzo submits lump sum estimate of \$34,447,283; Homeowners Associations objects to clearing right-of-ways; CIP orders “pause”**

Shortly before the 60% version of the construction plans was due for a milestone review, CIP and Lanzo met to review their joint understanding about the design criteria for the stormwater and hardscape sections of the construction plans. According to the minutes, CIP staff confirmed that the “minimum crown elevation of 2.2' NAVD is to be used for lower elevation areas in western sections of Palm Island along South Coconut Lane and North Coconut Lane,” and, further, that CIP also agreed that in order to construct the swales Rubio had included in his plans, “hedges, bushes, etc. can be removed from the ROW without replacement...City reaffirmed that mitigation plan includes 310 trees cited in DCP.”

On June 1, 2015, the Lanzo team submitted a 60% set of construction plans. At this point, the hardscape and stormwater sections of the plans Rubio had produced were nearly complete and included detailed technical specifications. The plans set the centerline road elevations at 2.2 feet in west Palm Island and converted most right-of-ways into grass swales with inlet drains. The following day, the Lanzo team sent CIP a Draft Guaranteed Maximum Price (GMP) of \$34,447,283 based on 60% plans. The GMP included more than 400 pages of estimates from subcontractors and unit prices for building materials. It was accompanied by a draft technical specifications document and construction schedule of 18 months, and the list of assumptions Lanzo had used to develop the estimates.

The assumptions were based on directives in the DCP and CIP’s modifications of the design criteria through the RFI process. Assumption #17 (“Existing landscape will be removed to accommodate Swales”) described the main requirement for converting the limited open ground in right-of-ways to grass swales with drains. Because this would entail clearing the right-of-ways of many trees, hedges, gates and fences, the other assumptions included planting 310 trees after construction and a plan for re-landscaping. Taken together, the 60% plans with technical

specifications and the lump sum estimate and construction schedule described how the project would be built, how much it would cost, and how long it would take to finish.

The City's comments on 60% plans illustrated the difference in priorities between Public Works, which was focused on designing an efficient drainage system, and CIP, which was intent on minimizing conflicts with residents that would make it harder to build the system. The comments from Public Works said Rubio's drainage studies "did not indicate whether the project's expected "Level of Service is being provided, or if the pumping systems are large enough." A comment from CIP said, "The proposed drainage/roadway work appears to impact numerous trees and/or palms," and asked about plans to plant trees elsewhere on the islands.

**D. (June 2015) Lanzo submits 90% plans, with Rubio's near-finished stormwater and hardscape sections; Homeowners Association objects to clearing right-of-ways to build swales; City postpones milestone review**

On June 19, 2015, Lanzo submitted a 90% set of plans to the City. The stormwater and hardscape sections with Rubio as the Engineer of Record were at a "near-finished" stage for constructing a standard drainage system. The City had not objected to Rubio's extensive use of grass swales and setting the centerline elevation of North and South Coconut Lanes at 2.2 feet above sea level.

At this point, the stormwater and hardscape sections of the plans were essentially done. Over the course of six months and two milestone reviews, the stormwater and hardscape sections of the construction plans by Rubio proposed a stormwater drainage system, roads, and right-of-way infrastructure that complied with the DCP's directives about the design of swales and the City's modification of the road elevation design criteria.

Drainage studies based on these plans indicated that Rubio had proposed something that in December 2012 the Stantec Drainage Analysis had said was "not possible" for North and South Coconut Lanes. Where he could raise roads on Hibiscus Island and east Palm Island to 3.7 feet above sea level without flooding private lots, he did so. On west Palm Island, where the drainage studies showed that elevation would result in flooding of houses with low first finished floors, the

City's waiver had allowed Rubio to propose raising North and South Coconut Lanes by six to ten inches above their existing elevation.

The drainage studies also indicated that the two pumping stations on Palm Island would provide a dramatic improvement in the Level of Service over the existing drainage system and prevent flooding of streets during a storm with up to 7.5 inches of rain in 24 hours. More extreme weather events with 10 or more inches of rain in a single day would still overwhelm the drainage system. Even in those worst-case scenarios, though, the proposed drainage system in Rubio's plans would remove floodwaters far faster than the gravity-based system it would replace.

The drainage studies showed that the new drainage system would meet the water quality and quantity standards that DERM and the SFWMD required for permitting. The computer modeling indicated it could remove all the rain that fell on public and private ground during a design basis storm, with the exception of rain in backyards that faced the Bay. The drainage study also established that the proposed drainage system would not cause new or harmful flooding of private homes that had garages or first finished floor with elevations below 2.2 feet above sea level.

On June 15, 2015 the Commission approved a resolution to allow the Marriot Residence Inn at West Ave. and 17<sup>th</sup> Street connect its stormwater drainage system to the City system. The After-Action minutes from the meeting said the resolution would serve "Until The City Approves Code Modifications To A Citywide Storm Water Connection Fee Program". In a written response, Carpenter that this was tantamount to approval to develop a policy to connect private yard drains to the City system. Carpenter's response said, "This, combined with the direction to size the stormwater systems to account for all of the inland lots and half of the waterfront lots, clearly demonstrates the direction if not the intent of the City Commission to include private properties in the adaptation plans, and not as an after the fact approval of modifications to the program...The City Commission gave direction to the Administration on June 10, 2015 to prepare a framework to allow private connections to the public stormwater system."

On June 19, 2015, the same day that Lanzo submitted the 90% construction plans, Senior Project Manager Tomczyk received a letter from the Homeowners Association President, Pierre De Agostini, expressing strong objections to cutting down trees in the right-of-ways to construct swales throughout Hibiscus Island and parts of Palm Island. Members of the Association had learned of the plans to clear right-of-ways to build swales. "The fact that the City is planning to ask residents to remove from the right-of-way hedges and other plantings that have existed for generations, which

will not physically affect the construction of this project, will be a very contentious issue,” he warned. De Agostini demanded a meeting with City Manager Morales “as soon as possible to resolve these important issues to our community.”

The impact of the letter on the project was immediate. The same day, Wade Trim engineer Garcia notified Rubio and others on the design team that CIP had decided to stop work on the plans. The email said, “We have been directed by the City of Miami Beach to complete our responses to their 60% comments and then pause all design activities until we receive comments from the HOA Board on our 60% submittal.” CIP postponed the 90% milestone review.

When Beaty learned of the HOA’s objections and CIP’s subsequent efforts to mollify the HOA by agreeing to change the plans, he used the RFI process to defend the swale-based design, and remind CIP that it was based on the design criteria that had been approved by the City.

On Aug. 8 Beaty uploaded RFI# 23 (“Swale Definition”), which said, “These swales are necessary to best ensure that rain water falling into the City Right-of-Way stays in the City Right-of-Way,” and that building the swales meant clearing most right-of-ways of trees and other encroachments and rebuilding many driveways that extended into public land. Further, RFI#23 expressed Beaty’s concern about verbal assurances that CIP had given the Homeowners Association about changing the plans.

RFI #23 concluded, “Landscape/Driveway area between the concrete valley gutter and the ROW Line will be preserved as much as possible. Please note that this may include the clearing of the entire Landscape/Driveway area if necessary for swale construction.” He closed with an effort to elicit clear guidance from CIP, saying “Please confirm that this swale definition is acceptable to the City.” CIP never provided a response to RFI #23.

Lanzo’s budget included \$500,000 for landscaping at the end of project. A landscaping contractor, Savino Miller, who was part of the design-build team, had prepared a landscaping section in the construction plans that provided for replacing the trees lost during the clearing of right-of-ways by planting trees elsewhere on the island. CIP had shared the construction plans with the HOA at the 30% stage of completion; during meetings with residents, CIP and the Lanzo staff explained the plans for clearing right-of-ways and mitigating the impact of that work.

Nevertheless, as a consequence of the complaints by the HOA, CIP postponed the 90% milestone review. As set forth below, the City directed Lanzo agreed to award a separate \$500,000

contract for new landscaping and make changes to the design of swales in the construction plans. This was the first of several significant changes to the drainage system's construction plans that were made at the request of the HOA. During an interview, Wade Trim engineer Thomas Brezinski, who led the Wade Trim team and handled negotiations with the City, said, "I think the City started a job in one way and responded to what their residents wanted which has been the driver of all these changes. They've been reacting to the residents."

Those changes reflected the difference in priorities between Public Works and CIP that Crews had identified in the DCP and the hurried preparation of the DCP. Yet the changes also support a conclusion that, notwithstanding their support for construction of a modern stormwater drainage system that reduced current flooding, residents on the islands were not prepared to sacrifice the tree-lined ambience of the islands to the cause of building a stormwater drainage system designed to reduce future flooding caused by sea level rise.

In a written response to the report, HOA President Ian Kaplan attributed the need for changes to poor planning by City staff. The response said, "The assertion that the Homeowners Association is responsible for delays in the project due to objections over the removal of trees is false. There was clearly a lack of adequate planning in the original plans to preserve the trees...Had proper planning taken place initially, no delays would have been encountered and the financial savings from minimizing tree removals would have been maximized."

**E. (Sept. 2015) The City approves use of Rubio plans to obtain permits from DERM and the SFWMD; during king tide flooding, Mowry advocates for raising elevations of roads on Palm Island**

On Sept. 16, 2015, Rubio emailed Carpenter a completed copy of the Miami-Dade County application for a Class II permit for his signature on behalf of the City as the owner of the construction project and applicant for the permit. Carpenter's assistant forwarded the permit application to Martinez and Mowry. Five days later, Wade Trim's Daniel Garcia emailed Rubio with a request that he send the permit's supporting documentation—the final design construction plans and the drainage study—to the City for review. "The City would like to fully review all documentation for permits prior to submittal to agencies," Garcia said.

During the final week of September, heavy rains caused extensive flooding on Palm Island and an unusually high king tide occurred that resulted in complaints from residents. On Sept. 26, 2015, a resident of Palm Island sent Mayor Levine an email with photographs of flooding around her house that began, “Thanks for taking care of the flood in Miami Beach but unfortunately you forgot Palm Island.”

Levine forwarded the email to Mowry, Carpenter, and Morales with a message that said, “Plan?” Mowry contacted Lanzo staff who agreed to plug the outfalls and deploy a portable pump. In an email to Levine that he copied to Carpenter and Morales, Mowry wrote, “This is the recommendation for Palm Island. I believe we have put a pump on the island to at least show we tried. I will continue to recommend that raising elevations is the only solution to ensure a future for Miami Beach. This has been my recommendation since the first day I became the City Engineer.” Later the same day, Mowry pressed his argument for raising the elevation of roads on North and South Coconut Lanes and amending City policy to allow the use of private-side yard drains. Mowry’s email said:

The neighborhood improvement project design for Palm Island is at a 60% complete (sic) with a proposed agenda item for action at the meeting in December/January for a contract to construct drainage with pump stations next year. The major problem we are encountering is the existing street elevations are below high tide and the older homes were built at low elevations. These owners are objecting to higher streets and this will result with streets that flood if they are not raised. We will need to develop a policy if we raise streets in these situations. The pumps will help but raising elevation is necessary to save the City.

On Oct. 5, CIP and Public Works had completed their review of the permit applications, the Rubio plans, and other documentation. CIP Director Martinez sent Carpenter the permits for his signature with a cover memo that said, “Backup documentation including water quality and water quantity calculations, drainage calculations and stormwater standard details to support this application are included in a CD attached to this request.” On Oct. 6, 2015, a Tuesday, Carpenter signed the permit application on behalf of the City as owner and permittee.

**F. (Oct. 9 – 12, 2015) City approves Mowry’s decision to change elevation criteria, requires raising North and South Coconut Lanes additional 1.5 feet; design engineer concludes the higher roads will cause new flooding of adjacent lots**

Three days after Carpenter signed the applications for permits based on the Rubio plans, Mowry met with CIP officials and Crews and announced that the City had decided to rescind its waiver of the minimum elevation design criteria requirements for west Palm Island that had set the elevation baseline for stormwater and roadway sections of those plans.

During a meeting with CIP staff on Oct. 9, 2015 Mowry explained that, in light of recent flooding during a king tide, he had decided to make the minimum grate elevation of 2.7 feet above sea level design criteria mandatory for all parts of Palm and Hibiscus Islands. This criteria established the lowest elevation for drains, and had an impact on how high roads could be raised and how swales were built. The City’s earlier waiver of this criteria had allowed Rubio to set the centerline road elevations of North and South Coconut Lanes at 2.2 feet above sea level.

In a written response, Mowry said Carpenter and other senior City staff approved the decision to changed the elevation criteria for west Palm Island. Mowry wrote, “When the elevation changes were established for Palm Island, the City Engineer had to discuss these changes with the Director of Public Works for his approval. The Director of Public Works and I did have these discussions, before I gave direction for the design of Palm Island to CIP.” In a written response on this issue, Carpenter wrote, “To my knowledge I was not involved in discussions regarding the inlet elevations on west Palm Island during this time period” was was not surprised to learn of the decision after the fact.

On Oct. 12, Crews notified Lanzo and Wade Trim of Mowry’s decision and the change in elevation design criteria in an email titled, “Palm and Hibiscus Islands Directive.” It said, “The City Engineer has directed that the absolute minimum elevation on the project be no lower than 2.7’ NAVD at the grate elevations. Please design all roadways within the project area to meet this criterion.”

The City made the decision knowing that the design engineers, including Engineer of Record Rubio, had concluded that the higher road elevation would cause new flooding of residential lots on west Palm Island. During an interview with OIG staff, CIP consulting engineer Crews said, “The major complication came with raising the roads because it inverted a lot of the properties that

had previously been higher than the road...[and] had natural gravity drainage to shed to the road.” Crews said that “when the road went up, suddenly they were behind the dam...we were making their historical situation worse.”

Wade Trim engineer David Mullen, the current Engineer of Record for the stormwater system, used a similar analogy to explain the expected effect of the City’s decision. During an interview with OIG staff, he said: “Yes, the construction, the elevating of the roadway, would basically put up a dam in the middle of the roadway blocking the existing stormwater flow.” Rubio also used the analogy of a dam-like barrier during an interview with OIG staff.

For Rubio, Mowry’s decision and the risk, if not absolute certainty, that it would cause harmful flooding raised several issues, including one that implicated his responsibilities to approve and make design changes to the construction plans that would have an impact on public health and safety, and meeting the requirements of permitting agencies.

As a licensed professional engineer, Rubio’s submission of the City’s permit applications to DERM and the SFWMD crossed a threshold and entered a legal realm that is governed by Florida law and the professional responsibility rules for professional engineers, adopted pursuant to 61G15 of the Florida Administrative Code.

These rules are unusually detailed. They govern every aspect of the process from the layout of each engineering sheet to the requirement that every page of a construction plan bear the signature of the Engineer-of-Record, the date the page was signed, and that both be stamped with a seal with the engineer’s license number. The bulk of the rules and their primary purpose are two-fold: (1) to establish the responsibilities and legal prerogatives of “the engineer in responsible charge” of drawing a project’s construction plans, commonly referred to as the Engineer-of-Record, and (b) to ensure the credibility and trustworthiness of signed and sealed engineering documents that are submitted to the “Authority Having Jurisdiction” or regulatory agency, for the purpose of obtaining a construction permit based on the plans.

A handful of these rules are material to the events described in this section. Among the most important to regulatory agencies are the rules for verifying “who is in responsible charge for the preparation, signing, dating, sealing and issuing of any engineering document(s)” and ensuring that a permitting agency assume that the plans they review for the purposes of issuing a permit were prepared by a single engineer who is legally responsible for the accuracy of every document,

written representation or letter certifying the information that the agency relies on in deciding to issue a permit.

Given the importance of the Engineer of Record's role in protecting the integrity of the permitting process, the State's rules explain how to distinguish the "responsible engineer in charge" of preparing construction plans from other engineers who may contribute to a project's technical documents. "As a test to evaluate whether an engineer is the Engineer of Record, the following shall be considered...2. The engineer shall be completely in charge of, and satisfied with, the engineering aspects of the project. 3. The engineer shall have the ability to review design work at any time during the development of the project and shall be available to exercise judgment in reviewing these documents."

The policies and practices of the DERM and SFWMD are based on Florida law and are essentially the same. Both agencies rely on the accuracy and completeness of documents, information and certifications signed and sealed by the Engineer of Record. Both agencies will begin their review of an application based on unfinished construction plans, but will not issue a permit until they review final plans signed and sealed by the Engineer of Record. In design-build projects these final plans are labeled "100% Final Design" that are approved by the project's owner after the final milestone review during a project's design phase.

After DERM and SFWMD issue permits for the construction of stormwater drainage system, both agencies have an unequivocal requirement that the project be constructed based on the signed and sealed final plans they reviewed and relied on in making the decision to issue a permit. DERM's Class II permit is issued subject to the following condition: "This permit only authorizes the grading and drainage work summarized in page 1 of this permit. Any additional work not shown in this permit or on the approved plans shall require additional Class II permit approval." Further, the DERM permit says that if the project is not built "in accordance with the conditions of the permit, the Code, or the approved plans upon which the permit was issued," then DERM can withdraw the permit and order that the work be stopped.

Despite the legal rigor of these requirements, both agencies acknowledge the operational reality that during the construction of a complex stormwater drainage system, general contractors often need to make minor adjustments, such as installing a fire hydrant on a different corner than originally planned.

Consequently, both agencies allow owners (in this case the City) and general contractors (Lanzo) to disclose minor changes at the end of a project when they submit an “As-Built” set of construction plans. However, this accommodation is limited to minor changes in the field that do not alter the project’s design or require significant changes to the construction plans. The District’s regulations state that, “Major changes, including changes to permit authorization or special or limiting conditions would require a permit modification before implementation.”

A provision in the Miami-Dade Code requires that all applications for Class II permits include a “Letter of Engineer’s Certification” affirming that the proposed stormwater drainage system will not create a “Harmful obstruction or undesirable alteration of the natural flow of the water within the area of the proposed work,” or cause a “Material injury to adjacent property”

The evidence supports a conclusion that Rubio, Wade Trim engineers including Kremers, CIP Consulting Engineer Crews, City Engineer Mowry, and other engineers involved in the project knew, or had reason to know, there was a high probability that raising North and South Coconut Lanes a foot or more above 2.2 feet above sea level would disrupt the historical “positive” flow of stormwater from private lots and cause the “ponding” of trapped floodwater.

**G. (Oct. 14 – Oct. 15, 2015) Mowry’s decision requires complete revision of the Rubio plans; City decides not to provide new funding for that purpose or allow Lanzo time for that work; Wade Trim decides to terminate Rubio and Craig A. Smith & Associates as subcontractor.**

The City’s decision to raise road elevations required a complete revision of the near-finished stormwater and hardscape plans that Rubio prepared for the 90% milestone review in June. Raising the elevation of the drains and road by a foot or more would have an impact on other parts of the design.

In an initial assessment for Wade Trim, Rubio wrote that, “Driveway harmonization will be (and has been) a significant effort and is intensified by the higher elevation. Note: revisions to water main plans may need to be considered unless deeper installation of water main is kept as a result of the road being elevated.” The change also meant that the results of drainage studies based on Rubio’s 60% plans, which Rubio had just submitted to the SFWMD as part of the City’s permit

application, would need to be revised. If elevations throughout the drainage system were raised by 1.5 feet, the results of the earlier tests would no longer be a reliable estimate of the drainage system's performance.

Further, Mowry's decision had financial consequences that were immediate. The change in criteria significantly increased the technical difficulty of the project. CAS assumed that Rubio would handle revisions of the stormwater and hardscape sections of the plans and sent Wade Trim a purchase order to pay for the additional engineering work on Oct. 15. Wade Trim rejected the purchase order and advised CAS that its own engineers would perform the revisions.

During an interview with OIG staff, Wade Trim's Brzezinski said his firm decided to have Wade Trim engineers do the revisions instead of Rubio because, at that point, the City declined to provide additional funding. Brzezinski said, "We were asked to finish the job for an amount of money that was less than what we wanted." In the weeks that followed, Wade Trim engineer Kremers began revising the stormwater section; Wade Trim engineer Carey Wright revised the hardscape section under Kremers' direction.

On Oct. 14, City Manager Morales submitted a Letter to the Commission (LTC) in support of Amendment #2 to the Lanzo contract, providing \$73,400 for "additional design services." The funding request was not related to the City's decision to require the minimum grate and road elevations on west Palm Island. The funding sought under Amendment #2 was for changes requested by the Homeowners Association and the Fire Department, as well as those required by a new City ordinance that made it more difficult to cut down trees. This reflected the City's decision to override guidance in the DCP regarding swales that allowed the removal of trees that obstructed the flow of stormwater.

The LTC recalled that just eleven months earlier the City Commission had added \$251,016 to Lanzo's design contract to cover the cost of incorporating the new stormwater design criteria into the construction plans, and noted that "the City's Public Works Department (PWD) has requested that staff implement the enhanced stormwater system criteria." Addressing the City Commission in support of Amendment #2, CIP Director Martinez said, "This is a progressive design build contract. We're strictly going through the design phase right now. There have been some additional design modifications that have come up that need to be incorporated into the design. So we're asking for this amendment for the design builder Lanzo Construction to continue and wrap up the design so we can bring up a guaranteed maximum price in December of this year."

Two aspects of the Commission’s action are material to this investigation. First, Amendment #2 did not request funds for the additional engineering services required to revise the stormwater and hardscape plans based on the City’s design changes. This would result in a decision by Wade Trim to terminate CAS as a subcontractor and assume responsibility for revising the Rubio plans. Second, declaring that the additional funds would enable the City to end the project’s design phase by December and negotiate a GMP with Lanzo meant the City was not prepared to allow time for Wade Trim to prepare new construction plans and drainage studies.

## **VII. WADE TRIM’S SOLUTION**

### **A. (October 2015) The City approves conceptual engineering solution developed by Wade Trim; adopts expedited design methodology that Mowry used as Engineer of Record for Sunset Harbour project**

The City’s decisions in October 2015 to change the elevation design criteria for west Palm Island, override CIP’s project management process, discard the Rubio plans, and begin construction without a revised set of plans were not made in a vacuum or without considering the risks that the higher road elevations in west Palm Island would cause new flooding of adjacent private property.

These decisions were based on the confidence that the responsible City officials and their contractors had in an expedited design and construction methodology they had been using in a project in Sunset Harbour, the first project during Mayor Levine’s tenure that included elevating roads above adjacent private lots and using yard drains to mitigate flooding.

During an interview with OIG staff, Carpenter said, “I can tell you that obviously we were in construction on Sunset Harbour at the time, we were learning a lot because we were actually building elevated roadways in a very constrained environment. And I am assuming that the team would have taken some of those lessons learned and tried to apply them to Palm and Hibiscus.”

The responsible City officials viewed the Sunset Harbour project as an early success story and proof that they could manage the challenges of accelerating the design and construction of a

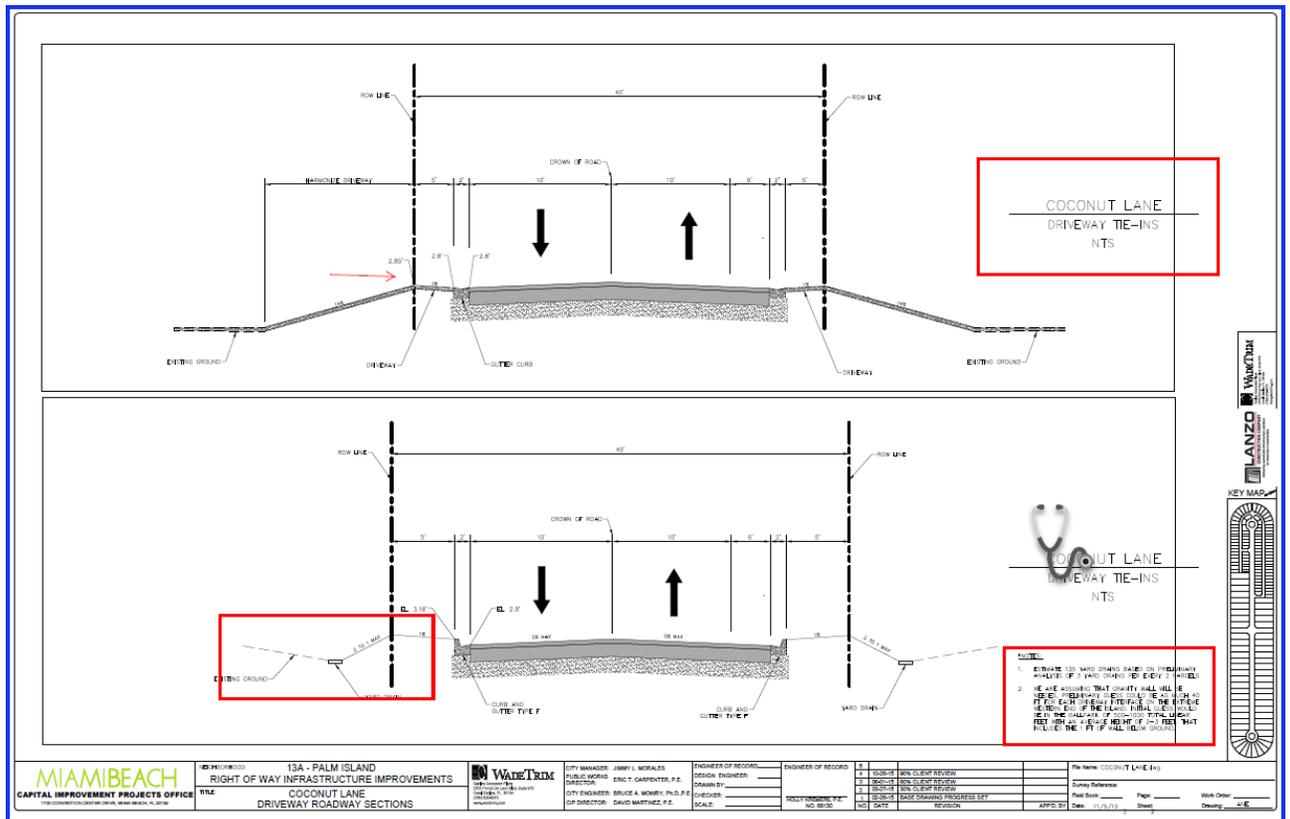
stormwater drainage project and develop innovative drainage solutions. Mowry ran the project; Wade Trim's Kremers designed the plans; Lanzo's Beaty was in charge of construction. By the last quarter of 2015, they had integrated the installation of pumping stations with water quality treatment devices, raised the elevation of roads by 6 to 30 inches, and installed 12-inch yard drains to collect stormwater trapped by the newly-raised streets.

In an interview with OIG staff, Beaty said the City's decision in October 2015 to raise North and South Coconut Lanes and Coconut Court a foot or more above the 2.2 foot height in the Rubio plans left the City with no alternative but to follow the Wade Trim solution. Beaty said, "You know as soon as you raise the road...you know you've got to do something to accommodate these people.... so they (the City) by design, they generated a problem that had to be dealt with."

During the final week of October 2015, Kremers and Wright had begun refining conceptual drawings for building a drainage system that connected to drains in private lots on west Palm Island. Starting with the standard drainage system in the Rubio plans, Kremers added an array of 12-inch PVC pipes ("laterals") that would extend out from the mainline pipe in the road to the edge of the right-of-way in front of each house. These could be used to connect a pipe that extended vertically up to the right-of-way or horizontally into the private lot. During an interview, Mowry said, "We wanted to be able to have this" to provide connection for private-side yard drains in the future.

On Oct. 23, Wade Trim engineer Wright finished a schematic drawing labeled "N. S. Coconut Lane Driveway Tie-in" that showed how connections would be made (Figure No.3).

Oct. 26, 2015, the day that CIP had set for submitting the 90% plans, was a turning point for the project. First, Lanzo sent the City a 90% set of plans that contained few changes to the stormwater and hardscape sections prepared by Rubio, and conceptual drawings by Wade Trim showing how the private-side yard drains would use the lateral pipes and right-of-way drainpipes to connect to the drainage system. Second, Rubio changed the designation of his 60% plans to "90%" plans, signed and sealed these plans, and submitted them to DERM as a supplement to the City's application.



*Figure 4 Drawing dated Nov. 5, 2015 by Wade Trim engineer Holly Kremers that show the plans for installing yard drains in private property*

**B. (Oct. 30, 2015)- The City approves RFI# 34 (Private Drainage Connection”) and Wade Trim’s conceptual plans for a drainage system designed to connect with drains on private lots; City staff tell Homeowner’s Association Commission will change policy to allow residents to connect yard drains to the City drainage system**

On Oct. 30, 2015, Beaty uploaded RFI # 34 “Harmonization of Private Property” . Included with the RFI was a Wade Trim conceptual drawings showing how the private-side drains would connect to the drainage system. Beaty explained that the new design would ultimately require construction work in private property. Beaty concluded with language that sought to limit Lanzo’s responsibility for additional work beyond the right-of-ways. The RFI said: “The Limits of Harmonization past the ROW and into private property will only include drive areas and only extend to the point of 7:1 grade transition to the existing grade of the drive area. Any further harmonization will be ‘By Others,’ including any necessary adjustments to gates, doors, entrance

ways, etc. Harmonization will be limited to driveway transition as defined by the attached driveway restoration policy.”

The same day, Oct 30, Beaty uploaded RFI #35, “Private Property Drainage Water Accommodation,” and again attached a Wade Trim conceptual drawing showing how a private-side drain would connect to the public drainage system. He wrote, “The attached section for elevating roadways provides drainage accommodation for Private Surface Water Runoff. I understand from discussions that this drainage system should be ‘Capped’ at the Right-of-Way for future connection by the Private Property Owner. This future connection will include a check valve on the private property side to ensure City drainage water does not ‘Back-up’ onto private property. Future Connection will be installed ‘By Others.’” (Figure No. 4)

**REQUEST FOR INFORMATION**

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PROJECT NAME: Neighborhood #13, Palm & Hibiscus Islands PROJECT No. F-430  
RFI No. 035 Request for Information Date: October 30, 2015  
TO: Jeff Crews, PE - Stantec, Olga Sanchez - Miami Beach CIP  
FROM: Bob Beaty, PE, Lanzo

REFERENCES:

PLAN No. Sections SPEC SECTION: \_\_\_\_\_ SHOP DRAWING: \_\_\_\_\_

INFORMATION REQUESTED: Private Property Drainage Water Accommodation

The attached section for elevating roadways provides drainage accommodation for Private Surface Water Runoff. I understand from discussions that this drainage system should be “Capped” at the Right-of-Way for future connection by the Private Property Owner. This future connection will include a check valve on the private property side to ensure City drainage water does not “Back-up” onto private property.

Future Connection will be installed “By Others”.

Please confirm this expectation.

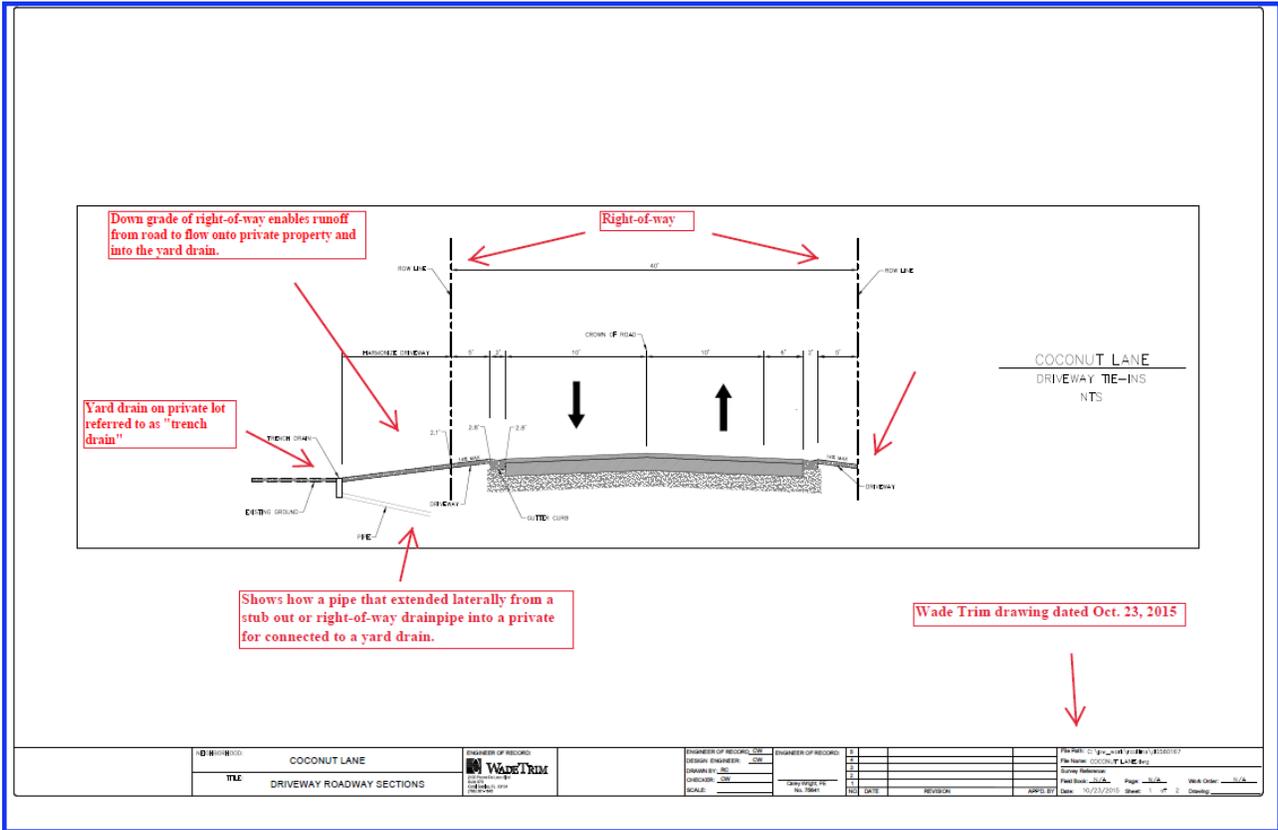


REPLY: \_\_\_\_\_ TITLE: Project Manager

*Figure 5 RFI #35 requesting confirmation of the City's plans to build a drainage system designed to provide private-side yard drains. (Emphasis added by OIG staff)*

The attachment to RFI #35 showed how the system could be installed on private lots.

(Figure No. 5)



*Figure 6 Wade Trim conceptual drawing attached to RFI #35 "Private Property Drainage Connection Accomodation" that former City Engineer Mowry approved on behalf of the City [Annotation added by OIG staff]*

CIP Consulting Engineer Crews of Stantec, who administered the RFI process, forwarded the RFIs to Mowry who responded promptly: "The City agrees with the connection to be made as described in the RFI."

During an interview with OIG staff Mowry said, "This was not something done in the dark...CIP, the Public Works Director, the City Engineer and the Blue Ribbon Committee, were all in concurrence of this and that we wanted to be able to have this...I made those statements, but they were based upon the direction that was given to me as from management and from committee meetings that were going on"

During an interview with OIG staff, Carpenter said he did not recall when the decision was made to approve the redesign of the drainage system to provide for connections to private-side yard

drains. “I don't know at what point in relation to the contract execution that those concepts started to get circulated. I remember hearing about stub-outs from right-of-way drains, but I don't remember at what point those discussions started.”

Regarding the City's Oct. 30, 2015 approval conveyed by Mowry of RFI #34 (“Private Drainage Connection Accomodtion”) and Wade Trim's conceptual plans to build a drainage system with connection for private-side yard drains, Carpenter said in an interview he could not recall when he learned of the plans. In a written response, he wrote, “More than four years after the fact, I am not sure of when the initial discussions took place in relation to the Oct. 30, 2015 date but I was consulted about building the drainage system to connect with private-side yard drains. But I was consulted on the need to provide stubouts to allow the possibility of future connections without disturbing work that needed to be done on the roadway.”

The Rubio plans were the result of difficult negotiations that resulted in a standard drainage system that complied with the DCP. AECOM engineer Thomas McGowan, who prepared the stormwater and hardscape sections of the DCP and participated in review of the 60% and 90% construction plans by Public Works, said the Rubio plans were the result of a compromise. He said in a statement, “I attended several meetings at CIP including Rubio and Crews wherein the intent of the DCP language was discussed, where flexibility existed, and means and methods to resolve the technical issues. The result was the Rubio design with road crowns in specific locations at 2.2 feet, NAVD, and a standard stormwater management system design as reflected in the 100% Rubio plans.”

**C. (Nov. 4, 2015) The City and Lanzo finalize plans for installing private-side yard drains; direct Rubio to submit his plans to DERM with permit application; direct Wade Trim engineer Kremers to reengineer, redesign, and revise Rubio's construction**

On Nov. 4, Beaty sent CIP a revised lump sum estimate of \$43,719,010 to build the project with the new road elevations and connections for private-side yard drains, an increase of \$9.2 million above the previous estimate based on the 60% plans by Rubio. Lanzo's new estimate included \$1,204,933 for “265 Yard Drains with Tee,” and added six months to the schedule.

It would take several months for Kremers to revise the stormwater and hardscape sections of the Rubio plans. Without a finished set of plans, Lanzo based its estimate on a list of assumptions. These assumptions were derived from the DCP and modifications to the design criteria that Lanzo had set forth in correspondence and the City had confirmed through the RFI process. These included assumptions that, except for driveways, Lanzo's work would be limited to the right-of-way; that "existing Landscape will be removed as necessary to accommodate construction of Swales;" and, importantly, that "the Work Definition associated with CIP's October 12, 2015 directive is complete with concepts presented in Lanzo's RFI-034 (Private Property Harmonization), RFI-035 "Private Property Drainage Water Accommodation", & Savino-Miller's November 3 E-Mail (Remove / Replace 225 Trees)."

In sum, as of Nov. 4, 2015, Wade Trim's conceptual designs for connecting private-side yard drains to the public drainage system, and the plan to install large numbers of private-side yard drains had been incorporated into Lanzo's Work Definition under its contract with the City. As set forth below, while the City would negotiate a lower lump sum price for the project, it would approve the materials and labor associated with the installation of "265 Yard Drains with Tees." During this period the City and Lanzo directed Rubio to continue his efforts to obtain permits for the project using his now-discarded plans for a standard drainage system.

Also, on Nov. 4, 2015 a clerk in DERM's Water Control Section logged the agency's receipt of the City's application for a Class II permit based on the now discarded construction plans by Rubio. Included with the City's application was a technical report that the City approved Oct. 6 and Rubio signed and sealed on Nov. 2, 2015. The report said the project would include "elevated roadways where possible, installation of new potable water main systems, installation of stormwater collection systems with 3 stormwater pumping stations equipped with water quality treatment units and gravity bypass stormwater outfalls with dissipation structures discharging into Biscayne Bay."

The report contained a section titled "Proposed Construction" that described the City's new minimum (or lowest) grate or drain elevation of 2.7 feet above sea level, and the minimum crown-of-road or centerline elevation of 3.7 feet above sea level. Using the acronym CMB for City of Miami Beach, the report explained that, in accordance with the project's DCP, the City planned to apply its new elevation design criteria to the "Roadways" or hardscape section of the construction plans. The report said, "CMB criteria requires that minimum road crowns are set at or above elevation 3.7' NAVD. For the West Palm Island System, and primarily on North and South Coconut

Lane, this was not possible due to the existing topography (garages and existing yard grades) encountered below the future design groundwater elevation of 2.7' NAVD.”

The technical report referred to two charts showing the results of Lanzo’s survey of the first finished floors (FFE) and garages for each house on west Palm Island. Approximately 60 homes had elevations lower than the minimum crown-of-road criteria of 3.7 feet NAVD. For that reason, the report said, “The criteria posed significant driveway harmonization and resident accessibility issues which cannot be addressed at this time unless each affected lot undergoes full blown redevelopment. As such, North and South Coconut Lane road crown elevations will be no lower than 2.2' NAVD as allowed by CMB with edge of pavement grades matching existing elevations.” (Emphasis added.)

Nearly a month had passed since Mowry’s announced the City Administration’s decision to require use of the elevation criteria to west Palm IslandPalm Island that would require raising the centerline elevation of North and South Coconut Lanes a foot or more higher than 2.2 feet above sea level.

**D. (Nov. 5 – Dec. 9 2015) The City approves Wade Trim’s revised plans for the drainage system in west Palm Island and unveils the initial version of a policy to allow the connection of yard drains on private property to the public drainage system**

As engineers in DERM and the SFWMD began their review of the City’s application for permits based on the discarded Rubio plans, Wade Trim refined the conceptual drawing for connecting private-side drains and the City explained the new approach to the Homeowners Association.

On Nov. 5, Kremers approved Wright’s conceptual drawing labeled “Coconut Lane Driveway Tie-Ins.” (Figure No. 6) She included notes on the drawing to describe two strategies to manage the ponding of water in private lots on North and South Coconut Lanes and Coconut Court that Wade Trim engineers expected to occur after the roads were raised.

The strategy entailed two steps: installing 12-inch drain connections at the edge of the right-of-way in front of most homes in west Palm Island; and thereafter using drains as connection points

for the installation of drains inside private lots. An engineering note on the diagram said, “Estimate 135 yard drains based on preliminary analysis of 3 drains per yard.” In the upper half of the same drawing, Kremers also illustrated the 14% slope that would be needed for driveways that descended from newly elevated roads. The City approved the Wade Trim solution the same day.

On the evening of Nov. 5, City Engineer Mowry, CIP staff, and representatives from Lanzo and Wade Trim met with the Board of Directors of the Homeowners Association. The first order of business was to explain the City’s decision to require the minimum grate elevation of 2.7 feet above sea level, and the City’s plan for addressing the new flooding that this change was expected to cause for houses at lower elevations on North and South Coconut Lanes. The minutes included the following:

Lanzo presented conceptual cross-sections for South and North Coconut Lanes. The concept will raise the roads such that the lowest stormwater catch basin is at a minimum elevation of 2.7' NAVD, and will continue at the new higher elevation to the edge of the right-of-way. Harmonization onto private property take place at a 1:7 slope into driveways and a 1:2 slope in non-driveway areas. Additional harmonization on private property will be responsibility of the homeowner.

City staff described plans for the Commission to change a policy that prohibited the connection of privately owned yard drains to the public drainage system so such connections could be made at the owners expense. The minutes said:

The City elaborated on the typical sections provided by Lanzo and the City's approach to stormwater management: The proposed roadway design will capture all rainwater that falls within the right-of-way via the City's stormwater system. **Drainage accommodation for surface water runoff from private property will be per a future City ordinance that will require property owners to pay for stormwater disposal from their private property into the City’s stormwater drainage system. As part of the current improvement project, a stub-out will be provided for each property and “capped” at the right-of-way (ROW) for future connection (if desired) by the property owner.** This future connection will require a check valve on the private property side to ensure City drainage water does not ‘back-up’ onto private property. (Emphasis added.)

This was the first iteration of the “policy” that Mowry and Martinez had been saying the City would need to adopt if it raised the elevation of roads in neighborhoods with unusually low elevations. Like the installation of the right-of-way drainpipes, the plan to have the Commission

allow the connection of private-side yard drains to the system was an essential feature of the Wade Trim engineering solution the City Administration had agreed upon to mitigate new flooding caused by the elevated roads. During an interview, Mowry said, “We were anticipating in the future that we would get a direction to be able to take water from private property.”

On Dec. 9, 2015, the City Commission passed a resolution setting a maximum base price of \$35 million for the project’s construction phase with a ten percent contingency for a total not-to-exceed price of \$38.5 million, and authorized the City to terminate its agreement with Lanzo if the parties could not agree on a price, and to solicit bids from other general contractors. In a written response by Carpenter, he said “Information was provided in agenda memos drafted by Public Works and CIP Departments and submitted to Mr. Morales for inclusion in the Commission Agendas,” for the Dec. 8, 2015 Commission meeting. The Commission Memorandum contained correspondence from Lanzo as an attachment that referred RFI #35 (“Private Property Drainage Connection Accomodation” but did not include the RFI or the Wade Trim drawings. Carpenter’s response said,

On or about Dec. 8, 2015, the City approved a version of the stormwater section of the plans prepared by Rubio, now labeled “100% Final Design” and dated Dec. 9, 2015. On Dec. 11, Rubio signed and sealed this version of his plans, and sent it to SFWMD. Thereafter, that agency used this version of the Rubio plans to complete its review of the City’s permit application. The following week, Kremers approved revisions to the hardscape section of the revised plans for west Palm Island that raised the crown-of-road elevation for North and South Coconut Lanes to 3.2 feet above sea level. This was six inches lower than the City’s minimum design criteria of 3.7 feet above sea level. The adjustment indicated that even Wade Trim found it impossible to raise the roads any higher.

**E. (Jan. 11 – 30, 2016) The City awards \$38.5 million build contract to Lanzo with finished plans for new public-private drainage system or drainage studies to verify its expected performance; Concurrent with these activities, the City continues to review and approve Rubio’s use of the original plans to obtain permits**

On Jan. 11, 2016, the City Commission approved Amendment #3 awarding a \$38.5 million contract to Lanzo to build the project. The City awarded the contract to begin construction without the benefit of finished construction plans for the stormwater and hardscape sections of the project. CIP Director Martinez said the priority that former Mayor Levine placed on accelerating project's put "a lot of pressure on the administration" that ruled out further delay in the Palm and Hibiscus project. **"This thing was moving at light speed...And there was no option to stop these things." Further, Martinez said Mowry was under particular pressure to get results. "He was tasked with getting these projects done, in my mind, at whatever cost. Getting them done. So he was not going to let anything get in his way to get them done."**

During January, CIP attempted to fill this gap by conducting a final milestone review of the finished, or "100% Final Design" version of the Kremers plans, and inadvertently had Crews and Public Works staff review the Rubio plans. The confusion occurred for two reasons. First, because CIP was managing the work of two engineering firms--CAS and Wade Trim--who were revising the same section of construction plans for distinctly different purposes; and, second, because the City and Lanzo decided to postpone submission to DERM of a signed and sealed final version of the Rubio plans for three months.

In January, 2016 CIP conducted a "100% Milestone Review" of the "100% Final Design" plans by Kremers. But these plans were not finished. This resulted in Crews and Public Works mistaking the Rubio plans for the Kremers plans. This mix-up resulted in statements in a CIP Comment and Review spreadsheet dated Jan. 30, 2016 that shed light on the intended purpose of the right-of-way drainpipes that were installed in front of each house on west Palm Island.

In the process of critiquing what he thought were the Kremers plans, Crews observed that the grate elevations on west Palm Island were lower than the minimum elevation of 2.7 feet. His comment said, "These plans have not been updated to include the higher grate elevations required. This sheet shows grates at 1.30', 1.40' etc." Crews also noted the absence of the lateral pipes that would provide right-of-way drainpipe connections for the future installation of private-side yard drains. Crews' comment said, "These plans do not show the miscellaneous connections discussed for the swale and private party connections."

The responses attributed to CAS (presumably Rubio) show an attempt to clarify that the plans were unchanged because Rubio was not involved in Wade Trim's revision of the stormwater

and hardscape sections of the plans. The CAS comment said, “CAS was aware of the scope change and requested a change order on 10.12.15 for another scope change from WT. On 10.15.15, WT opined to CAS that they were better suited to address the elevation... by Dec. 2015 but have not clarified ‘engineer in responsible charge’ matters with CAS nor to the best of our knowledge modified plans as they indicated.”

The CAS response about the “engineer in responsible charge,” refers to rules in Florida that apply when an Engineer of Record is replaced. Before signing and sealing plans prepared by another engineer, the F.A.C. rules require successor engineers to “redo” the engineering calculations, document that they have “rethought and reworked the entire design process,” and notify the prior Engineer of Record they are taking charge of the project.

The exchange of comments reflected the impending end of Rubio’s responsibility for preparation of the stormwater and road plans and approval of design changes. In developing the original drainage system, Rubio had decided to use 18-inch and 36-inch drains on both islands to improve the performance of the system to collect stormwater in the swales and right-of-ways. Because the size and location of drains helps determine the performance of the drainage system and its ability to prevent flooding, such decisions can have an impact on the “health, safety and welfare” of residents.

The CIP comment and response spreadsheet included a comment from Wade Trim that the issue of drain size should be discussed with the City and said, “12” [inch] SDR 35 yard drains to be used in west Palm section.” The response from CAS referred to Rubio’s earlier response to Beaty. It said, “CAS has had discussions with the Contractor and CAS recommends keeping the 18” grates in Palm Island with a USF 5608 grate and a 12” storm pipe (if the DCP has been relaxed from 18" to 12") connecting to the proposed 12” Inserta Tee.”

The foregoing statement, and other evidence support a conclusion that Rubio was excluded from Wade Trim’s revision of his plans, but that on or before January 2016 he knew, or should have known, that the City’s decision required that his plans be reengineered, redesigned, and redrawn; that Wade Trim engineers were making these revisions without his approval; and that he was no longer carrying out the functions of the Engineer of Record for the stormwater and hardscape sections of the plans.

**F. (Feb. 26 – March 19, 2016) At the direction of the City and Lanzo, Rubio continues using his plans to obtain permits for the project; Wade Trim engineers Kremers and Wright complete their revision of the Rubio plans**

Despite Rubio’s lack of involvement in Wade Trim’s revision of his plans, he continued to represent the City as the project’s Engineer of Record for the stormwater drainage section in his dealings with SFWMD and DERM. CIP, Lanzo and Wade Trim staff continued to oversee and approve his efforts to secure the permits.

With the exception of his interactions with the permitting agencies, Rubio no longer carried out responsibilities of an Engineer of Record for the stormwater and hardscape sections of the revised plans for the new drainage system the City intended to build on west Palm Island. During an interview with OIG staff, Rubio said he never saw and did not approve the revisions by Kremers and Wright. There is no evidence that Rubio notified DERM or the SFWMD that he was no longer in charge of the plans for the drainage system or that it was being revised.

While DERM and the SFWMD used the discarded Rubio plans to conduct their permitting reviews, Kremers and Wright continued revising the Rubio plans with the assistance of CIP and Public Works. The evidence supports a conclusion that between February and May 2016, Kremers carried out the functions of Engineer of Record with one exception: She did not sign and seal the revised stormwater section of the plans. The purpose of this singular omission was explained in Wade Trim’s correspondence with CIP.

In a letter to CIP Senior Project Manager Mark Tomczyk dated March 3, 2016, a Wade Trim manager described the firm’s plans to continue designating Rubio as the Engineer of Record until the District and DERM had issued permits based on the Rubio plans. It said, “As discussed, Wade Trim will be appropriating design documents from Craig A. Smith & Associates (CAS) for the Neighborhood 13 Palm and Hibiscus Islands Right-of-Way Infrastructure Improvements project once 100% submittal has been fully approved by the City of Miami Beach and relevant permits acquired from SFWMD and Miami-Dade RER (DERM).”

For the City, Lanzo and Wade Trim, the alternative to this arrangement was to notify DERM and the SFWMD that Kremers and Wright had replaced Rubio. Had they done so, there is a high probability that DERM would then have asked to receive finished plans signed and sealed by

Kremers. According to the pertinent section of the Miami-Dade Code, “If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit.” In early March, Kremers and Wright prepared the 100% Final Design versions of the revised stormwater and roadway sections, with a cover date of Feb. 26, 2016. Wright’s hardscape section included a schematic drawing that showed how private-side yard drains would be connected to the drainage system. A note on one drawing said,, “Estimate 90 12-inch yard drains based on preliminary analysis of 1 yard drain per parcel.” In some areas, the revised plans replaced the 18-inch drains preferred by Rubio for the 12-inch drains favored by Beaty, an indication that Rubio no longer was making decisions as the Engineer of Record.

After receiving the “100% Final Design” plans from Kremers dated March 19, 2016, Crews conducted a review on behalf of CIP. His comments were circulated in a spreadsheet titled “Second 100% Review Comments.” Regarding the stormwater section for North and South Coconut Lanes, Crews expressed surprise that additional pipes for the private-side yard drains had not been added to the plans. He wrote, “The configuration of private property collection basins does not meet the intent of the discussed improvements. Each property should have its own connection and longitudinal pipes cannot run on private property.” Crews reminded Kremers that the lateral pipes that extended from the mainline drainage pipe to the right-of-way in front of each lot should not go onto private property.

Even as the City and Lanzo worked with Kremers on the redesign, CIP and Wade Trim staff continued to oversee and approve Rubio’s ongoing efforts to obtain a Class II permit on behalf of the City. On March 10, 2016, the City and Wade Trim approved a letter from Rubio to DERM providing written answers to information requests. The correspondence was copied to CIP Project Coordinator Sanchez, Lanzo Construction Manager Beaty, and Wade Trim engineer Garcia. On March 19, 2016, Wade Trim engineer Garcia delivered a signed and sealed version of Rubio’s “100% Final Design” plans for Palm Island, which also bore the cover date Feb. 26, 2016, and plans for Hibiscus Island dated Feb. 22.

Since January, Lanzo had been working on other parts of the construction project that did not require a DERM permit. By March, Crews had become concerned about the length of time that

Lanzo had been working without the benefit of a finished set of construction plans. In a March 22, 2016, email to CIP staff Crews said, “Despite the fact that the “100%” plans continue to evolve, I went ahead and prepared comments (on the Kremers plans) so that I was on record. I am concerned that these plans are not where they need to be. More importantly, I am concerned that the elevations are higher than they should be. Meanwhile, we are installing water main based on those elevations.”

This statement for the record by Crews addressed the potential risks, in terms of cost and schedule delay, of the City’s decision to allow Lanzo to begin construction before the revised stormwater and hardscape plans were finished.

**G. (April 7 - 28, 2016) The City and Lanzo finalize plans for installing permanent yard drains in private lots; DERM begins the final phase of reviewing the City’s permit application**

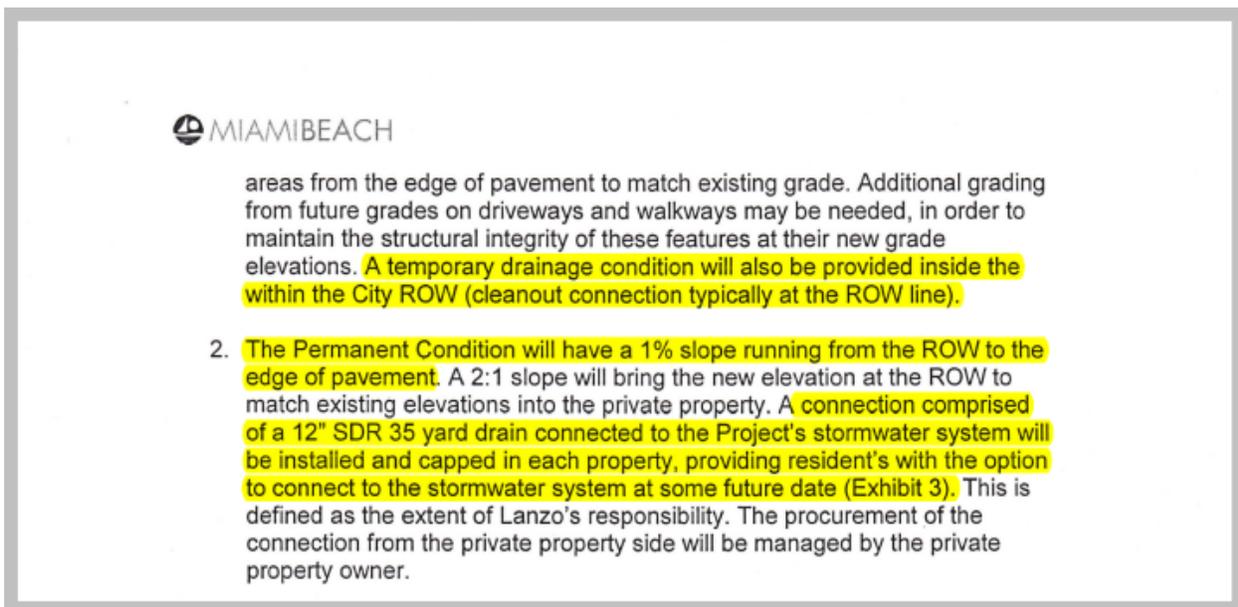
On the morning of April 7, 2016, CIP Project Coordinator Sanchez and CIP consulting engineer Crews traveled to Palm Island where they met with Lanzo Construction Managers Beaty, Pablo Riano and Victor Serrano, and Wade Trim engineers Wright and Garcia. The purpose of the field meeting was to finalize plans for installing yard drains at the edge of right-of-ways and in private lots along North and South Coconut Lanes.

Five months had passed since the City had approved Wade Trim’s conceptual design for an alternative stormwater drainage system that connected to private yard drains. During this period, the City oversaw the parallel efforts of Rubio and Kremers. Also during this period, CIP and Public Works reviewed and commented on 90% and 100% versions of the discarded Rubio plans, and approved his written responses to requests for information from DERM and the SFWMD. Concurrent with this activity, CIP and Public Works also oversaw the ongoing revisions of Rubio’s plans by Kremers and Wright. During February and March, CIP and Public Works both reviewed versions of the revised plans and provided comments that were incorporated into a final draft.

In early April, the City and Lanzo had reason to believe that the City’s permit applications were in the final stage of the review process at both agencies. In early March, Rubio had sent DERM engineer De Torres a written response to what he assumed would be the agency’s last request for information. He concluded with a plea, “The Design Team and the City are on a fast

track to get this project started and any assistance you can provide to expedite the permit issuance is appreciated.”

The purpose of the April 7, 2016, meeting in west Palm Island was to (1) verify the work that Lanzo would do in the right-of-ways and on private property, (2) identify the tasks the City would need to accomplish in order for Lanzo to install pipes and drainage connections on private property, and (3) delineate the options available to property owners and their responsibilities during construction. The understandings and agreement reached during the meeting were recorded in jointly approved minutes. The minutes were titled “North & South Coconut Lane – Special Harmonization,” and bore logos of the City, Lanzo, and Wade Trim. The two-page document summarized the City’s plans “to address construction adjacent to and along these properties.” Figure No. 8 is an excerpt from the minutes that recorded the agreement between the City, Lanzo, and Wade Trim to install permanent pipes and drainage connections on private property and connect these private-side drainage systems to the public drainage system using the pipes and connections installed in the right-of-way.



*Figure 8 Excerpt from minutes of April 7, 2016 meeting describing plans by the City, Lanzo, and Wade Trim to install private-side yard drains and connect them to the City drainage system using the pipes and drainage connection in the right-of-ways.*

The minutes of the April 7 meeting begin with a summary of events that preceded the City's decision to build a public drainage system that connected to private-side yard drains. RFI #34 and Wade Trim's drawing of the changes in grade that the higher road elevations required were attached as exhibits. The minutes said: "The City has established a minimum grate elevation and roadway crown elevation of 2.7' NAVD for west Palm Island. The proposed roadway elevation adjustments will impact driveways, front yard and backyard interfaces between private property and public ROW. The impacts will extend into the private properties, in some properties more than others." The minutes included as an attachment the conceptual drawing by Wade Trim that showed how the lateral 12-inch drain pipe installed in the right-of-way in front of a private lot would connect a private-side drain pipe with the mainline pipe in the road.

Three sections in the April 7, 2016, minutes delineated the responsibilities and tasks as to Lanzo, the City, and property owners. The first section described a "temporary condition" while Lanzo cleared and regraded the right-of-way in front of a house and reconstructed the driveway to match the elevated road. It said, "In order to provide property owners with the opportunity to make adjustments to their property interfaces with the new elevation at the public ROW...Lanzo has provided a temporary condition, which will only impact driveways, walkways, and a small width of green area." This part of the agreement was based on the City's approval of RFI # 34 (Harmonization), which established that Lanzo was not responsible for additional reconstructive work beyond this limited area.

Given the extent to which existing fixtures and landscaping beyond the right-of-way might be demolished during construction, the summary said that the "temporary condition" was intended to allow the homeowners to make "adjustments" during the project at their own expense. The minutes continued, "Additional grading from future grades on driveways and walkways may be needed, in order to maintain the structural integrity of these features at their new grade Elevations. A temporary drainage condition will also be provided inside the within [*sic*] the City ROW (cleanout connection typically at the ROW line)." This part of the agreement referred to the permanent lateral pipes, Tees, and drainage connections Lanzo would install in the right-of-way in front of the houses. During construction this permanent part of the drainage system would also be available if the elevated roads caused new flooding or trapped stormwater on private lots.

During an interview with OIG staff, former City Engineer Mowry said the lateral and right-of-way drain pipes were installed as permanent parts to the drainage system to accommodate the future connection of private-side yard drains. He said the right-of-way drainpipes also were used to prevent flooding during construction. Mowry said, “We did have the accommodation. It was just being appropriate and good planning that we had this thing designed and we knew that we were going to have to take the runoff from construction anyway because we could not run water from public property into private property. And so we knew that even during construction we had to have these and we said ‘Why don't we put them in so that we then have the flexibility to connect a private individual in the future.’” Similarly, CIP Consulting Engineer Crews said that using the permanent lateral pipes and right-of-way drainpipes as a “temporary” means to collect stormwater during construction was an essential precaution and an effective use of the permanently installed equipment. He said in an interview:

On one hand, one of the things that it was accomplishing was creating that potential connection point for every property. The other thing that it allowed the contractor to do is to create a temporary system during construction so that those laterals....went to the property line, and turned up into small drains. That became a temporary connection point, not a connection, a temporary inlet. Because, what happens in this is when they raise the roads, the problems happen right away for the private property... So those drains that were turned up at the right-of-way became at least a temporary relief point so that the private lot wouldn't flood. Because there was a danger that if we raise the roads and there was some delay between raising the roads and getting the property situated with whatever eventual solution would take care of them, that if they flooded, they wouldn't get any flood relief until it either spilled over into the bay or got as high as the roads.

The April 7, 2016, minutes described a “Permanent Condition” that would entail reversing the slope inside private lots and extending a pipe from the right-of-way connection drain to a low point in the private lot for use as a yard drain. It said, “The Permanent Condition will have a 1% slope running from the ROW to the edge of pavement,” and a slightly steeper slope from the edge of the right-of-way “to match existing elevations into the private property.” Thereafter, the minutes continued, “...**A connection comprised of a 12" SDR 35 yard drain connected to the Project's stormwater system will be installed and capped in each property, providing residents with the option to connect to the stormwater system at some future date.**” (Emphasis added.)

Lanzo would leave behind a newly graded right-of-way and a rebuilt private driveway, but in many cases the construction would require much additional construction and landscaping further

inside the property. After the City's decision in late October to further elevate North and South Coconut Lanes and to have Lanzo build Wade Trim's engineering solution to mitigate the expected flooding and impoundment of stormwater on private lots, Beaty had emphasized the limits of Lanzo's responsibility for work on private property. These limitations were documented in the minutes of the April 7 meeting. They said, "Should the resident wish to harmonize from property interfaces at ROW to all areas further into the property, the resident can do so and is allotted time for this between the dates that the Temporary and Permanent Conditions are constructed."

As to the City's responsibilities and assigned tasks, the minutes described the need to change existing City policy to allow property owners to connect their personal yard drains to the City's drainage system. Without a change in the existing policy, the City could not allow these connections. Further, the minutes described the additional task assigned to the City of obtaining written authorization from each property owner for Lanzo to work further inside each property. Without the signed harmonization agreements, Lanzo could not dig necessary trenches inside a private lot and lay an additional length of PVC pipe that extended from the lateral pipe and right-of-way drain connection to a low point on the owner's property. "The City is to define (right-of-way) harmonization policy, private party drainage connection policy, and endorsement of typical section...City to finalize letters to send out to residents affected by special harmonization conditions."

Finally, the parties agreed on the responsibilities and options that would be available to each homeowner who agreed to have a yard drain installed on private property. The minutes said, the "procurement of the connection from the private property side will be managed by the private property owner." This meant that after the City and Lanzo installed the permanent private-side drain connection, the property owner would be responsible for the costs of activating the drain to collect and transfer stormwater from their yard into the public drainage system. During an interview with OIG staff, Mowry said the change in policy was an integral part of the City's decision in 2016 to install the permanent laterals and drainage connections in front of each lot on west Palm Island. He said, "We were anticipating in the future that we would get a direction to be able to take water from private property...we put this in so that we had the flexibility to be able to make that connection in the future."

After the April 7, 2016 meeting, CIP staff moved forward with the tasks assigned to the City that were necessary prerequisites for Lanzo's installation of the private-side drain connections. The

minutes of a CIP construction progress meeting with the Lanzo design team on April 26 said, “Some properties can be asked if they want a yard drain, resident to decide...Some harmonization agreements still not signed...Residents were contacted.” Further, the minutes said, “Residents wishing to connect to system only need plumbing permit from city.”

In order to identify the best location for installing pipes and drain connections on private lots, CIP and Lanzo also discussed the need to conduct a more detailed elevation survey of private lots in west Palm Avenue to determine the best location for the private-side drain connection. The minutes said, “Scope of survey into private property only required to determine appropriate drain location.” The minutes contained no reference to the need to modify the City’s pending applications with the SFWMD and DERM for permits to construct a public stormwater drainage system to allow for its extension into approximately 90 lots on west Palm Island.

From Lanzo’s point of view, the City’s decision in late October 2015 to require adherence to the minimum grate elevation criteria of 2.7 feet above sea level on west Palm Island (which required raising North and South Coconut Lanes above the centerline elevation of 2.2 feet above sea level in the Rubio plans) was a “changed condition” under the contract. At this point, though, the Commission had not amended the contract with Lanzo to authorize an expanded scope of work to extend the stormwater drainage system beyond the right-of-way for the installation of private-side drain connections.

Without contractual language that also covered work on private property, Lanzo’s management feared exposure to liability for damages for what occurred on private lots from elevating North and South Coconut Lanes to the point where they trapped stormwater on private lots and caused new flooding. During an interview with OIG staff, Beaty said the ability to refer to the right-of-way drainpipes as “temporary” provided a justification or legal rationale for the work the City wanted done. Beaty said, “The road is higher than the private property. The accommodation and the need was understood, but the method of accommodation wasn't. That was resolved with temporary drainage...What that allowed us to do is build the drainage system and build the road and come up with a method of accommodating private residents. But that was not in our contract.”

The City Administration made the decision that Mowry announced Oct. 9, 2015, which required raising the roads on west Palm Island by an additional foot, despite the concerns of design engineers that the road would change the existing positive flow of stormwater from private lots and

cause harmful flooding to adjacent private property. Having crossed this threshold, the responsible City officials, including Carpenter, Martinez, and Mowry, recognized that they had to develop a way of mitigating the expected flooding.

In the absence of contractual language and/or an amendment to Lanzo's contract that explicitly authorized construction work on private property and the installation of underground infrastructure for private-side drain connections, Beaty and other Lanzo construction managers used written and electronic means of documenting the City's directions and commitments, including email, correspondence with CIP, the RFI process, the jointly approved minutes of CIP progress meetings, and, ultimately, electronic recordings of those meetings.

For example, in a letter to CIP Senior Project Manager Tomczyk dated April 27, 2016, Beaty restated Lanzo's understandings with the City that were recorded in the minutes of the April 7 meeting and in RFI submissions. The letter said in part: "Request for Information (RFI) 34 & 35 (attached) dated October 30, 2015 provide current contract definition with regard to Private Property Harmonization...and Private Property Drainage Water Accommodation (Capped 12" for future connection by Others and a temporary yard drain)."

During an interview with OIG staff, former Wade Trim Vice President Kremers said that the designation of the right-of-way drains as "temporary" was an accommodation to the City. Kremers said: "While we were designing this project, the City was in the process of developing a policy for...whether it would and how it would allow private properties to connect to the system. The ultimate plan was they would be allowed to connect. They (the City) just weren't sure of the means yet." During an interview with OIG staff, Beaty said the right-of-way drain connections were described as temporary installations "because at that point, the definition of how it was going to be accommodated, and who was going to pay for it, that definition didn't exist."

On April 28, City Engineer Mowry attended a CIP progress meeting that included CIP, Lanzo, and Wade Trim staff. According to the minutes, he confirmed the City's plan to operate the public drainage system and allow property owners of private-side drains to connect to it for a monthly fee. The minutes said, "Bruce M. (PW) explained the process of billing regarding private property drainage. It will be a flat rate per month, regardless of rain."

During an interview with OIG staff, Mowry said that during the decision-making process in early 2016, he, Carpenter and Martinez agreed on the strategy the City implemented. He said they discussed the flood risks of elevating roads before the Mayor's Blue Ribbon Committee and

described the option of using private-yard drains to remove trapped floodwaters from private lots. Based on these interactions, Mowry said he and his colleagues concluded that they were authorized to have Lanzo build a public drainage system that was designed to connect to private-side yard drains, with the understanding that the necessary change in City policy would be made at a later date.

In written responses, Carpenter said he did not recall when he learned that the lateral pipes and connection tees, which together are also referred to as stubouts, were added to the construction plans. However, in a written response, Carpenter indicated he was aware of the changes and the City's decision to approve Wade Trim plans to build a drainage system designed to connect with private-side yard drains by at least Dec. 9, 2015 when Public Works and CIP provided former City Engineer Morales with memoranda that referred to RFI #34 ("Private Drainage Accomodation") that was attached to a Commission Memorandum.

Further, Carpenter's response said, , he acknowledged his awareness of changes to Rubio's plans. He stated, "The incorporation of the secondary drainage system on west Palm Island evolved over time. The initial modification was only the inclusion of stubouts from the existing primary drainage system that remained unchanged."

## VIII. PERMITTING AND CONSTRUCTION

### A. (May 5 – July 5, 2016) The regulatory agencies issued permits for the project based on the Rubio plans. With this in hand, the City directed Lanzo to begin construction using the Kremers plans

On May 5, 2016, the SFWMD issued to the City an Environmental Resources Permit based on the outdated Rubio plans titled, “100% Final Design,” dated Dec. 9, 2015, that Rubio had signed, dated and sealed on Dec. 11, 2015. The first general condition of the permit said, “All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62- 330.315, F.A.C. Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.”

During the next two weeks, Kremers and Wright incorporated the City’s comments into the now fully reengineered and revised Rubio plans, known as the Kremers plans. This work resulted in a second version also titled “100% Final Design Plans,” dated May 18, 2016, by Kremers. Consistent with the March 2, 2016, understanding between Wade Trim and CIP, Kremers and Wright did not sign, date and seal the revised stormwater and hardscape plans.

On May 27, 2016, DERM issued a Class II permit for the Palm and Hibiscus project to Carpenter on behalf of the City “per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates.” (Figure No. 8) Like the permit issued by the SFWMD, the DERM permit contained a condition stating: “This permit only authorizes the grading and drainage work summarized in page 1 of this permit. **Any additional work not shown in this permit or on the approved plans shall require additional Class II permit approval.**” (Emphasis added.)

**Class II Drainage Construction Permit**

Permit Number: CLII-20150058  
Project Manager: MAYRA A DE TORRES

Issue Date: 05/27/2016  
Expiration Date: 05/27/2018

**Permittee:**

1

CITY OF MIAMI BEACH PUBLIC WORKS DEPARTMENT  
Mr. Eric Carpenter, P.E.  
1700 CONVENTION CENTER DRIVE  
MIAMI BEACH, FL 33139-

**Contractor:**

LANZO CONSTRUCTION COMPANIES  
Mr. Bob Beaty, P.E.  
125 SE 5TH COURT  
DEERFIELD BEACH, FL 33441-4749

**Professional Engineer:**

2

Craig A. Smith & Associates, Inc.  
Mr. Orlando Rubio, P.E.  
7777 GLADES ROAD, SUITE 410  
BOCA RATON, FL 33434-

Application Name: CITY OF MIAMI BEACH INFRASTRUCTURE IMPROVEMENTS AT PALM AND HIBISCUS ISLA

Project Location: PALM & HIBISCUS ISLANDS MIAMI, FL 00000-0000

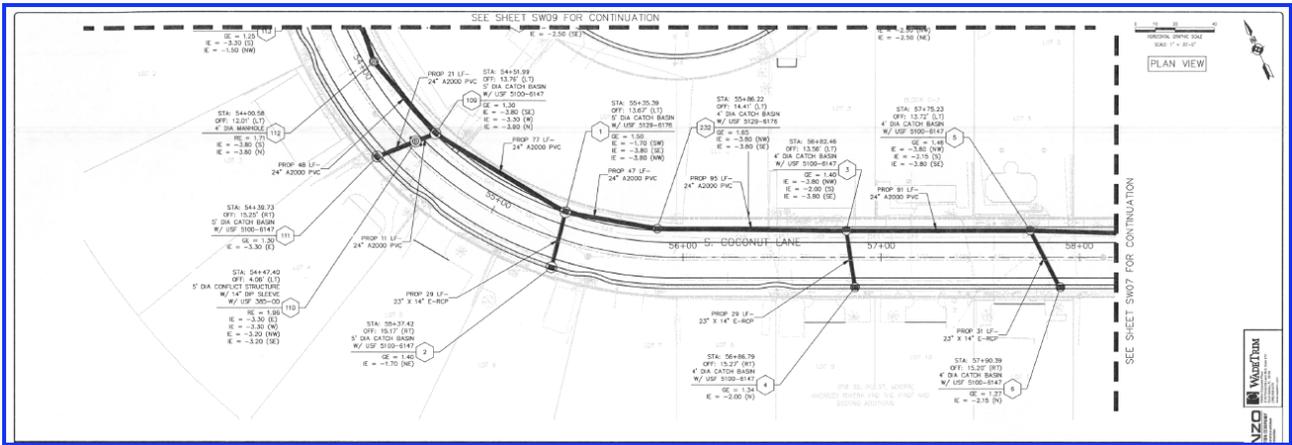
**Project Description:**

The proposed infrastructure improvement is to serve the City of Miami Beach (CMB) Palm and Hibiscus Islands otherwise known as "Neighborhood No. 13". The project will consist of elevated roadways where possible, installation of stormwater collection system, three (3) stormwater pump stations equipped with water quality treatment units with a gravity by-pass and stormwater outfalls with dissipation structures discharging into Biscayne Bay. Backflow prevention devices will be installed at the outfalls to prevent extreme high tides from backing up into the system, as per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates., dated February 19, 2016.

3

*Figure 7 Excerpt from Class II permit dated May 27, 2016. Item #1 identifies Carpenter as the designated permittee, Item #2 identifies Engineer of Record Orlando A. Rubio, Item #3 shows the permit was based on plans signed and sealed by Rubio.*

The two drawings below show pages from the Rubio plans and the Kremers plans for the same section of South Coconut Lane. Figure No. 9 shows the standard right-of-way drainage system designed by Rubio, which included four 18-inch drains that were connected to the drainage system by four pipes extending from the force main. The drainage study conducted by Rubio showed that these drains were sufficient to collect stormwater from the right-of-way.



**Figure 8 Excerpt from the permitted Rubio plans for a section of South Coconut Lanes that shows standard design for a right-of-way drainage system**

On June 20, 2016, Kremers signed and sealed the revised stormwater section of the plans; Wright signed and sealed the revised hardscape section. See the plans below in Figure No. 10. The array of lateral pipes Kremers added to the Rubio plans were the essential infrastructure for building a public stormwater drainage system that was configured to connect to private-side yard drains.

The lateral pipes shown in blue tint on the Kremers plans extend from the mainline pipe to the right-of-way in front of each residential lot on west Palm Island. The primary purpose of lateral pipes was to provide permanent links between the mainline pipe and one or more private-side yard drains in each lot. During an interview with OIG staff, CIP Consulting Engineer Crews said, “One purpose was to create that future potential connection point that, if the City had gone through with that policy, you, as homeowner at a given address, could say, ‘I’ve got water that I don’t know what to do with it. Here’s my \$35 a month’...they would have allowed you to connect. You make the connection, you get to discharge your water to the public system.”

As shown in the Kremers plans, the intention was to equip the end of each lateral pipe with a tee connection fixture, also known as a stubout, with two connections for additional drains. A vertical connection could be used to establish temporary or permanent drainpipes or inlets in the right-of-way (“right-of-way drainpipes”). A horizontal connection could connect with pipes in as many adjacent lots as possible for permanent private-side yard drains. (See Figure 10 below and Engineer’s Report re: Exhibit 1 Comparison of Rubio plans and Kremers plans for additional examples.)



*future installation of yard drains on private lots. Together, the lateral pipes and connection tees comprised the stub outs and infrastructure of right-of-way drainpipes.*

Beaty equated the lateral pipes, Tees, and caps installed in the right-of-ways in front of each house on west Palm Island to permanent water and sewer lines installed in a new development before houses are built. Beaty said, “When you go to a new residential development, you never go onto private property. You do all your work in the right-of-way. What you do is you establish a service within the right-of-way up to the property line for connection by the private owner at a later date. What that does is that when they build the house and the plumber comes in, a plumber has a place to connect the sewer pipes.”

Mowry said that from the beginning of the redesign by Kremers of the Rubio plans, the City planned to build a drainage system that provided right-of-way drainpipes to use in the future to provide connections to private-side yard drains. He said, “We were anticipating in the future that we would get direction to be able to take water from private property... it was just being appropriate and good planning that we had this thing designed.”

The City’s Joint Response said, “The documents prepared by Wade Trim did not add inlets,” or open drains, and added:

This is not a material change, nor does it make the permit documents false or misleading. The DCP and early meetings with DERM clearly established the tributary area of the stormwater collection system for this project to include the entire right-of-way, the entire private, non-waterfront lots, and 1/2 the private waterfront lots. This did not change between the two sets of documents; is not a material change to the permit; and does not make the permit documents "false or misleading." Simply stated, the Wade Trim drawings did not alter the functionality, effectiveness, or ability of the project to protect the Bay, and comply with Code.

An additional three weeks passed while the plans were reviewed by Public Works.



on private property was not part of Lanzo's contract with the City to build a right-of-way drainage system. Beaty said, "When the road is higher than the private properties, there's a need for accommodation and the need was understood, but the method of accommodation wasn't... That was resolved with temporary drainage." Beaty's recollection was consistent with the minutes of a CIP progress meeting on Oct. 13, 2016. The minutes said, "Harmonization Meetings Summary spreadsheet for Coconut Lane was discussed. Certain components including wall/gate harmonization are homeowner responsibility, yard drain in certain areas is a temporary condition, it will be plugged when homeowner establishes their private side drainage system."

During an interview with OIG staff, Kremers explained the genesis of the decision to describe the 88 "permanent" right-of-way pipes and drain connections as "temporary" : "The original...design kept some portions of the road low so we wouldn't be trapping pools of water on people's property. The design criteria was modified so the roads were required to be raised. It was at that point when we knew we were going to have to make accommodations for private property drainage. And the City at that point didn't have a policy established and was working on it."

CIP Senior Project Manager Samadi took over management of the project in July 2016 after Tomczyk left his position. During an interview with OIG staff, Samadi said that from the beginning of her involvement, she understood that the plan was to use the right-of-way drain pipes to install private-side yard drains. She said:

The set of the plans that we were working from the time that I took over the project had those yard drains in it and I could not understand what that was and it was explained to me in detail as to what was the purpose of those yard drains. The purpose of the drains [was] for during the construction, and they were going to be plugged. And at some point in the future, when the city approved, they were ...going to allow the residents to connect to these drains like a stormwater utility permit type of payment and things of that nature...the yard drains were already a part of the plans. I am not sure. I don't think they were permitted, but they were part of the plans when I took over the project and that was what was going to be constructed.

The evidence supports a conclusion that between Dec 9, 2015, and May 27, 2016, the responsible City officials and City contractors knew, or had reason to know, that DERM and the SFWMD were reviewing plans prepared by Rubio that the City did not intend to follow; that the permitting agencies were basing their permitting decision on the Rubio plans; and that Rubio had ceased to function as the Engineer of Record. Ultimately, both agencies issued permits based on the Rubio plans. Soon after receiving a Class II permit on May 27, 2017 based on the approved plans

signed and seal by Rubio, the City adopted the unpermitted plans prepared, signed and sealed by Kremers.

Carpenter said in an interview that he was not aware the Rubio plans were revised by Kremers. “I can honestly say that I don't recall reviewing those plans. I don't know whether those plans were, you know, put together as one obviously is with harmonization and one is without harmonization, meaning that we're able to reach an agreement with a private property owner to be able to encroach into their property, do additional filling to be able to match an elevated roadway.” Further, Carpenter said that when he signed the permit he was not aware of any decision to use the Rubio plans for obtain permits from SFWMD and, concurrently, direct Wade Trim’s Kremers to prepare an alternative set of plans with connections for private-side yard drains. Carpenter said, “I think the simple answer to that is no.”

Carpenter said he was not aware the Rubio plans were revised by Kremers and contained changes that DERM considered significant. “I can honestly say that I don't recall reviewing those plans. I don't know whether those plans were, you know, put together as one obviously is with harmonization and one is without harmonization, meaning that we're able to reach an agreement with a private property owner to be able to encroach into their property, do additional filling to be able to match an elevated roadway.” Further, Carpenter said that when he signed the permit he was not aware of any decision to use the Rubio plans for obtaining permits from SFWMD and, concurrently, direct Wade Trim’s Kremers to prepare an alternative set of plans with connections for private-side yard drains. Carpenter said, “I think the simple answer to that is no.”

During interviews with OIG staff, DERM engineers Molina and De Torres said they believe they were misled in 2016 when they were led to believe that Rubio was the Engineer of Record for the stormwater drainage section of the plans, and that the City intended to use the 100% Final Design plans prepared by Rubio to build the drainage system. During an interview, Molina said: “The work scope of a Class II is to...check the quality, check the quantity, and also the piping. The fact that they added extra piping, extra connections, that also implies that we have new owners in place. It would have required a Class II permit...Had they come to us and showed us, ‘This is our plans.’...I would have requested a permit modification.

DERM Director Hefty disputed the rationale offered by Carpenter and Beaty that, given the system’s capacity to provide water quality treatment for stormwater from both public and private lots, there was no need to notify DERM of changes in the system design to accommodate private-

side yard drains. Hefty said this change in design “should have been included initially or, if they came up with a design change of this significance, it would have required a modification to the permit. Further, he said:

It sounds to me like what they're trying to say is they didn't think they needed to get DERM's approval because they thought they had overdesigned it. But those two things are apples and oranges. If they've overdesigned, great, include those calculations in your request for a modification. It'll make it easy for my staff to review and approve. But the requirement to obtain a permit is pursuant to the Code. They don't get to decide when they get a permit or not based on what they think DERM cares about. The Code spells out when a permit is required, a permit was required and they didn't obtain it.

During interviews with the OIG staff, the responsible current or former City officials, including Carpenter, Martinez and Mowry , Mowry, Martinez, Samadi, and Sanchez contended Lanzo was solely responsible for permitting. They claimed that the City as owner and permittee was not responsible for obtaining permits or ensuring that the agencies were provided with the Kremers plans because the City’s agreement with Lanzo made the general contractor responsible for obtaining all permits. During an interview, Carpenter said, “The Engineer of Record is responsible for design and permitting of the project.” Martinez said his staff will assist in processing the applications, but that contractually the design builder is responsible for permitting.

During an interview with OIG staff, DERM Director Lee Hefty stated,

I've been a public servant for more than 30 years. And you can't outsource stewardship, so as a public servant, we have a higher level of obligation, responsibility to the public. And so for the city to simply say, ‘Hey, it's not our fault we hired somebody else,’ I don't buy that excuse. Quite frankly, we are public servants for a reason. We have a higher moral obligation to ensure the public is protected. So I don't care how many people you hire, you are ultimately responsible. So that's my professional opinion.

The Office of Inspector General strongly agrees with this view.

**B. (May 2016 – Dec. 2017) The City and Lanzo make significant changes to the construction plans to accommodate demands from the Homeowners Association; Wade Trim engineers recommend notifying DERM and obtaining a permit modification to no avail**

After issuing a permit, both DERM and the SFWMD require the project owner and general contractor to use the approved plans to build the project and notify them of significant changes.

However, both agencies acknowledge the operational reality that during the construction of a complex stormwater drainage system, contractors often need to make minor adjustments, such as installing a fire hydrant in a different part of a street, or shifting the placement of a storm drain by several feet to improve the drainage in a swale.

For that reason, both agencies allow owners and contractors to disclose minor changes at the end of a project when they submit an “As-Built” set of construction plans indicating what has been constructed. But this accommodation is limited and is not intended to include changes to the project’s design. The SFWMD’s policy says, “Major changes, including changes to permit authorization or special or limiting conditions would require a permit modification before implementation.” The DERM application requires a project’s owner and Engineer of Record to attest that, “To the best of my knowledge and belief, the information, data and plans submitted are true, complete and accurate, and I will apprise the Department of any changes to information provided in this application.”

Because Wade Trim engineer Garcia was based in the firm’s Coral Gables office, he attended CIP progress meetings, attended numerous meetings with residents on Palm and Hibiscus Island, and responded to requests from CIP and Lanzo. Under Florida rules that apply to licensed professional engineers, Garcia functioned as a “delegated engineer” who provided engineering services under the direction of Engineer of Record Kremers.

As the Wade Trim engineer with day-to-day responsibility for servicing the project, Garcia attended most CIP progress meetings and was instrumental in the engineering work these changes required. During an interview with OIG staff, Wade Trim engineer Garcia said that by 2017 he had grown frustrated with the number of significant changes that CIP had directed Lanzo and Wade Trim to make to the construction plans, most of them at the request of the Homeowners Association. Garcia stated that he was concerned about the failure to notify DERM of the significant changes and the agency’s reaction if all the changes were only disclosed at the end of the project. In 2017 Garcia prepared a spreadsheet of issues with CIP, including one labeled “Disregard for approved permits.” It said:

MDRER/SFWMD: Significant changes have been directed by CIP to stormwater design (as a result of changes in tree removal directives); it has only been recently that CIP has expressed concern with project certification; it is unclear whether CIP weighed risk of permit certification against universal directive to save ALL trees, including not removing trees in swale areas that reduce conveyance efficiency and integrity of the proposed stormwater system (the removal of trees in the swale area was an explicit directive in DCP).

One of these significant changes was a redesign of the swales that, in the Rubio plans, would have been created by clearing the right-of-way along Palm Avenue North. In response to requests from the HOA, in October 2016 the City directed Lanzo to redesign those plans to preserve the trees and other encroachments in the right-of-way. This represented a significant change to the Rubio plans.

During an interview with OIG staff, Wade Trim engineer Garcia said he urged the City and Lanzo to notify DERM of the significant changes to the project's construction plans and determine the need to modify the Class II permit. Garcia said, "On a number of occasions I had recommended that we reach out to RER (DERM) sooner to begin discussions regarding some of these changes that had been going on. And every time I would present that, they would say, you know, 'wait, let's wait,' or, you know, 'don't talk to them directly.'" Garcia stated that he was given these directions by CIP Senior Project Manager Mina Samadi and Lanzo Senior Construction Manager Pablo Riano. Garcia said, "That came from not only Mina but also Pablo...Pablo was my client, or Lanzo, and so I advised Lanzo that we really should start discussions earlier with RER (DERM). But then he also put the clamp on that, so I was essentially muzzled."

**C. (Feb. – April 2017) In February City Manager Morales affirms policy prohibiting connection of privately owned yard drains to the public drainage system; in April the City Commission directs City staff to develop an "engineering solution and policy" to allow property owners to connect private-side drains to the drainage system**

The Palm and Hibiscus project was the first neighborhood project where the City had applied the strategy Mowry had approved in Sunset Harbour that combined raising roads and using 12-inch drains to mitigate new flooding. It also was the first neighborhood project that suffered from the unintended consequences of accelerating the project's design and disrupting CIP's process for managing large scale design-build construction projects.

One of the earliest warning signs was the City's failure to develop a framework and policy for managing the legal, regulatory, and operational issues that City officials knew were likely to result from a project that raised roads a foot or more higher than the elevation of adjacent

properties, and depended on an unprecedented and untested engineering solution that relied on the use of private-side yard drains.

When the City decided in October 2015 to require Lanzo to raise roads in west Palm Island a foot or more above the 2.2 foot centerline elevation in the Rubio plans, Carpenter, Mowry, Martinez, and other decision-makers knew that requiring the minimum grate elevation of 2.7 feet above sea level could result in new flooding of private residential lots. Mowry and other City officials recognized the need to develop a legal justification and an administrative process for managing the connections.

Sixteen months after Mowry and others had assured the HOA Board at a Nov. 2015 briefing that the City would change the policy prohibiting the connection of private-side yard drains to the City system, that had not happened. This suggests that City Manager Morales and his staff had not yet agreed on an approach that allowed the connections but also protected the City from liability for the legal and financial risks associated with causing new or harmful flooding on private property.

Meanwhile, Lanzo had been installing the drainage system, and word of the City's allowing residents to connect their personal yard drains to the public drainage system had spread to other neighborhoods. In response to an increasing number of inquiries about the City's policy, Morales sent the City Commission an LTC dated Feb. 9, 2017, titled "Elevating Roads and Reducing Floor Risk-Frequently Asked Questions (FAQ)." The FAQ explained that residents were responsible for any new flooding caused by newly elevated roads and ruled out the connection of private-side yard drains to the City's drainage system.

Two of the FAQ's questions and answers are material to this investigation. The first asked, "Will elevating the roads flood my property?" The City's answer was, "The street improvement projects are designed to capture and manage all water within the public right of way. If water from private property flows to the street, when the street is raised, this water will have to change the direction of flow to other locations on the private property. Water will not flow from the elevated City street into private property."

Historically, stormwater that fell on private lots on west Palm Island had flowed into the street, where the inverted center of the pavement, had channeled the water into the drainage system. Raising the roads in front of those houses would block or alter that historical flow of stormwater and, in worst case scenarios, cause this water to pond or collect on the homeowner's lot.

The FAQ statement that “water will not flow from the elevated City street into private property” was, at this point, an aspiration and design objective of the construction plans, but was not true. If it were true that the elevated roads would not cause new flooding, the City and Lanzo would not have decided to install private-side drain connections in most lots on west Palm Island.

The second question asked was, “How can I tie my stormwater infrastructure into the City's drainage efforts?” The City’s answer was, “Currently this is not an option for private property owners, but we are exploring options to provide our residents with additional water management options in the future.” While expressed in nuanced language, the answers indicated that the City recognized the risk that raising roads would cause new flooding on private lots; was unwilling to assume a city-wide duty to prevent such flooding; and intended to shift the legal responsibility for any flood damage caused by elevating roads to individual property owners. On its face, the FAQs restatement of existing City policy appeared to rule out the use of the engineering solution that Wade Trim had developed to remove trapped stormwater from private lots.

In light of subsequent events, the Feb. 2, 2017, LTC suggests that Morales was not aware at that time that the drainage system was already designed to connect with private-side yard drains. However, Mowry and other engineers involved in the project considered the use of private-side yard drains an essential part of their plan to raise North and South Coconut Lanes a foot or more above 2.2 feet above sea level. During an interview with OIG staff, Morales said he was not aware that the drainage system had been designed to connect to private-side yard drains. Morales said the option of using the right-of-way drainpipes or stubouts for private-side drains was presented to him in 2018 as “work we would have to go back in and do.”

**D. (March 7 – April 26, 2017) Carpenter and Mowry continue pursuing change in policy; Commission approves policy allowing connection of private-side yard drains to public drainage system**

During March 2017, Mowry continued to assure Lanzo that the City’s new policy would be adopted, and that private-side drains would be installed and residents would be allowed to connect their new private-side drains to the public drainage system. When the subject came up during a CIP progress meeting March 7, 2017, Mowry said he expected the new policy to be presented to the

Mayor's Blue Ribbon Committee in April. According to a recording of the meeting, Mowry said, "Based on what the committee has, if they recommend to move forward, then we can go to the City Commission....if the City Commission basically concurs with it, then the program will be set up sometime in Summer to make a connection."

During the same meeting, Mowry acknowledged that allowing residents to connect personal drains to the system raised potential legal issues for the City that had to be sorted out. Mowry said, "Actually, I have a meeting with the City Attorney's office. It is an active process. We have experts coming in from other places to help us talk about this because we are one of the first places in the whole country that's ever done this. And even legal precedent of this has to be asked."

During March 2017, Carpenter and Assistant City Attorney Eve Boutsis began drafting a resolution approving the change in policy at the request of City Commissioner John Aleman.

On March 31, 2017, Boutsis sent a draft to Carpenter in an email that said, "Eric, this is my first attempt at the draft stormwater policy resolution that City Commissioner Aleman is seeking...thought I would kick this off – for discussion purposes." The text said, "the City stormwater policy requires private property owners to construct on-site stormwater management systems to handle their stormwater volume, however, certain single-family properties place additional demands on the City's stormwater management system because they are (1) older single-family properties that did not have the same requirements at time of construction, (2) single-family properties that partially redevelop and increase the impervious area of a property without the associated stormwater improvements; and (3) single-family properties that are illegally connected to the public stormwater management system."

Concurrent with these efforts, City officials generated support for the new policy through news media coverage. On April 5, the *Miami Herald* published an article ("Miami Beach residents worry: Will city's anti-flood work dump water in my yard?") about an open house the City held in response to the "level of concern among property owners that the city is moving fast on infrastructure projects that are not completely understood by the public. Each homeowner will want to know what will happen to their property when the crown of the street is raised."

The article added, "In the coming months, city staffers want to propose a program that would allow private property owners to connect to upgraded street drainage systems for a fee. This

would allow homeowners who have drainage issues to keep their properties dry after the streets are raised.”

At an April 26, 2017 City Commission meeting, Commissioner Aleman introduced the resolution calling it “a really significant paradigm shift” in City policy. During an interview, Aleman said she learned of the option of connecting private-side yard drains by City staff: “Bruce Mowry, Eric Carpenter, Roy Coley, [Assistant Public Works Director] Jay Fink were the ones that informed me the most... Yes, absolutely. I mean, I attended numerous of those blue ribbon panels. I consulted with Eric and Roy and Jay and Bruce all the time.”

The resolution had not been discussed or approved by the Sustainability and Resiliency Committee; was not accompanied by a Letter to the Commission from Morales that described how the policy would be implemented.

The resolution said the City would assume responsibility for designing and implementing “a stormwater system with sufficient capacity to handle both public and private stormwater runoff,” and “...develop a policy and engineering solution for private property owners within the City's municipal stormwater system.” It directed the City to “coordinate a stormwater system that would have the capacity to allow private property owners to connect to the system,” and to establish a monthly stormwater fee “to ensure proper capitalization of the program through cost recovery.”

During her presentation of the resolution, Aleman said she had developed the resolution on an expedited basis. She said, “I would have normally taken this resolution through the Blue Ribbon Panel on Sea Level Rise and had them endorse it through all the proper channels.” However, she decided to expedite the process after hearing from constituents “who are really, really concerned about the message that they were receiving, which was based on the old policy. This policy says you're going to get to tie in now. We're not going to drain our water on you and we're not going to charge you to tie in. And I thought residents needed to hear that sooner rather than later.”

The resolution provided Carpenter and Mowry broad authority and legal basis for proceeding with the City's plan to install a lateral pipe and drain connection in private lots and use the right-of-way drain pipe to connect the private-side drainage system to the public drainage system. This was the policy change that Mowry had said would occur during multiple CIP meetings with Lanzo and had unveiled for the Homeowners Association in November 2015.

Aleman's description of the resolution as authorizing a "really significant paradigm shift" was not an exaggeration; the financial, legal, and operational implications for the City were potentially significant. Mowry, in a recorded statement during a CIP meeting in March, had stated that he would be attending a meeting in the City Attorney's office with legal experts to sort out the legal issues of what he called the "unprecedented" step of connecting private-side yard drains to a public drainage system. However, City Attorney Raul Aguila said in an interview with OIG staff that no such meeting occurred and he was not asked to provide legal advice on the subject. During an interview, Aguila said, "I do recognize and respect the pressure that's put upon administrative staff to get these projects done. But I think the lessons learned from this project is that you cannot sacrifice process for expediency."

During an interview, CIP Director Martinez said of the 2017 resolution, "They haphazardly passed a directive without thinking of unintended consequences to provide a drain connection to every property. That is something that in my experience is unheard of."

Subsequent events and records examined during the investigation, support a conclusion that the primary purpose of the resolution was to provide after-the-fact authorization and legal justification for the private-side drains the City had already allowed, and any new connections of such drains to the system. During an interview Carpenter said, "What this particular resolution was intended to do was to give some relief to the private property owners that were hurting at the time because the roadway had been elevated and there had not been any authorization to install private stormwater drains on private property."

Lanzo's design team was concerned about the regulatory implications of converting the temporary drains to permanent fixtures and connection points for drains in private yards. Garcia had worked on the project since early 2015, had served as Wade Trim's liaison with Rubio, and assisted his work in obtaining the DERM permit.

Garcia knew that DERM had issued a Class II permit based on the previously discarded Rubio plans and that the City had replaced those permitted plans with the unpermitted plans by Kremers. He also knew that during 2016 and 2017 the City had directed the Lanzo team to make other significant changes to the construction plans. Based on the number and significance of those changes, Garcia said in an interview with OIG staff, that he recommended the City and Lanzo conduct new drainage studies to verify the system's performance, and to notify DERM of the significant changes to the plans.

During an interview with OIG staff, Garcia said, “ I can say that on many occasions, I raised red flags and I tried to push back, but it felt like just the support wasn't there, you know, going up the chain, so to speak...Wade Trim runs a business and they want to keep clients happy and etcetera. But on several occasions, Lanzo had already done things to Wade Trim that I thought weren't correct. And I was surprised that we were still in business with them.”

**E. (June – Nov. 2017) National recognition for City’s proactive efforts to address climate change; first signs of trouble with permitting agencies over City’s efforts to accelerate work on a stormwater drainage project**

Mayor Levine’s accomplishments were substantive and had the sustained support of an affluent and progressive community that was awake to the existential threat of sea level rise, and prepared to pay higher utility rates to reduce flooding and protect property values. A November 2017 Engineer’s Report for a stormwater series bond issue estimated the total cost for new and existing stormwater drainage and neighborhood infrastructure projects at \$658,940,087.

Having ensured that the City would have sufficient funding for a sustained build-up of its defenses against climate change, AECOM’s McGowan, Carpenter, Mowry in Public Works, and Robins as chairman of the Mayor’s Blue Ribbon Committee collaborated on plans for using these funds to overhaul the City’s 70-year-old stormwater drainage system in seven to ten years. This would entail the construction of 57 additional pumping stations, each with a backup pump and power station. Where possible, these stormwater drainage upgrades were integrated into neighborhood right-of-way infrastructure improvement projects, that included upgraded water and sewer lines, roads, sidewalks, lighting and landscaping.

The Engineer’s report said, “The financial plan for improvements to the City’s stormwater management system, as described in this Engineer’s Report, includes adequate funding for improvements to be constructed and installed in the manner and time periods currently contemplated.” This conclusion was based on the assumption that the projects would be well-managed and would not suffer significant increases in cost. The report estimated the Palm and Hibiscus project at \$32,161,390, At that point, the cost of the project was \$38.5 million and climbing. At present, the total project cost is projected to exceed \$50 million (See Appendix 2).

During the June 2017 United States Conference of Mayors, Mayor Levine led a panel discussion about the City's resiliency efforts and asked Carpenter to describe his strategy. Carpenter said: "I have the benefit of being an engineer by training, but also having one foot in the administrative side of the government. So my role was really twofold: putting the team together of the engineers that needed to decipher the problems, but also identifying those problems and helping the policymakers set the policies that were going to fix the problems."

Carpenter noted that a key to the City's expanding initiative was persuading regulatory agencies to issue permits for drainage solutions that fell outside the existing framework of environmental law and regulations that required public and private stormwater drainage systems to retain the first inch of rain (the most heavily polluted) and prevent its discharge into a body of water. "We were working with outdated technology because it was all the environmental regulators had been familiar with," Carpenter said, "And so we had a large learning curve, not just of ourselves, but also educating the regulatory community on how we can do this better and still not have any adverse impact on our surrounding environment."

A critical step had been persuading the SFWMD and DERM to allow the use of water quality devices in pumping stations to meet water quality standards instead of retaining the first flush of stormwater in a well or cistern. This opened the door to wider deployment of large pumping stations that could discharge all rain from a storm or king tide into Biscayne Bay or the Atlantic Ocean. During the Mayor's Conference panel, Carpenter said, "We've had to push the envelope, not only on the technology side, but also challenge the regulators to evolve with us. We've basically come up with some very innovative techniques to be able to treat the water before it gets discharged into the bay." A prerequisite to the City's accomplishments were increases in stormwater rates that served as the basis of bond issues in 2015 and 2017

Regulatory approval of the water treatment equipment also changed hydrologic and hydraulic modeling of expected performance of stormwater systems ("drainage studies"). In theory, it allowed the City to meet DERM's water quality standards with a pumping system that could collect all or most of the stormwater on public and private property. This development was material to evaluating the City's actions during the Palm and Hibiscus project. To establish that a public drainage system would meet water quality standards, DERM required drainage studies based on the amount of rain expected to fall within the right-of-way during a design basis storm. That requirement had not changed. But use of the treatment devices meant the City was installing

pumping stations that could ensure the water quality of stormwater collected from both public and private property.

Levine turned next to Mowry, saying, “You're more than a chief engineer. You're Eric's general on the ground constantly,” and asked him to “tell us from an engineering point of view, what are the unique, advanced things that you've had to do and had to look at and reconfigure?” Mowry said that the City’s success had depended less on his technical acumen than Levine’s “Get it Done” philosophy and the support of the residents. “Technical is easy,” Mowry said. He added, “It's the issue of getting it all together and getting the funding and getting the community together...and that's how I implement our solutions here.”

During the panel, Carpenter and Mowry did not mention their ongoing and unprecedented plan to build a public drainage system that was designed to connect private-side yard drains to the public stormwater drainage system.

## IX. EXPANSION AND DISCLOSURE

### A. (Jan. – April 2018) The City decides to begin installing private-side yard drains under the Class II permit; CIP tells homeowners that the unpermitted right-of-way drainpipes will be used as connection points to the mainline pipe

On the afternoon of Jan. 19, 2018, CIP and Lanzo staff met with Stuart B. Cooper of 262 South Coconut Lane and explained the City's plans to install two private-side yard drains in his front yard that would be connected to the mainline pipe in the road using the 12-inch drain pipe that Lanzo had installed in the right-of-way in front of the house.

Two years earlier Cooper had been one of the west Palm Island property owners who received the Aug. 3, 2016, letter from Mowry that said, "During the construction phase of this project, the contractor will install a temporary collection system inside your property to mitigate the stormwater runoff from the right of way. This is a temporary system and will be capped once the final elevations are established and the project restoration is complete."

On Feb. 8, 2018, CIP Public Information Specialist Lauren Firtel followed up in an email to another resident that said, "The contractor explained that you have a drain that sits at the right-of-way with a single connection point to allow for you and the other property owners to connect to the public right-of-way. The City Commission passed a resolution which allows for private property owners to connect to the public drainage system and a method is currently being established."

Firtel's account of how the contractor explained the process for using the right-of-way drain pipes for connecting a private-side yard drain to the drainage system is consistent with the City's plans for a permanent condition that was described in the minutes of the April 7, 2016 meeting with CIP, Lanzo and Wade Trim staff to finalize the harmonization process for North and South Coconut Lanes.

The City had not yet adopted a new policy allowing private drains to connect to the drainage system, but CIP was proceeding on the assumption that the change would happen soon. They were able to do this during the first quarter of 2018 because the City had installed at least 85 lateral pipes

and right-of-way pipe connections in front of or near each house on North and South Coconut Lanes. CIP's communications with residents between January and March, signaling the City's plans to use those right-of-way drainpipes for their intended purpose: as permanent connection points for private-side yard drains to the mainline pipe.

As set forth below, the evidence establishes that Wade Trim engineers recommended notifying DERM of the new phase of construction on private property and obtaining a modification to the City's Class II permit. After agreeing to new drainage studies to show DERM the drainage system could still meet water quality standards, the City and Lanzo jointly arrived at an understanding not to notify DERM, and did not do so.

The New Drainage Directive (NDD) was prepared by Public Works under the direction of Assistant City Manager Carpenter, with the assistance and approval of lawyers in the City Attorney's office and City Attorney Raul Aguila, as well as City Manager Morales. During March and April, CIP and Public Works began implementing the new directive without further action by the City Commission.

CIP staff carried out most of the activities with Lanzo and Wade Trim. The administrative aspects of the policy were carried out by Public Works and staff in the Building Department. The new phase of construction work beyond the right-of-way was not referenced in the City's contract with Lanzo to design and build a "right-of-way" project. It was performed under task orders. Aside from Typical Drive-way Tie-In for North and South Coconut Lane in the hardscape section of the Kremers plans, Wade Trim did not have construction plans and had not conducted drainage studies to verify that the large scale installation of private-side yard drains would meet DERM's water quality standards.

The new work on private property was not covered by the City's Class II permit for work in the right-of-way, and not included on the Kremers plans. During March, according to Wade Trim engineer Garcia, he raised with Lanzo and CIP the need to notify DERM of the new work and obtain a modification of the Class II permit.

Minutes of CIP progress meetings indicate that during February and March of 2018, Lanzo, Wade Trim and CIP staff discussed the need to notify DERM and obtain a modification of the project's Class II permit. Wade Trim engineer Garcia said he again recommended to Lanzo, Wade

Trim's client, and to CIP that the City and Lanzo notify DERM of the new construction and obtain a modification of the City's Class II permit.

On March 20, 2018, Garcia sent Lanzo Construction Manager Victor Serrano an email explaining that the new drainage studies were necessary because the number of significant changes made to the plans had made the drainage studies done by Rubio and Kremers obsolete. The email said the computer modeling would include, "Review of stormwater as-builts to update ICPR (or drainage study) model to create baseline conditions; there have been many significant changes to the design we originally proposed, so want to make sure we reflect installed conditions as our baseline."

Given the number and significance of the changes the City had directed Lanzo to make since July 2016, the June 2015 study by Rubio submitted to DERM and the June 2016 version by Kremers were by then both outdated. Those results were based on the performance of the proposed drainage system with different designs.

Regardless of when the City and Lanzo disclosed the changes to DERM, the agency would expect to see updated construction plans and a drainage study based on those plans. The purpose of conducting a new drainage study in April 2018 was to verify that, even with the actual changes that had already been made and the additional changes the City proposed to make, the expected performance of the drainage system on Palm Island would still meet DERM water quality standards.

During an interview with OIG staff, Garcia said that Wade Trim did not have a complete understanding of all the work Lanzo had done at the direction of the City. Given the number of both large and small changes to the unpermitted stormwater plans that Kremers had signed and sealed in June 2016, Garcia said the first task was to obtain an updated version of the Kremers As-Built plans. Garcia said: "We were sort of mid-construction. And so we're having to put [into computer modeling] what's been installed already in the field and then what is planned to be installed in the field."

Garcia said the As-Built plans would be used to conduct a drainage study to establish a new baseline of expected performance for the drainage system, based on the changes since July 2016. Once a new performance baseline had been established, Garcia said he would conduct a second round of drainage studies to model the expected effect of private-side yard drains on the

performance of the drainage system. In an interview with OIG staff, Garcia said, “To proceed with the design, you gotta confirm that this makes sense from the stormwater perspective. And so you do a model...of this and confirm that the proposed changes work or make sense.”

Based on the information he had received from CIP, Garcia estimated that one or more drains would be installed in about half the private lots on west Palm Island. An important aspect of the second drainage study was verifying that the private-side drains would not cause new flooding, which was possible. In his email to Serrano, Garcia said he would “create new [sic] scenario with proposed private side connections (our initial count shows between 30 and 40 additional connections); we need to make sure the hydraulic grade line does not create potential flooding conditions in the properties, now that they will be connected to the public stormwater system.”

On March 15, during a CIP progress meeting, the participants discussed the City’s plans to expand the new phase of construction beyond the right-of-way. That meeting was attended by CIP staff members Samadi and Sanchez, CIP consultant Crews, Riano and Serrano from Lanzo, Garcia and Mullen from Wade Trim. **According to the minutes, the participants discussed the engineering work for the new construction beyond the right-of-way, and Wade Trim’s recommendation that the City and Lanzo notify DERM and obtain a modification of the Class II permit** (Emphasis added).

The text of the minutes indicate that CIP staff discussed, but did not approve, the recommendation Garcia said he made that the City and Lanzo notify DERM of the New Drainage Directive phase of construction and obtain a modification of the existing Class II permit, and further, that the parties reached a consensus that the work on private lots could be performed under the existing Class II permit for the right-of-way project. Section 5.0 of the minutes (“Design”) said: “Private connections discussed: The intent is to provide connection specifically if properties are low. D/B (Design/Build) team noted this as a changed condition and will need to review calculations and permits. **Work to take place under existing permits,**” (Emphasis added.)

Nevertheless, this did not end discussion of contacting the permitting agencies. On March 22, 2018 Lanzo Construction Manager Riano sent CIP Project Coordinator Sanchez an estimate of \$63,877 for “additional yard drains to the already approved drainage system, for properties that have a floor elevation lower than the proposed crown of the adjacent road at the Palm & Hibiscus project.” The correspondence included a Wade Trim Scope-of-Work for preparing As-Built plans and drainage studies to “confirm feasibility of City-directed private side connections,” and

obtaining modifications of the existing permits from DERM and the SFWMD to allow construction of private yard drains. (Figure No. 13)



**Scope of Work and Fee for Services  
City of Miami Beach  
Palm and Hibiscus Islands**

**Scope of Work:** Stormwater modeling efforts to confirm feasibility of City-directed private side connections

Tasks include:  
 Review of stormwater as-builts to update ICPR model to create baseline conditions  
 Create new scenario with proposed private side connections  
 Review actual pump operating conditions (pump reports to be provided by the City)  
 ICPR model version upgrade

TASK NO.	TASK DESCRIPTION	PROJECT MANAGER	SENIOR CIVIL ENGINEER	STAFF ENGINEER
	Miami Beach Hourly Rates	\$138.00	\$138.00	\$116.15
<b>1.0</b>	<b>Stormwater baseline and new model scenarios</b>			
1.1	Review of stormwater as-builts to update ICPR model to create baseline conditions	10	50	0
1.2	Create baseline model (ICPR model conversion)	10	100	0
1.3	Create new scenario with proposed private side connections	10	50	0
1.4	Review actual pump operating conditions (pump report to be provided by City)	4	2	0
1.5	Prepare report summarizing comparison between baseline and new scenario	8	20	20
1.6	QA/QC	4	8	0
<b>2.0</b>	<b>PERMITTING (SFWMD, MDRER): Submittal of supporting documents addressing changes to original permitted design</b>			
2.1	Prepare report regarding differences between installed and original design conditions	16	50	20
2.2	Address permitting agency comments	16	20	10
	<b>GRAND TOTALS</b>	<b>78</b>	<b>300</b>	<b>50</b>
	Hourly Rates	\$138.00	\$138.00	\$116.15
	Labor Cost per Category	\$10,764	\$41,400	\$5,808

*Figure 12 Excerpt from Wade Trim Scope-of-Work for engineering services required to notify DERM and SFWM of City's plans to install private-side yard drains and obtain a modification of existing permits*

On April 9, 2018 Sanchez sent Garcia, Riano, and Serrano an email (“Palm Island Coconut Ln. Harmonization Complete – IMPORTANT”) that suggested the City did not object to Lanzo and Wade Trim contacting DERM to obtain a permit modification. The email said, “I am still waiting for Daniel’s list of FFE and center line of the road elevation to determine which address does this correspond to? Run your drainage model and apply for permit mod. If you need to. Provide a reasonable request for change order with design and construction cost. Implement the work to meet the new directive and meet your deadlines.”

Notwithstanding this email, subsequent events, other records, and statements from Garcia and Riano during sworn interviews, support a conclusion that the responsible City officials discouraged the Lanzo team from disclosing the new phase of construction to the permitting agencies. CIP approved funding for Wade Trim to prepare As-Built plans and conduct a new drainage study, but did not approve \$17,560 for engineering services associated with notifying SFWMD and DERM about the City's plans to install private-side yard drains and obtain permit modifications.

Despite rejecting Wade Trim's recommendation to notify DERM and the SFWMD about the new phase of construction, the City approved funding for Wade Trim to prepare an As-Built version of the unpermitted Kremers plans and to conduct new drainage studies based on those plans. The work was funded under a revised Wade Trim Scope of Work that omitted reference to contacting the permitting agencies.

**B. (April 4 - May 10, 2018) The City decides to begin a new phase of construction that extends the public drainage system into private property; creates City Drainage Connection Permit**

On April 4, 2018, Samadi sent Lanzo and Wade Trim additional information about the New Drainage Directive and the City's policy for selecting the lots where the new drain connections would be installed. The email said in part: "Any Property that has signed the Harmonization Agreement and has FFE at or below the new crown of the road shall receive a yard drain/catch basin inside the private property, at the low point, referred to as the "connection point" with a plug that can be removed and connected to the system."

The City's efforts to extend the public drainage system into private lots and issue Drainage Connection Permits to connect those drains to the system, and Wade Trim's concurrent efforts to prepare an As-Built set of plans and drainage study for Palm and Hibiscus Islands, were completed during the six weeks preceding the expiration of the project's Class II permit

On April 18, 2018 Engineer of Record Kremers completed an As-Built version of the stormwater section of the construction plans that showed the right-of-way drainpipes and other significant changes the City had directed Lanzo to make during the project. As planned, Garcia used

those updated plans to conduct drainage studies that established a new performance baseline for the system. The results for Palm Island were submitted to CIP in a report titled dated May 3, 2010. This was documentation that the City and Lanzo could use to obtain a modification and extension of the project's Class II permit. They did not do so.

On April 24, 2018, Chief Resiliency Officer Susan M. Torriente emailed Carpenter about developing an installation guide for residents suggested by City Commissioner Aleman. It said in part, "Com. Aleman called me about this potential private tie-in to the public infrastructure system. She would like me to create an easy "how to" manual or brochure for other residents. Can we meet to discuss process and steps so I can help in terms of streamlining."

Carpenter's response, copied to Morales, Martinez, and Coley said: "Building, CIP and Public Works have met on this to streamline the process as an attempt to provide concierge service for the residents that want to connect. I believe that we have a good process of Building [Department] allowing the walk-through of a plumbing permit with documents provide [sic] by a licensed plumber and a form signed by Public Works. We are just waiting on legal review of the form and then we could certainly use some help on the Communication side to get the word out."

On May 1, 2018 Lanzo Construction Manager Riano emailed DERM Senior Engineer DeTorres a request for a six month extension. She responded, "As per the Miami-Dade County Chapter 24-48, the application for the permit extension must be submitted."

On May 10, 2018 three events occurred: CIP held a progress meeting with Lanzo and Wade Trim staff; the City Attorney's Office approved the City's new Drainage Connection permit; Garcia signed a cover letter for the City's application for a new Class II permit.

The CIP progress meeting included Lanzo owner Joseph D'Alessandro, and Lanzo construction managers Beaty, Riano and Serrano and Wade Trim engineers Brezezinski, Kremers, Garcia, Wright, and David Mullen, and CIP Project Manager Samadi and Project Coordinator Sanchez. The minutes reflect an extensive discussion of pending items, including permitting. However, the minutes indicate discussion of two permits other than the Class II permit.

The new Drainage Connection Permit made "all present and future owners" of the property responsible for the performance of the private-side yard drain and clarified that in allowing the connection the City was not assuming a duty to prevent flooding on the property. The permit said, "The property owner agrees to indemnify and hold harmless the City, its agents and assigns for any

damages resulting from this agreement” absent negligence. And further, that the “property owner shall be responsible for the maintenance and repairs of the storm water connections within the property.” It concluded with a disclaimer that said, “This permit shall only be valid for this drainage connection, and any new development or redevelopment of the subject property shall follow the City's Land Development Regulations.” If the existing structure on the property were to be redeveloped, the City would require the owner to raise the property’s elevation.

The May 10, 2018 Garcia signed a letter to DERM intended for submission with the City’s application for a second Class II permit. CIP Project Coordinator Sanchez made the letter part of the application package in lieu of an “Engineer’s Letter of Certification” signed by Engineer of Record Kremers.

On May 15, 2018, Assistant City Manager Carpenter signed the City’s second application for a Class II permit. The same day, CIP Project Coordinator Sanchez emailed the signed application for a Class II permit to DERM Senior Engineer DeTorres. The investigation obtained no records that established that Carpenter saw Garcia’s May 10, 2015 letter to DERM’s Supervisor Molina. During interviews with OIG staff, Carpenter said it was his practice to have CIP review permit applications prepared by the design-builder and to sign the application based on CIP’s review and approval.

The DERM permit application at Section 2 included a checklist of documentation required with each application signed by the project’s Engineer of Record. It said, “Checklist: INCOMPLETE APPLICATION PACKAGE WILL NOT BE PROCESSED” and thereafter contained boxes to check for 3 copies of the project’s construction plans, drainage studies, and the Letter of Certification from the Engineer of Record that the proposed drainage system would not alter the positive flow of water or cause harmful flooding. In the new application, these boxes were checked to indicate that the required documentation, including the construction plans, were attached. They were not.

The application did not include the recently updated As-Built version of the Kremers plans, the updated drainage study by Garcia based on those plans, and an Engineer’s Letter of Certification from Kremers. Instead, the email from CIP to DERM included the permit application signed by Carpenter and the May 10, 2018 cover letter on Wade Trim letterhead signed by Garcia. The letter included an explanation for not submitting the required documentation, including the

construction plans. The statement said, “For all required documentation as outlined in Section 2 and Attachment B, please refer to original permit application for Permit No. 20150058, as a reference.”

This was a reference to the original plans prepared by Rubio that had been the basis of the 2016 permit. It indicated that the Rubio plans were being used to build the drainage system. Those plans also would serve as the basis of the City’s application for a new permit in 2018. The reference to the “original permit application” also encompassed the Engineer’s Letter of Certification that Rubio had signed as part of the first application. In that letter, he had stated that he would provide “periodic inspections throughout the construction period with staff under my responsible charge,” and prepare a set of As-Built plans for the agency to review at the end of the project. Rubio was at this point no longer serving as the Engineer of Record for the drainage system.

By omitting a second letter of certification signed by Kremers, and omitting plans signed and sealed by Kremers, the application was omitting information that was (a) required by the application and (b) material to DERM’s review of the application. In lieu of this documentation, the May 10, 2018 letter signed by Garcia provided an unusual and irregular supplement to the standard DERM application form. It contained five questions from DERM’s “Application for Time Extension of Class II...Permit.”

One question said, “Describe the work, as authorized by the above-referenced permit that has not been completed up to date.” In the letter, Garcia wrote the following: “Swale area grading, pump stations, private-side yard drains, lighting, final lift of asphalt, pavement and marking.” All but one of the items on that list were routine tasks performed at the end of a project. The outlier in the middle of the group was “Private-side yard drains.” No “private-side yard drains were “authorized by the” the 2016 permit. This statement in Garcia’s letter was factually false.

In response to the question, “Has the work performed to date as authorized by the above-referenced permit been conducted in accordance with the permit description, approved plans and restrictions, limitations or conditions of the permit? If not, describe in detail work that has been conducted that is not in accordance with the permit.” Garcia’s response to this question did not answer the first question as to whether work on the project to date had been done in accordance with the original permit description and “approved plans.” The truthful answer was no, the work had not been done according to the Rubio plans.

Garcia answered, “City provided a change in directive requiring installation of private-side yard drains for properties that have finished floor elevations below the adjacent crown of road.” This referred to the New Drainage Directive adopted by Public Works in April.” Thereafter, his answer summarized the City’s rationale for its assumption that that private-side yard drains were not a material change because the design of the drainage system was scaled to handle water on both public and private lots.

The answer continued, “The original stormwater design criteria required that the drainage area be sized to account for and reflect the actual contributory area at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots. Thusly there is enough capacity in the system to account for this additional stormwater load, particularly in light of the fact that few of the properties fall within this new City criteria.” At this point, it was not clear how many lots would have private-side yard drains installed but it was expected to be more than “a few.” Garcia had estimated 40 to 50, but the number could be as high as 90 on west Palm Island.

Next, Garcia said, “Additional City-directed changes will be submitted via revised plans for Palm Island and Hibiscus Islands during permit certification submittals; these mainly relate to change of pipe alignments to reduce impact to existing vegetation, addition of a secondary drainage system to reduce potential flooding in isolated areas, and lowering of proposed elevation of roads to reduce harmonization impacts to private properties.”

The preceding paragraph suggested that the City and Lanzo would be making changes in the future to the plans (“Additional City-directed changes”) under new directives from the City and (b) that those changes would be described in As-Built plans at the end of the project.

Submission of As-Built plans is an activity that is described in the Engineer’s Letter of Certification. The Engineer of Record agrees to “prepare a set of reproducible record prints of drawings showing changes made during the construction process based upon the marked-up prints, drawings, and other data furnished by the contractor to me.” As noted previously, it is common practice for a contractor to disclose minor adjustments made during construction. DERM and SFWMD permits are issued with a condition that requires a permittee to report significant changes, after which the agency determines the need for a permit modification.

In sum, Wade Trim and Lanzo had prepared, and CIP had submitted, an application for a new permit in 2018 that relied on the construction plans, drainage studies, and certification letter signed by Rubio for the 2016 application, and did not submit the recently completed As-Built plans, the updated drainage studies, and a certification letter from Kremers.

Dissatisfied by the incomplete application and contents of the cover letter by Garcia, De Torres sent Sanchez a pointed email that said, “We need a certification from the Engineer of Record of the original permit to certify that not [*sic*] changes to the original signed and sealed plans dated \_\_\_\_\_ and drainage calculations dated \_\_\_\_\_ approved under CLII-20150058 have changed.” The plain meaning of this email was a request from DERM to CIP to submit a statement from Kremers certifying that no significant changes had been made to the signed and sealed (though already outdated) plans by Rubio, dated Feb. 26, 2016, and that DERM had approved when it issued the 2016 permit.

At this point, Kremers was the project’s Engineer of Record for the Stormwater section of the plans and for most others. However, she could not have honestly certify that no significant changes had been made to the Rubio plans or Rubio’s drainage calculations. She had revised Rubio plans in 2016 and recent prepared an As-Built update of the alternative plans. Kremers did did not provide a response to DERM. Instead, this task fell to Garcia, Wade Trim Miami-based project manager

During an interview, Garcia stated that he never saw the email from De Torres to Sanchez asking that the Engineer of Record certify that significant changes had not been made to the permitted Rubio plans dated Feb. 26, 2016. Garcia said, “What I was told from Olga [Sanchez] and Pablo [Riano] was that they wanted a statement from the project manager stating, you know, no changes had been made.”

After consulting with Riano, Garcia said he prepared and signed a letter on Wade Trim letterhead addressed to DERM Section Chief Molina. He emailed the signed correspondence to Riano who who approved the document on behalf of Lanzo and forwarded it to Sanchez. The letter included the following statement: “**The purpose of this letter is to state that the original signed and sealed plans dated February 22, 2016 for Hibiscus Island and February 26, 2016 for Palm Island and drainage calculations dated October 2015 approved under CLII-20150058 have not had significant changes.**” (Figure 12)



FLC Reg. No. C000121

Wade Trim, Inc.  
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May 17, 2018

Department of Regulatory and Economic Resources  
Environmental Resources Management  
701 NW 1st Court, 6th Floor  
Miami, Florida 33136

Attention: Mayra De Torres, Engineer II

Re: City of Miami Beach Neighborhood 13A Infrastructure Improvements  
Palm and Hibiscus Islands  
Class II Permit Renewal (Permit No. CLII-20150058)

Dear Ms. De Torres:

The purpose of this letter is to state that the original signed and sealed plans dated February 22, 2016 for Hibiscus Island and February 26, 2016 for Palm Island and drainage calculations dated October 2015 approved under CLII-20150058 have not had significant changes.

The City of Miami Beach has recently revised the project's stormwater design criteria, which we are currently evaluating. Should the new criteria result in any significant changes, as they relate to the original signed and sealed plans and drainage calculations, they will be reflected in the project permit certification documents.

Please do not hesitate in contacting me with any questions.

Very truly yours,

Wade Trim, Inc.

Daniel Garcia, PE  
Project Manager

LNZ2003.02S

cc: Pablo Riano (Lanzo)

*Figure 13 May 17, 2018 letter from Wade Trim engineer Garcia assuring DERM signification changes had not been made to the Rubio plans.*

The statements in the letter were not true and misrepresented the status of the project. The first sentence falsely stated that “significant changes” had not been made to (1) the “100% Final Design” construction plans dated Feb. 26, 2016 by Rubio that were approved by CIP and Public Works and (2) drainage study calculations by Rubio based on those plans summarized in a report dated October 2015. The Rubio plans had been extensively revised in early 2016. During 2016 and 2017 additional significant changes were made in response to requests from the Homeowners Association. Given the number of significant changes, Wade Trim thought it necessary to conduct a new drainage study to verify the system’s expected performance. More broadly, the statement conveyed the false and misleading impression that the City and Lanzo had been using the Rubio

plans to build the system and would continue to do so. In interviews with OIG staff Garcia said, “I wasn’t trying to mislead DERM.” He said he was trying to keep “this project moving forward for the residents of Palm and Hibiscus Island and for the City” until such time as he could present DERM with a coherent description of the changes the City had directed Lanzo to make to the project.

Garcia said he recalled discussing DERM’s request for a certification letter as well as his second letter to DERM dated May 17, 2018 with Kremers. During an interview with OIG staff, Kremers said she was not aware of the May 17, 2018 letter signed by Garcia. Notwithstanding her role as Engineer of Record, Kremers said she did not know who was responsible for notifying DERM that significant changes had been made to the Rubio plans. She said, “I don’t know the answer to that,” but thereafter contended, “The intent was not to try to hide any kind of changes” because “there’s nothing to be gained” from misleading DERM.

Garcia stated that in preparing the letters for DERM he took direction from Riano who transmitted the signed copies to Sanchez. During an interview with OIG staff, Riano agreed that the changes the City had directed Lanzo to make to the construction plans were significant, and that the statements in Garcia’s letter dated May 17, 2018 were not true. He said Lanzo and City staff made a joint decision that it would be sufficient to report the changes in As-Built plans at the end of the project. Riano said, “The City is aware of what’s going on. Stantec is aware of what’s going on. Wade Trim is aware of what’s going on. Lanzo is aware of what’s going on. And yes, I guess that should not have been done. The proper thing would have been to notify them, stop the project, get the revision and then move on again.”

When asked about the May 17, 2018 letter by Garcia during interview with OIG staff, CIP Martinez said, “I would have to say it isn’t accurate...they appear to be a significant change. Then by definition, there is a significant change. So that makes the letter not accurate.” Advised of the DERM staff’s view that they were misled by the Garcia letter, Martinez said, “I agree...I don’t know why Wade Trim decided that they felt comfortable signing this. Maybe their opinion of significant changes is different than than than mine...I’d be speculating why they didn’t just come out and say, you know, ‘There’s been these changes.’”

Asked during an interview why the City and Lanzo might be reluctant to notify DERM of changes to the construction plans, Riano said, “They will put a stop on the project and we should have ceased activities until the permit is approved. Revised and approved.” He said the impetus for submitting Garcia’s May 17, 2018 to DERM was “the idea to keep going. I think it's more because of the way the project was moving and the way we needed things to be done, without opening a can of worms. The idea would be to provide this letter, get the extension of the permit.”

During an interview with OIG staff, Sanchez said she would not have sent the letters by Garcia to DERM without the approval of a more senior official in CIP and before the submission was discussed with staff from Public Works, Stantec, and Lanzo. Sanchez said, “Before I submit anything to DERM everything is discussed. It's not like it is my decision...always everything was discussed at meetings.” She said all submissions to DERM were “reviewed by Public Works.” She said Public Works staff were the City personnel in a position to say, “Oh no, you cannot submit that letter because it is our understanding that it is significantly changed on the design.” She said, “And they didn't say anything. That's why we provided the letter to DERM based on that.”

Sanchez reported to Senior Project Manager Samadi. In an interview Samadi said, “I want to emphasize this is the design builder's responsibility. I don't know why they didn't apply for a permit. I don't know. I don't know. It is beyond me to understand why they didn't do what they were supposed to have done.” She said she was not aware of the letters written by Garcia, or that Sanchez, her subordinate, was involved in submitting the application for the second permit. “She (Sanchez) was my project manager, but sometimes she did things that I didn't know...example of it here. I would not have asked her to submit this package and application directly to DERM because this would be the contract design builder's responsibility. I would have suggested against this move.”

After reviewing a draft of this report, Sanchez provided a written statement that took exception to Samadi’s characterization and said the following:

At the CIP Department, no documents that goes to an external agency, leaves the department without the approval of a Senior, Assistant Director, or Director. No documents that needs a signature from an Assistant City Manager leaves the CIP Department without the approval of a Senior, Assistant Director, or Director. That was the policy as a Capital Projects Coordinator, I did not have the authority to undertake this action on my own nor could I have bypassed three levels of supervision. Furthermore, we discussed all projects at regular weekly meetings and

we always were required to obtain prior authorization to proceed with all projects related matters.

During an interview with OIG staff, Carpenter said he was not aware that the permitted plans by Rubio had been revised by Kremers in 2016 and, in May 2018, would not have known that the plans had been revised. He said, “So, from my perspective, I certainly wouldn't have seen a need to go to DERM to modify the drawings if I didn't realize the drawings had been modified.” During the investigation, the OIG staff did not identify emails, correspondence, or other records that establish that Carpenter was aware of the two letters signed by Garcia.

During an interview, Carpenter said he recalled being informed at some point about concerns that the City and Lanzo needed to notify DERM that significant changes had been made to the project's construction plans, but said he could not recall when that occurred. Carpenter said, “I remember those questions coming. At what point in time those questions came, I don't, at this point, remember. But my feeling would be that if someone came to me with that feeling, I would have said, ‘Then let's go back to DERM and let's get their modification issued.’”

Additionally, Carpenter said, “I can't speak for anyone else, but I certainly wouldn't have misrepresented to DERM what we were intending to do. I can tell you that. Obviously, we were in construction on Sunset Harbor at the time, we were learning a lot because we were actually building elevated roadways in a very constrained environment. And I am assuming that the team would have taken some of those lessons learned and tried to apply them to Palm and Hibiscus.” On May 29, 2018, DERM Supervising Engineer Molina issued a second Class II permit, again based on the outdated Rubio plans, for the Palm and Hibiscus project “per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates, dated February 19, 2016, and the letter from Daniel Garcia, P.E., from Wade Trim, Inc., dated May 17, 2018.” The permit was issued to Carpenter as the permit holder in correspondence addressed to Kremers as the project's Engineer of Record. For the second time, DERM had unwittingly relied on misrepresentations in an application filed on behalf of the City and Lanzo, and issued a Class II permit for the project.

The new permit ensured that Lanzo and Wade Trim could continue with the new work of installing private yard drains under the new permit. Five days after City received the second permit, Morales sent an email to Mayor Gelber and members of the City Commission (“Subject: R9W –

Status Update on the Residential Stormwater Tie-In Initiative”) with an attached copy of the new “Drainage Connection Permit for Single Family Residents.” The City Manager’s email said:

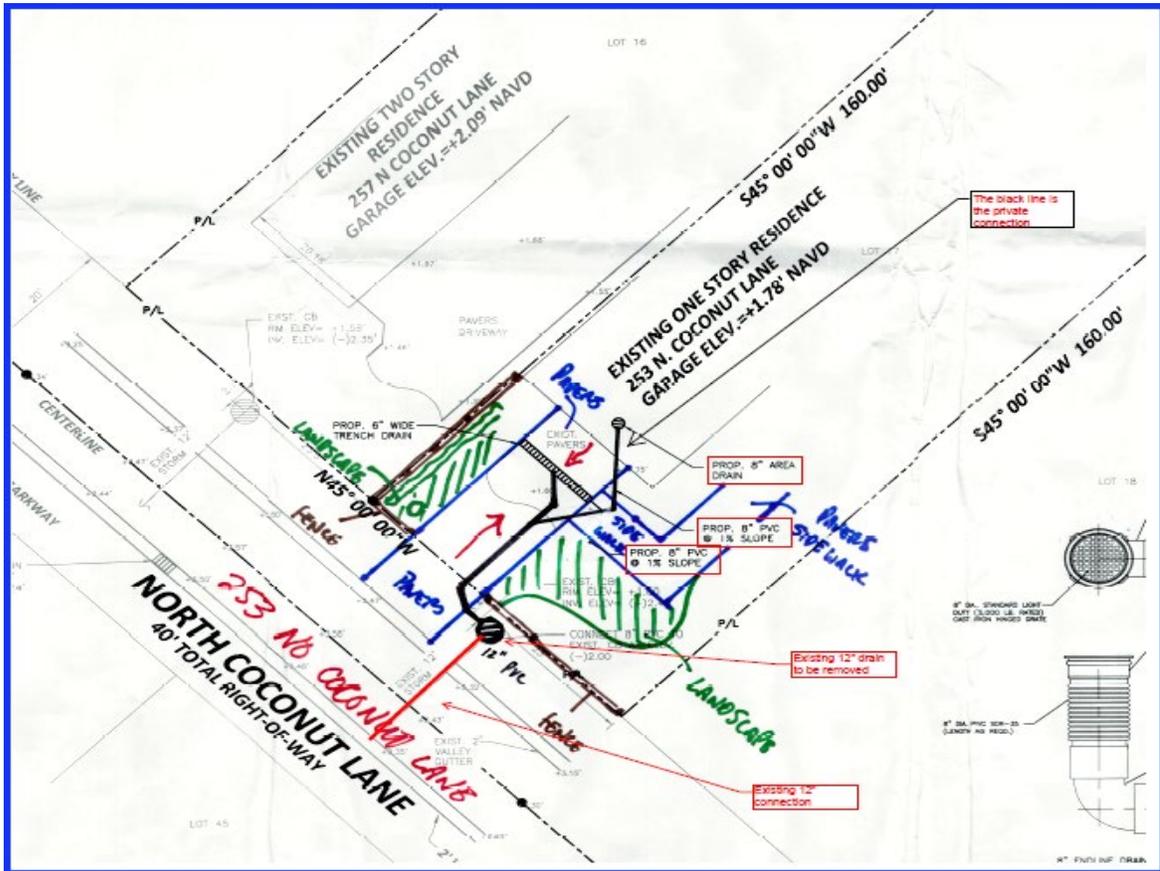
All properties within Palm and Hibiscus Islands can connect to the City’s stormwater system with a plumbing permit and execution of the attached form (drainage connection permit form). The cost of the permit is a percentage of the cost of the work. The first permit was issued to 215 Palm Ave. (construction cost \$1,000 and permit cost \$115).

When the resident decides to connect to the City’s stormwater system, CIP meets with the residents to advise the following: Process of Connecting to the City’s Stormwater System, which includes property owner’s proposed drainage connection sketch, a plumbing permit from the Building Department and associated fees and Drainage Connection Form.

Two City permits had been issued, Morales said, for the connection of private-side yard drains to the system. Additionally, 109 residents on west Palm Island had signed harmonization agreements allowing work on their lots. The new permit and the email describing the process did not mention the legal requirement for each property owner to obtain a Class II Permit from DERM before a new stormwater drainage system that emptied into the Bay could be installed on private property.

**C. (May 29 – Sept. 11, 2018) Events related to the construction at 252 North Coconut Lane, DERM enforcement action and the City’s response to notification that Class II permits were required**

On Sept. 11, 2018, Public Works Director Coley signed a Drainage Connection Permit for the connection of two private drains at 253 North Coconut Lane. Attached to the permit were engineering drawings that described the construction work that in that would later be capture in the photographs a whistleblower emailed to DERM Engineering Supervisor Maria Molina. (Figure No. 14)



**Figure 14 Construction plans approved by Public Works for installing two private-side yard drains at 252 North Coconut Lane and connected to the City drainage system by a drainpipe in the right-of-way.**

On the afternoon of Sept. 19, 2018, former City Manager Jimmy Morales received an email with the same photographs of construction at 252 North Coconut Lane that the whistleblower would send to DERM Supervisor Molina the following day. Morales knew the whistleblower to be a vocal critic of the City’s new practice of issuing Drainage Connection Permits to allow homeowners to connect their privately-owned stormwater drains to the public drainage system. Morales forwarded the email to Assistant City Manager Eric Carpenter, Public Works Director Roy Coley, and Environment and Sustainability Director Elizabeth Wheaton with a message that said, “FYI. He won’t stop. Make sure we have a good response to this.”

On Oct. 17, 2018, one week to the day after Molina warned Assistant Director of Environment and Sustainability Wells that separate Class II permits were required for each private-side drain connected to the drainage system, CIP Director David Martinez stood before the City Commission to speak in support of Amendment No. 5 to the City’s contract with Lanzo

Construction. The amendment provided \$775,000 in new funding for large scale construction of 12-inch yard drains inside private lots on west Palm Island.

At the request of Martinez, however, Mayor Dan Gelber had put amendment #5 to the Lanzo contract on the City Commission's meeting agenda. Gelber explained that he decided to expedite the process after talking with Martinez about the urgent need for the new funding. "I don't want to shorten a process at the expense of doing it right," Gelber said, "but I think when we talked about it you felt we could bring it to the City Commission and perhaps shortcut a little bit of it because we met with some residents who...are extremely frustrated."

Martinez agreed. He said, "We had met last week with residents of Palm and Hibiscus Island, mainly Palm Island, in discussions in terms of wrapping up this project and completing the few items we have left to do." He said Lanzo would be "installing a drain somewhere on private property. It may or may not follow up with the resident tying into it. That's their choice. The process is set up for that to happen if they elect to...they are not forced to."

Further, Martinez said in presenting Amendment No. 5, he was unveiling a new policy that responded to an April 2017 resolution that directed the City Administration to "engineering solution and policy" to allow residents to connect their personal yard drains to the public drainage system. Martinez said, "It's taken awhile to determine what the policy is. We have finally defined it and what you see here is the effort that a design-builder would have to take in order to address approximately 50 to 60 properties that would fall into this category on Palm and Hibiscus Island."

The City Commission approved Amendment No. 5. The resolution did three things: First, it added the task of constructing private-side yard drains to Lanzo's contract with the City. Second, it authorized the use of the stubouts and right-of-way drainpipes as connection points for approximately 90 drains on private property. Third, it provided funding for a new phase of construction that was not covered by the City's Class II permit. At this point the City's Class II permit did not include any construction outside the right-of-way, or the stubouts and right-of-way drainpipes installed in front of each house on west Palm Island.

Five days after the Commission approved Amendment No. 5, Wade Trim Vice President Holly Kremers signed a letter to Lanzo Construction Manager Pablo Riano that said the following:

Temporary 12 [inch] stormwater inlets along the low-lying N&S Coconut Lanes as part of the road elevation design were included in the approved 100% Palm Island construction plans dated

August 2016. These drains were not intended to be permanent and were to be cut and capped as the elevating of the road proceeded along the roadway. Capital Improvement Projects and City Commission provided directive to allow private side connections to these temporary stub-outs and requested Wade Trim provide a recommended design to convert the temporary construction drains to permanent drainage connection points.

During an interview with OIG staff, Kremers said the 88 unpermitted drainpipes in the right-of-ways “are the temporary, are formerly the temporary, construction drain. OK, so they were there and as indicated for construction means and methods...And the City said, ‘Well, hey, as long as they're there, let's keep them and turn them into permanent drains and use them to allow the private property connections to connect to the City's drainage system.’ OK, so now we're permitting them as permanent drains.” On Oct. 25, 2018 Lanzo Project Manager Riano submitted a formal request to CIP for direction to enable the project’s design engineers to begin preparing plans for the new construction activity. The request for information began: “Per the directive provided by City of Miami Beach Commission and CMB Capital Improvement Project Department to allow private property drainage connections to the temporary twelve (12) inch edge drains.”

In the weeks ahead, DERM’s Water Control Staff met with personnel from Wade Trim and Lanzo and conducted their own field research. By February 2019, the agency had identified more than 100 unpermitted drainage structures. The bulk of these were the right-of-way drainpipes or stubouts that extended to the front of each house, but several were private-side yard drains that had been connected to the public drainage system.

On April 26, 2019, Kremers sent Lanzo Construction Manager Serrano a Scope of Work and change order for \$126,385 that the City subsequently approved. It included language that acknowledged the unusual and non-standard design of the system and the doubts that Wade Trim had entertained about whether DERM would permit the proposed public-private drainage system. The Scope-of-Work said the following: Task 1-DERM CLII Permit Requirements Investigation. **Due to the lack of precedence for DERM permitting of a residential stormwater connection to the public stormwater collection system, an investigation of the permitting requirements and process will need to be performed to quantify the level of service required.** This task is broken down into the following sub-tasks: 1.1 – Meetings with Regulatory agencies 1.2 – Investigation of Permit Requirements. (Emphasis added)

Six months passed before the Oct. 2019 testimony during a public hearing of the Environment and Sustainability Committee that discussed enforcement action and the unpermitted construction of right-of-way drainpipes before members of the Commission.

**D. (January 2021) Lanzo submits response to OIG draft report with email dated July 30, 2020 from SFWMD Section Leader indicating that no permit modification is needed for secondary drainage system; City staff cites email in response to OIG draft report; OIG confers with SFWMD Bureau Chief and other senior officials who state that a permit modification from SFWMD is necessary**

In July 2020 a Wade Trim Senior Project Manager Jim Penkovsky engineer spoke by phone with SFWMD Section Chief Dustin Wood about the need to modify the project Environmental Resources Permit regarding the design and construction of the secondary drainage system, and then followed up with an email to Wood that said:

In a follow-up to our conversation, it is my understanding that the work described herein is considered ‘de minimus’ and no permit mod is required for the subject permit (attached for convenience). Briefly, as part of the project the City has asked the design-build team of Lanzo and Wade Trim to provide for drains within select private properties to assist in localized drainage at those properties. The ERP project description is right-of-way based. So we did want to inform the District of our encroachment into the private side at an average of 10’ into each property...DERM permitting is almost complete and property owner agreements are in place.”

Wood responded with an email that said, “The installation of yard drains within the permitted surface water management system as described below will not require a permit modification.” (July 30,2020 email attached). Carpenter, Martinez, and Coley cited Wood’s decision in a joint response to a draft of this report that said, “it has recently been confirmed by the South Florida Water Management District that the introduction of the secondary drainage system will not require any additional documentation or a permit modification.” These emails were provided to the OIG for the first time by Lanzo in its response, dated January 15, 2021, to the OIG draft report.

During a subsequent interview of SFWMD officials by OIG staff, which included a review of differences between the Rubio and Kremers plans, SFWMD senior officials, including Executive Director Jill Creech and Bureau Chief Jesse Markle, indicated that they were not aware of the Kremers plans. In a written response to the draft report on behalf of the agency (attached), Markle states, “The District’s July 30, 2020 response to the e-mail from Wade Trim engineer Jim Penkosky of the same date was based solely on the information provided in the e-mail without benefit of review of the Wade Trim/Kremers construction plans or any supporting stormwater management (SWM) calculations, which were not provided. As such, our position that “[t]he installation of yard drains within the permitted surface water management system...will not require a permit modification” is no longer the case.”

Markle said SFWMD will require the City to obtain “A modification to Environmental Resource Permit (ERP) 13-06125-P to address the changes made to the... system during construction that were not contemplated by the ERP will be required.” Markle said the City will be required to demonstrate that it “has real property interest... to operate and maintain the portion of the... system that extends into private property and, further, demonstrate that the areas outside the right-of-way “that was not considered under the permit that is now contributing discharge” to the drainage system “does not lead to a violation of State water quality standards” or “lead to substantially different flood protection.”

## X. FINDINGS:

**Finding #1. The stubouts, which consisted of lateral pipes that extend from the main drainage system to the front of each house on west Palm Island with connection tees were permanent parts of the the stormwater drainage system. They were available to mitigate flooding during construction. Evidence, including statements under oath by multiple witnesses, established that the description of these installations as “temporary construction drains” after they were discovered by DERM, was a legal fiction**

This designation was intended to protect the City and Lanzo from legal liability until the City adopted a policy for connecting private-side yard drains to the public drainage system, and to postpone the legal requirement to obtain the approval of permitting agencies for their installation. The purpose of the City’s investment in the engineering design and construction services and material, starting sometime in 2015, was to build the permanent infrastructure required to connect private-side yard drains to the public drainage system. The responsible City officials decided to add the feature to the standard drainage system designed by Orlando Rubio, because engineers feared the the newly elevated roads of North and South Coconut Lanes would trap stormwater on private lots and cause harmful flooding.

To ameliorate the harmful effects of new flooding, the City decided to have Lanzo and Wade Trim prepare new construction plans for a drainage system designed to connect to private-side yard drains. The evidence establishes that this plan by the City was based on a considered decision by the responsible City officials. In November 2015 and during the subsequent six months when the permitting agencies reviewed the outdated Rubio plans, the responsible City officials had a duty to fully and timely disclose to DERM and the SFWMD that the project’s construction plans and the intended purpose of the drainage system had changed in significant ways. Similarly, when the Commission approved the award for the project’s construction phase on Dec. 9, 2015, the City Administration had an obligation to fully and timely disclose to the Commission that construction of a drainage system designed to connect to private-side yard drains would significantly increase the cost and technical difficulty of difficulty of the project.

**Finding # 2 In May 2016 DERM issued Class II permit based on plans for a standard right-of-way drainage system prepared, signed, and sealed by Orlando A. Rubio, PE., without seeing the Kremers plans;; similarly, the SFWMD issued an Environmental Resources Permit based on the Rubio plans and without the benefit of reviewing the Kremers plans.**

During s seven month review of the City’s permit application from November 2015 and May 2016, DERM and SFWMD staff remained under the impression that Rubio was the project’s Engineer of Record for the Stormwater section of the construction plans and ultimately issued the permit based on plans dated Feb. 26, 2016 that were prepared, signed, and sealed by Rubio.

On or after November 2015, the City Administration directed Wade Trim engineers to revise the plans by Rubio. On after January 2016 Wade Trim engineer Holly Kremers, PE had assumed the defacto role of Engineer of Recorded for the Stormwater Section.

Ultimately she, and not Rubio, prepared, signed, and sealed the plans that the City used to build the project. DERM and SFWMD staff with the mistaken impression that Rubio was “engineer in responsible charge” of the plans and the plans they were reviewing would be used to build the project.

Had DERM SFWMD been notified of the change, they would have required submission of final plans signed and sealed by Kremers. Instead, DERM, as well as SFWMD, issued permits based on plans prepared by Rubio and Rubio’s “Engineer’s Letter of Certification.” The failure of Rubio and Kremers to notify regulators was not consistent with provisions in Florida law and professional responsibility rules that apply to an Engineer of Record

**Finding #3. In early 2018 the City began the installation of private-side yard drains on west Palm Island but did not disclose the new phase of construction to DERM and SFWMD, turn over the updated Kremers plans, or obtain modification of the existing Class II permit.**

Upon learning in early 2018 of a decision by the City to proceed with a new phase of construction on private property, that was not covered by the existing permits from DERM and SFWMD, Lanzo and Wade Trim personnel recommended that the City approve and fund preparation of As-Built construction plans; conduct new drainage studies based on the widespread installation of private-side yard drains; notify DERM and SFWMD of the new phase of

construction work that the City proposed to do outside the right-of-way; and obtain a modification of the existing permits.

The City approved production of As-Built plans and new drainage studies, but disregarded the Lanzo/Wade Trim recommendations. Instead, the City directed Lanzo to proceed with the work under the existing Class II and Environmental Resources permits. By August 2018, the City and Lanzo had developed detailed plans for installing private-side yard drains in many houses on west Palm Island using the unpermitted right-of-way drainpipes to the public drainage system. At all times, the responsible officials with the City, who were also licensed professional engineers, knew or should have known that Section 24-48 of the Miami-Dade Code required that the owner of each new private-side yard drain obtain a Class II permit.

**Finding #4. In May 2018, in applying for a second Class II permit, the City did not give DERM recently updated As-Built plans and new drainage studies. Instead, the City obtained a permit based on the Rubio plans and the misrepresentation that significant changes had not been made to the Rubio plans.**

The DERM permit application and correspondence in May 2018 from Wade Trim engineer Garcia were incomplete, inaccurate, and omitted facts that were material to DERM's permitting decision. In this instance, the false statements and misrepresentations, especially Wade Trim engineer Garcia's certification that significant changes had not been made to the Rubio plans, appear to be intentional. Based on those representations, DERM unwittingly issued a second permit based on the superseded Rubio plans.

**Finding # 5. The pressure to accelerate work on the project resulted in a sequence of decisions that disrupted CIP's management of the project and resulted in an override of internal controls, process, policies and procedure designed to protect the City's interests and achieve its objectives in design-build projects. The investigation established that the City lacks a clear policy for planning and managing design-build construction projects.**

**Finding #6.. The City awarded Lanzo a contract for the project's pre-construction design phase without a finished DCP.**

In response to the Homeowners Association and the perceived pressure from former Mayor Philip Levine, on Sept. 19, 2014 the City awarded a \$599,464 contract to Lanzo for the pre-construction design phase of the project without a finished DCP. Without a finished DCP, the City and Lanzo did not have a reliable means of estimating the cost and complexity of preparing the construction plans. It also ratcheted up the pressure on City staff and their contractors to complete the technically challenging work of incorporating the new elevation design criteria into the DCP in ways that did not cause new flooding and that would dramatically increase the cost and complexity of the project.

A major roadblock to resolving the technical issues was the City's failure to obtain a survey of the elevation of garages and first finished floor of houses on west Palm Island, a task that can be accomplished in a matter of weeks. In a written response, AECOM engineer McGowan said, "Prioritizing speed over technical refinement in the project's design created a cascade of problems. On Nov. 18, 2014, or one month after the first award, the City Commission passed Amendment #1 to Lanzo's contract that increased the award \$251,016. This brought the total cost for preparing the project's construction plans to \$850,480, a figure that would be increased again in less than a year. The need for this amendment was an early indicator of problems in the project's design phase.

**Finding #7 The City overrode the role of the project's Design Criteria Professional and adopted a DCP that did not provide Lanzo with clear guidance for raising road elevations on west Palm Island.**

In an effort to exert control over how the City's new elevation design criteria were incorporated into the DCP, the City agreed to a demand from the Mayor's Blue Ribbon Panel on Sea Level Rise that the panel's consulting engineer, AECOM's McGowan, assume responsibility for revising the DCP. This decision undermined the role assigned to the project's Design Criteria Professional, engineer Jeffery Crews, and discounted the value of the City's \$599,464 contract with Stantec. Crews did not write the DCP sections on stormwater drainage and roadways. He provided CIP with a critique that expressed his reservations about the DCP guidance regarding the construction of swales and the elevation of grates and roads. In both cases the guidance proved problematic.

In the rush to develop a DCP that reflected the recommendations of the Mayor's Blue Ribbon Panel on Sea Level Rise, the City failed to produce a DCP that gave the Lanzo team clear guidance about how to apply new elevation criteria; it also failed to provide Lanzo and CIP with a reliable basis for estimating the cost and technical difficulty of preparing the construction plans. T

he DCP's guidance about designing roads, for example, defaulted to a recommendation that Lanzo raise the centerline elevation of roads to the new design criteria "where practicable," and do so without causing flooding or obstructing the "positive" flow of stormwater. Together, these first two decisions were red flag indicators of a rushed and poorly managed process for planning the expenditures on a project whose final cost is expected to exceed \$50 million. These decisions ignored the purpose of provisions in Florida law that apply to the planning of a design-build construction project by municipalities and discounted provisions in the City's contract with Stantec that were intended to reinforce the design-build process.

**Finding #8 After deciding to change the project's elevation criteria, the City failed to provide sufficient time and resources for Wade Trim to prepare construction plans for a drainage system designed to connect to private-side yard drains and verify its expected performance.**

While the responsible City officials recognized that the change in elevation criteria would require revision of the stormwater and hardscape plans by Rubio, they decided that the City could not afford to wait for the design engineers to revise the plans. The consequences and potential costs of the design change were not fully disclosed to the City Commission; and a necessary request for another large increment of additional funding for new construction plans and drainage studies was delayed.

The basis or wisdom of the City's decision in October 2015 to change the elevation criteria for west Palm Island is beyond the scope of this investigation; the implementation of the decision is not. The City made a serious error by failing to pause and allow time for the Lanzo design team to revise the construction plans and prepare a credible cost estimate. The failure to acknowledge the engineering challenges that the criteria change created - and fully disclose these risks to the Commission - set the stage for many of the consequences that followed.

**Finding 9.. The City awarded Lanzo a \$38.5 million contract for the build or construction phase of the project without finished construction plans for the stormwater and hardscape sections of the project and without a reliable basis for estimating costs associated with providing connections to private-side yard drains.**

On Jan. 11, 2016, the City Commission awarded Lanzo a \$38.5 million contract for the project's build phase without finished construction plans for building the project's roads and

stormwater drainage system in west Palm Avenue, or a reliable means of estimating how much the project would cost or how long it would take to build. Instead, without providing the necessary funding and time required to redesign, reengineer, and revise the stormwater and hardscape sections of the construction plans and conduct new drainage studies, the City decided to award the contract based on conceptual drawings and narrative descriptions in RFI documents and correspondence. Considered together, findings #3, #4 and #5 indicate a serious override of the City's internal controls, and a considered decision to disregard CIP's process for managing design-build construction contracts. These decisions were a recipe for cost-escalation, schedule delays, and flawed decision-making.

## **XI. RECOMMENDATIONS**

**Recommendation #1:** Establish by ordinance that the Director of the Environmental and Sustainability Department shall have the final authority and responsibility to approve the submission of all applications for permits by the City from the South Florida Water Management District (SFWMD), the Miami-Dade Department of Regulatory and Economic Resources (RER) and its Division of Environmental Resource Management (DERM), or any other federal, state or county agency with environmental enforcement authority over issuance of a permit for any City project; and, further, that the Director of the Environmental and Sustainability Department shall immediately, and in writing, report to the City Manager and the Inspector General any concerns expressed by those agencies, or by any other parties, about alleged lack of compliance with federal, state or county laws and regulations related to the permitting of any such projects.

**Recommendation #2:** Establish by ordinance that, notwithstanding any provision in a City contract, that the City official who signs an application for a permit included under Recommendation #1 be responsible to personally verify in writing to the City Manager the accuracy and completeness of all such permit applications and associated documentation submitted to any such regulatory agency.

**Recommendation #3:** The City Administration should develop policies and procedures for the management of design-build contracts that provide a framework of guidelines, practices, and internal controls to guide management of design-build projects. The City Manager should develop the policy in consultation with CIP, Public Works and the Procurement Director.

**Recommendation #4:** Establish by ordinance that, prior to approving significant changes in the design criteria of a design-build project after onhe award of the construction phase of the project, require that the City Manager notify the Commission, provide justification for the change and its impact on project cost schedule.

**Recommendation #5:** Direct the City Manager to provide an evaluation of the costs and benefits of the City present of multiple architecture and engineering consultants versus those of retaining a single project management contractor to provide the City with anintegrated, coordinated, and disciplined end-to-end process for planning, designing, and managing the City’s portfolio of design-build projects to counter the effects of sea level rise.

**Recommendation #6:** : Require that CIP, Public Works, and the Procurement Department working together, in consultation with the Finance Department, develop a list of key indicators and provide an annual report to the Commission that projects that are at a high risk of cost overruns, schedule delays or performance failures.

**Recommendation #7:** Amend the City’s Debarment Ordinance to authorize the Inspector General to conduct fact investigations in support of the Debarment Panel and submit to the City Manager and Director of Procurement reports of investigations on the performance of City contractors for possible debarment.

## **XII. EVALUATION OF RESPONSES TO DRAFT REPORT**

The “Principles and Standards for Office of Inspector General developed by the Association of Inspectors General describes the qualitative standard for evidence used in an OIG report as follows: “Sufficient, competent, and relevant evidence is to be obtained to afford a reasonable basis for the investigative findings and conclusions” and provides the following guidelines:

- Evidence is sufficient if there is enough of it to support the report’s findings.
- Evidence used to support findings is relevant if it has logical, sensible relationships to those findings.
- Evidence is competent to the extent that it is consistent with fact (valid).

As required by the OIG’s enabling ordinance, before finalizing this report and its findings and recommendations, a draft was sent to the persons and entities named in the report to provide a written response or rebuttal within 30 working days. The draft was released on December 4, 2020. In recognition that weekdays and holidays during that period could not be counted, the due date for responses was set at January 22, 2021. An additional seven working days, through February 2, 2021, was provided to City staff members Eric Carpenter and David Martinez in which to make further responses on their own, as well as to respond to questions from the OIG concerning issues in contention.

Where the written responses from any person or entity provided identified errors or omissions, proffered new evidence or information, provided alternative views, or suggested clarifications that had merit, some revisions were made to the final report to enhance its accuracy and fairness and the potential value of its recommendations to the City Commission and residents of Miami Beach. In instances where a respondent strongly objected to a finding or characterization of their actions, the office re-examined the underlying evidence and, where appropriate, conducted additional interviews. In such cases, pertinent statements from the written responses or prior sworn interviews, were added to the final report to provide context and to reflect alternative explanations consistent with the evidence.

### **Responses of Elected and Appointed Officials and a Representative of the Homeowners Association**

Former Mayor Levine, former Chairman of the Mayor’s Blue Ribbon Committee on Sea Level Rise, and former Commissioner John Elizabeth Aleman did not submit written responses to the draft report. However, the Inspector General (IG) met with Levine and his attorney at their

request. During the meeting, Levine and his counsel strongly objected to the use of the word “pressure” to describe the impact on City staff of Levine’s public efforts to accelerate work on construction projects to reduce flooding, and the imperative to incorporate new design criteria to counter the future effects of sea level rise. Subsequently, Levine’s counsel submitted emails from former City Manager Morales stating that Levine never “exercised any improper pressure or influence” and from Acting City Attorney Aguila stating that, while serving as City Attorney, he never received complaints of Levine having “used any undue influence or pressuring City staff with regard to various projects.

The report does not state that the actions of Levine and Robins, as to the Palm and Hibiscus project, were wrongful or improperly motivated. It sets forth facts that show the unintended consequences that occurred in one construction project. It bears noting that during sworn interviews, Morales and Martinez used the word “pressure” in describing their perceptions of factors that influenced decision-making during the project. A written response on behalf of the Homeowners Association objected to the characterization of the group’s actions during the project. Revisions were made to the report that address those concerns.

#### **Current and Former City Staff Named in the Report.**

Assistant City Manager Carpenter, CIP Director Martinez and Public Works Director Coley submitted a 14-page joint response as well as separate individual responses. Additionally, at the request of an attorney representing Carpenter, the Inspector General and Special Agent Jim McGee met with these officials and the attorney as a group. During this meeting, Carpenter’s attorney, Michael Band, Esq., Carpenter, Martinez and Coley provided additional verbal comments. In sum, Carpenter’s counsel contended that draft report accused Carpenter and the others of crimes including conspiring to mislead DERM and reiterated their position that Carpenter, Martinez, and Coley had no motive to mislead the regulatory agencies; and that they had relied on the design-build team to comply with permitting requirements.

Further, Carpenter’s counsel argued that the “language” used in the report was incendiary and implied or created the false and unfair impression that Carpenter and his colleagues had engaged wrongful actions when, in fact, they were doing their best in a difficult situation and sought to act in the best interests of the City. Following the meeting, Carpenter addressed follow-up questions in a five-page supplemental response that identified what he viewed as errors or omissions in the draft and/or characterizations that cast his actions in a false light.

The written response from Martinez strongly objected to the criticism of CIP management of the project and stressed that the design-builder, Lanzo, was responsible for obtaining permits from DERM and SFWMD and that he and City staff had a right to rely on their professional judgements. His response said, “Neither the City Administration, Office of Capital Improvement Projects, nor I, have violated the laws of Miami-Dade County regarding the construction of stormwater drainage systems. There has been no mismanagement, deception, negligence, or serious misrepresentations.”

The draft report did not allege crimes or intentional torts by any individual. The draft report did not state that Carpenter, Martinez, and Coley “conspired” to mislead DERM and the SFWMD; directed others to withhold the Rubio plans during the 2016 permitting process; directed others to indicate to DERM that significant changes had not been made to the Rubio plans; or directed others not to notify DERM in early 2018 of the City’s plans to begin installing private-side yard drains. Further, the draft report did not state that these individuals engaged in a civil or criminal “conspiracy” to defraud DERM.

The evidence obtained during the investigation established that the City’s two applications for permits from DERM and SFWMD did not include the construction plans, prepared by Wade Trim Vice President and Professional Engineer Holly Kremers, that the City intended to use to build the project; that, as a consequence, DERM and SFWMD relied on the submitted but no longer applicable Rubio plans in granting permits for the project in 2016; that DERM relied on the representation by Wade Trim Professional Engineer Garcia, submitted on behalf of the City and Lanzo, that significant changes had not been made to the Rubio plans; that, from the whistleblower’s complaint, engineers in DERM’s Water Control Section were surprised by their discovery that the City had installed 85 or more right-of-way drainpipes on west Palm Island that were not on the permitted plans; that the DERM engineers responsible for issuing the two permits stated in sworn interviews that they believe they were misled during the permitting process in 2016 and 2018; and that DERM’s subsequent enforcement action reflects the gravity of the omissions during the permitting process. Additionally, SFWMD, which had not been notified by the whistleblower and did not initiate action against the City, has now determined, upon review of the Kremers plans provided to it by the OIG, that the City needs to apply for a modification of its permit from that agency.

The written responses of Carpenter, Martinez, and Coley did not provide evidence that alters these facts. However, in the interest of fairness and completeness, the report was revised to include additional statements from the respondents and from DERM staff on this subject, as well as a response from the Bureau Chief at the Environmental Resource Bureau/Regulation Division at SFWMD. The language used to describe the actions of Carpenter, Martinez and Coley in the draft report was reviewed for fairness and clarity and, where appropriate, was revised. Former City Engineer Mowry and former CIP Project Coordinator Sanchez submitted responses that affirmed their statements during interviews. Sanchez and CIP Senior Capital Project Coordinator Mina Sanchez reiterated their department's position that it was Design-Builder Lanzo's responsibility under its contract, or that of its consultant Wade Trim, and not that of CIP, to obtain all necessary permits for construction of the project. No acknowledgement of any responsibility on the part of the City to monitor permitting activities was included.

#### **Lanzo, Wade Trim, Craig A. Smith and AECOM**

Wade Trim engineer Holly Kremers and CAS engineer Rubio did not provide written responses; no current or former employee of Lanzo other than Robert Beaty provided a response. Former Wade Trim engineer Garcia provided a detailed and thoughtful response, that included observations that were incorporated into the report. His statement did not dispute the report's description of his actions during the 2018 permitting process. Wade Trim and Lanzo provided responses that contained general denials of wrongdoing or any intention to mislead DERM and the SFWMD during the permitting process. Neither contractor disputed specific facts related to the actions of their personnel during the permitting process.

Wade Trim's response from President/CEO Andrew McCune said, "Relative to Wade Trim, we find the report to contain numerous is representations and faulty conclusions; so many that responding to each would be overly burdensome" and, further, said "The design-build team worked with and at the direction of the City of Miami Beach. We were transparent in our dealings with the City and other stakeholders. Wade Trim never intentionally misled or deceived any party and the implication of such is simply false." Similarly, the response from Lanzo's Beaty stated, "A picture of deception by the City of Miami Beach, Wade Trim and Lanzo is seemingly presented which is not factual and far from the truth."

Additionally, both contractors suggested the OIG staff lacked the technical expertise to evaluate their actions. "The report should clearly indicate that the conclusions are being drawn, not

by a “member of the same profession” as required by the contract, but by a party limited in familiarity with design engineering, construction, and design-build delivery, making it [OIG] unqualified to assess the performance or standard of care.” Lanzo’s response said, “Lanzo does not cast blame upon the OIG for its erroneous presentation, understanding that the engineering and construction aspects of the Palm and Hibiscus Neighborhood Infrastructure Project are quite complex and beyond the normal report and recommendation background of your office.” In bears noting the Inspector General retained a consulting engineer, Louse Aurigemma, PE to provide technical assistance during the investigation. His signed and sealed report, which supports the OIG position, is included in the Appendix.

The Lanzo response to the OIG draft report on January 15, 2021, included an exchange of emails that occurred on July 30, 2020 (i.e., during this investigation, though not previously provided to the OIG by Lanzo or City staff) between a representative of Wade Trim and Dustin Wood, Section Leader with the Environmental Resource Bureau at SFWMD. The Lanzo response to the OIG said, “Please note that South Florida Water Management District (SFWMD) issued Environmental Resource Permit 13-06125-P for the Palm and Hibiscus surface water management system. In response to the discussion concerning the addition of yard drains to the system, the SFWMD representative stated ‘The installation of yard drains within the permitted surface water management system as described below will not require a permit modification.’” The City’s Joint Response also referred to this email and said, “Furthermore, it has recently been confirmed by the South Florida Water Management District that the introduction of the secondary drainage system will not require any additional documentation or a permit modification.”

Notably, the July 30 email to Lanzo came from an Environmental Resource Bureau Section Leader not directly involved in the project, and was based upon incomplete information and without the SFWMD having been provided with a copy of the Kremers plans. In response to this new information, the OIG staff conducted an interview with SFWMD staff, which has now had the benefit of reviewing the OIG draft report. As indicated in the final report, the SFWMD response to a query from an Wade Trim project manager in email dated July 30, 2020, which was referenced in responses from Lanzo and City, does not reflect the agency’s present views. The City will be required to seek a modification of its permit from SFWMD.

A response from AECOM engineer McGowan resulted in the revisions and clarification of technical concepts related to the DCP.



### **XIII. POSTSCRIPT: THE PROBLEM OF MANY HANDS**

*...we should surely still hold the officials morally responsible for failing to take precautions to avoid the harmful consequences of the actions of other people when those actions are predictable responses to the officials' own actions.*

Dennis F. Thompson, Political Ethics and Public Office (Cambridge:Harvard University Press, 1987) p. 58

The mismanagement and misconduct in the Palm/Hibiscus project outlined in this report includes acts of commission and omission, lapses both intentional and unintentional. Harvard political scientist and ethicist Dennis Thompson has tackled the “problem of many hands” in connection with the difficulty of affixing legal or moral responsibility to individuals when wrong decisions in government are made through the actions of layers of personnel, some of whose actions or inactions may affect but not determine the decisions.

There are not enough facts produced in this report to accurately assess the responsibility of all of the players involved in the Palm and Hibiscus Stormwater Drainage project. When there are multiple government departments, as well as consultants and subconsultants to them and to multiple private contractors involved in making complicated, technical decisions on a project gone awry, it becomes too easy for many of them to point elsewhere when the blame is assessed for the missteps taken. When the roles of those players are overlapping and ill-defined, the problem of assessing responsibility deepens.

In the end, some consideration needs to be given to whether the numerous public and private consultants interwoven into the Palm and Hibiscus Stormwater Drainage, without clear lines of authority, have added to or subtracted from the transparency of the decision-making process, as well as to the overall efficiency of the project. One gets the impression that the motivation behind the retention of so many consultants could have more to do with insulating the decision-makers from responsibility, than it does with marshalling the professional expertise with the necessary brainpower to ensure the project's success.

There are other projects of a similar nature to be completed in the City of Miami Beach. It is hoped that the unraveling of the issues raised in the Palm and Hibiscus Project will help the City better evaluate these concerns in the road ahead.

## **Appendices**

**Appendix 1. OIG Consulting Engineers Report**

**Appendix 2. Auditors report on spending during Palm and Hibiscus project**

**Appendix 3. Written responses to draft from named entities and parties**

## **Appendix 1. OIG Consulting Engineers Report**



**FINAL REPORT**

**OIG Report No. 20-07**

***Management of the Palm and Hibiscus Right-of-Way Infrastructure Improvement Project***

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**Joseph M. Centorino**

**Inspector General**

**F. James McGee**

**OIG Special Agent**

## **Appendices**

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## **Appendix 1. OIG Consulting Engineers Report**

**XV. APPENDICES**

**Appendix 1. OIG Consulting Engineer's Technical Report**

**Appendix 2. Financial analysis by OIG Internal Auditor of Palm and Hibiscus project**

**Appendix 3. Written Responses from named entities and individuals**

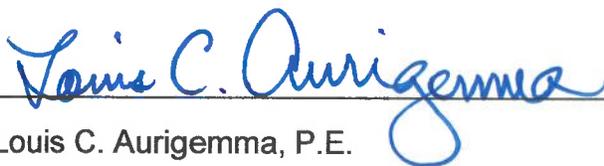
## **Appendix 1. OIG Consulting Engineers Report**

October 2020

Prepared by

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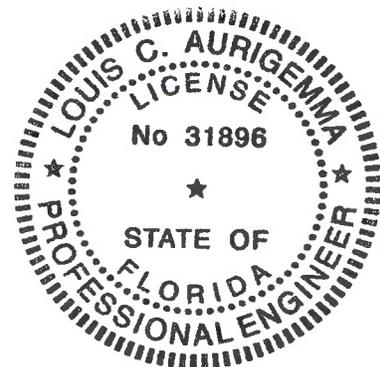
I certify to the best of my knowledge and belief that the information contained in this Engineering Report is true and accurate. The independent opinions presented are based on my experience and engineering judgment during the review of the documents provided to me by the Miami Beach Office of the Inspector General.



Louis C. Aurigemma, P.E.

State of Florida Professional Engineer License 31896

February 5, 2021



October 2020

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<b>E.</b>	<b>General observations</b>	<b>129</b>
1.	Exhibit 1 consists of two separate sheets. The first cover page is that of the CAS/Rubio plans that served as basis of Class II permit issued May 27, 2016. The second cover page is that of the WT/Kremers plans dated May 18, 2016 used by City to construct drainage system.	130
2.	Exhibit 2 consists of two separate sheets. Page SW06 from Rubio plans is a drawing of the stormwater drainage system for South Coconut Lane. Page SW06 from Kremers plans showing the stormwater drainage system with additional lateral pipes that extend to the front of each lot.	131
3.	Exhibit 3 consists of two sheets. The Typical Roadway Sections from Rubio plans for N. & S. Coconut Lanes and Coconut Ct. shows a swale-based drainage system within Rights-of-Way (ROW). The Typical Roadway Sections by WT EOR Wright show plans for connecting private yard drains and drains at edge of ROW; estimates called for 90 12-inch yard drains.	132
4.	Exhibit 4 (4 pages) Request for Information #035 “Private Property Drainage Water Accommodation” dated Oct. 30, 2015 and attachments that included as attachments WT drawings for Coconut Lane Tie-ins to yard drains installed in private lots or in ROW adjacent to property line and subsequent email from former City Engineer Bruce A. Mowry, P.E., also dated Oct. 30, 2015, approving proposed design.	133
5.	Exhibit 5 Excerpt from Kremers plans (page G03) Construction Sequencing Notes stating lateral pipes under road and yard drains “shall be temporary drainage...during construction.”	136

6. Exhibit 6 is cover of City’s Technical Report submitted to DERM with permit application in October 2015 with CAS (Rubio) as the Engineer of Record. .... 136

7. Exhibit 7 is excerpt from report, identified in Exhibit 6, explaining use of minimum crown-of-road elevation of 2.2 feet NAVD for North & South Coconut Lanes and Coconut Court. The design criteria elevation of 3.7 feet NAVD is “not possible” because first finished floor elevations are below “future design groundwater design basis 2.7 feet NAVD). .... 138

8. Exhibits 8 (4 pages) is excerpt from Drainage Report prepared by WT Engineer of Record, Daniel Garcia, P.E., dated May 3, 2018, that show additional installations of secondary drainage pipes on Palm Avenue that connect to private yard drains. (Annotations and markups added for emphasis). .... 139

9. Exhibit 9 is correspondence dated from Wade Trim South Florida Manager to CIP Senior Project Manager explaining that “once 100% submittal has been fully approved by the City of Miami Beach and relevant permits acquired from South Florida Water Management District and Miami-Dade RER” WT would replace CAS as the Engineer of Record (*no record of the transfer is provided per Exhibit 9A - Chapter 61G15-27 of the Florida Administrative Code*). .... 142

10. Exhibit 10 is May 17, 2018 exchange of emails between DERM Engineer Mayra De Torres to CIP Project. De Torres asks that the City submit a statement from EOR certifying that no significant changes had been made to the Rubio plans that had served as the basis of Class II permit issued May 27, 2016. Sanchez transmits correspondence from Engineer of Record, Daniel Garcia. .... 144

11. Exhibit 11 is WT correspondence dated May 17, 2018 that Sanchez emailed as attachment to DERM Engineer Mayra De Torres, wherein WT EOR Daniel Garcia stated that Rubio plans that had served as the basis of the first Class II permit, and Rubio plans and the drainage study calculations based on those plans, “had no had significant changes” during construction. .... 145

12. Exhibit 12 is excerpt from DERM Class II permit dated May 27, 2018 issued to designated City permittee Assistant City Manager Eric Carpenter and Wade Trim EOR Holly Kremers, P. E. stating permit was issued “per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates., dated February 19, 2016 and the letter from Daniel Garcia, P.E., from Wade Trim, Inc., dated May 17, 2018. .... 146

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## IX. Introduction

I was retained by the City of Miami Beach Office of Inspector General (OIG) to provide technical assistance in connection with an investigation of the Neighborhood No. 3 Palm and Hibiscus Islands Infrastructure Improvements (“the Project”) and the City’s application for environmental permits to build stormwater drainage systems that emptied into Biscayne Bay, a designated Official Florida Water subject to enhanced environmental protection. My review included, but was not limited to, the examination of documents, emails reports, engineering drawings, engineering calculations, City/Agency permits and photographs; and interviews of appropriate City staff and City Consultants/Contractors.

The specific purpose of this investigation was to identify the material events, actions and decisions during the planning, design, permitting and construction phases of the project that gave rise to two issues of concern to the Mayor, City Commission, and City Administration: (1) the enforcement actions taken by the Division of Environmental Resources Management (DERM), Miami-Dade County Department of Regulatory and Economic Resources (RER), regarding the City’s alleged unpermitted construction of yard drains on public and private property; (2) the Project’s frequent design changes, schedule delays, escalating costs and unfinished status.

It is important to set forth what this report does not address. This report does not address the merits of the many changes in design criteria and policy that the City of Miami Beach (“the City”) adopted between 2014 and 2018 in response to the effects of climate change and sea level rise. The report focuses on the engineering, project management, and contract administration issues that occurred during the City’s implementation of a major construction project in which the City applied the new criteria.

## X. Professional qualifications

During a 40+ year career as a Civil Engineer, I have been responsible for the design and management of public works/utilities projects for municipalities and the administration and oversight of construction contracts. I have served on more than 100 technical evaluation committees for construction projects ranging from \$100,000 to \$750 million in value. I served as Executive Director of the City of Riviera Beach (FL) Utility Special District and City Engineer/Assistant Public Works Director in the City of Coral Springs (FL). In the private sector, I was Director of Civil Engineering for Keith and Schnars, P.A., Fort Lauderdale (FL) Consulting Engineering firm, primarily working on the design and construction management for water and wastewater projects for the City of Fort Lauderdale. I was also a Regional Manager for the Nielsen-Wurster Group, a construction claims consultant primarily working on Florida Department of Transportation (FDOT) engagements. In my current position as an independent consulting engineer, I have provided technical evaluation assistance to the Millennium Challenge Corporation ([mcc.gov](http://mcc.gov)), an independent United States Government Foreign Aid Agency (US STATE Department); and performed Annual Bondholder Facilities Reports for the South Martin Regional Utility (SMRU)/Town of Jupiter Island, Florida (2016-2020). I am a licensed professional engineer in Florida, Connecticut, Georgia, Alabama, Tennessee and Texas, and a Life Member of the American Society of Civil Engineers (ASCE) and the American Public Works Association (APWA). I earned a Bachelor of Science Degree in Civil Engineering from the University of New Haven (CT).

## XI. Report structure and limitations

The purpose of this report is to provide my professional opinions regarding the documents and testimony obtained by the OIG staff with respect to the planning, design and construction of the Neighborhood No. 13 Palm and Hibiscus Islands Right-of-Way Infrastructure Improvement Projects (“the Project”), and the administration of the City’s contract with Design-Build Firm (DBF), Lanzo Construction Co. Florida, (“Lanzo”). Additionally, the report contains my professional opinions regarding material issues of fact and the explanations and testimony provided by the responsible current and former City officials and staff, as well as those of the DBF-Lanzo and its engineering subconsultants, Wade Trim (WT) and Craig A. Smith & Associates. (CAS).

The opinions expressed in this report are my own. They are based on my knowledge, skills, and training as a licensed professional engineer and 40+ year public and private sector work history specializing in in the design and management of public works projects for municipalities and other governmental entities. The views expressed are based on sworn interviews of witnesses during the course of the OIG investigation and my examination of exhibits. In particular, I have carefully compared the Stormwater Drainage and Hardscape sections of the 100% Final Design Plans dated Feb. 22, 2016, signed and sealed by Engineer of Record Orlando A. Rubio, P.E. of Craig A. Smith & Associates (“the Rubio plans”) with the same sections contained in alternative 100% Final Design Plans dated May 18, 2016, signed and sealed by Wade Trim Engineers of Record Holly Kremers, P.E. (“Kremers plans”) and Carey Wright, P.E. and other pertinent technical documents.

The report is broken down into four distinct sections as follows:

Part 1: The City’s application for permits. This section of the report provides a summary of material events. It examines the City/DBF’s use of the Rubio plans to obtain permits from during 2016 and again in 2018. Also, the City/DBF’s concurrence of the Kremers plans to build an alternative stormwater drainage system designed to accommodate the connection of private yard drains.

Part 2: Background, chronology, significant events: This section contains excerpts of key exhibits that show the changes between the Rubio plans and Kremers plans that resulted in the 2016 installation of underground infrastructure and yard drains not shown on the Rubio plans; the installation of an additional secondary drainage system in 2017; and the City application for a second Class II permit from DERM in May 2018.

Part 3: Evaluation of explanations by the City and Wade Trim: This section contains an evaluation of the statements and explanations about the events and decisions made by current and former City officials and members of the Lanzo design team in sworn interviews or before the City Commission.

Part 4: Primary causes of the project's unfinished status: This section describes the two factors that in my professional opinion, and based on my evaluation of the exhibits and testimony, were the primary causes of the project's troubled history: the twin imperatives to accelerate work on the project and simultaneously incorporate the City's new design criteria to counter sea level rise.

## XII. Executive Summary

In 2016, the City used the Rubio plans to obtain a Class II permit from the Miami-Dade County Division of Environmental Resources Management (DERM) to construct a stormwater drainage system. Almost immediately after applying for the permit based on the Rubio plans, the City instructed DBF-Lanzo's consulting engineer, Wade Trim, (Holly Kremers, P.E.) to prepare alternative plans for a modified drainage system designed to connect to swale drainage and private yard drains.

During the six-month DERM permit review process, the City and DBF-Lanzo/Wade Trim proceeded on this parallel track with the understanding that after DERM issued a permit, the Rubio plans would be replaced by the WT/Kremers plans. After DERM issued the permit on May 27, 2016, the City/DBF did not use the Rubio plans, and the DBF-Lanzo began construction using the WT/Kremers plans. In 2018, the City applied for a second Class II permit for the project and succeeded in gaining approval without disclosing the WT/Kremers plans.

On May 27, 2018, DERM issued the second permit based on the Rubio plans and a certification from a Wade Trim Professional Engineer, Daniel Garcia, stating that "no significant changes" had been made to the previously submitted/approved Rubio 2016 stormwater drainage plans. In September 2018 a whistleblower alerted DERM to efforts to connect a private yard drain on Palm Island to the municipal stormwater drainage system. Pursuant to a DERM field inspection, it was discovered that unpermitted yard drains had been installed on public and private property in Palm Island West, resulting in the present enforcement action.

Pursuant to the DERM Class II Permit General Conditions, Section 31 states:

*"If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit."*

The evidence shows that the City/DBF never disclosed the Kremers plans to DERM or notified the agency of its new drainage design. During this investigation, DERM engineers Maria Molina and Mayra deTorres testified that they believed they were deliberately misled by the City and its representatives. In my professional opinion, the evidence gathered during this investigation supports the testimony of the DERM engineers: they were misled and misled more than once.

In my opinion, the statement in the Garcia letter to DERM that “no significant changes” had been made to the Rubio plans was false and omitted facts that Mr. Garcia knew were material to the request from De Torres and material to DERM’s review of the City’s second permit application. The involvement of CIP staff in submitting the Garcia letter to DERM is consistent with other evidence that indicates the City and DBF-Lanzo/Wade Trim acted in concert on permitting matters.

By contract, it is the responsibility of the DBF-Lanzo to obtain all permits for the Project. Any modifications to the permit(s) required the DBF to adhere to the permit conditions from the permitting agencies for resubmittal of updated plans, specifications, calculations, etc. **Therefore, in my professional opinion, the DBF-Lanzo has constructed the stormwater drainage system in the Palm/Hibiscus Infrastructure Improvements Project without a valid SFWMD permit and DERM Class II Permits as the DBF-Lanzo did not comply with the respective conditions of the said permits.**

### **XIII. Part 1: The City’s application for permits Background, chronology, significant events**

On Oct. 6, 2015, Assistant City Manager, Eric Carpenter, signed a DERM application for a Class II permit based on the Rubio plans and a technical report sent to DERM that described the City’s use of design criteria to counter the effects of sea level rise, including a minimum crown-of-road elevation of 3.7 feet NAVD. The report explained the City’s decision to waive the new criteria for roads in Palm Island West where it was “not possible” to raise the roads to 3.7 feet NAVD “due to the existing topography (garages and existing yard grades) encountered below the future design groundwater elevation of 2.7’ NAVD” and said, “As such, North and South Coconut Lane road crown elevations will be no lower than 2.2’ NAVD.”

On Oct. 12<sup>th</sup>, the City notified the DBF-Lanzo/Wade Trim that it had decided to raise the minimum crown-of-road elevation for Palm Island West to 3.7 feet NAVD. This was a significant change that would require a complete revision of the Stormwater Drainage and Hardscape sections of the plans. City Engineer Bruce A. Mowry, PE, and other City staff recognized that the new elevation would result in the impoundment of stormwater on private lots lower than 3.7 NAVD. For that reason, the City authorized DBF-Lanzo/Wade Trim to begin designing an alternative drainage system that would accommodate connection with swale and yard drains.

#### **XXXVI. The City use of the Rubio plans to apply for a Class II permit in 2016**

Despite the change in criteria and development of alternative construction plans, the City continued with the permit application process based on Rubio’s plans. DERM received the City permit application Nov. 4, 2015 based on the Rubio plans and drainage calculations. The same day, the City approved Wade Trim’s conceptual designs for an alternative stormwater drainage that would accommodate connections to 12-inch yard drains installed on private property or in Rights-of-Way adjacent to the property line in front of each lot on Palm Island West. Between December 9, 2015 and May 9, 2016, the City approved successive iterations of the Kremers plans.

During the same period, the City conducted 100% milestone review of Rubio’s plans. In a letter dated March 2, 2016 to CIP Senior Project Manager, Mark Tomcyk, PE; a Wade Trim Manager, Victor H. Herrera, PE, confirmed a plan to replace Rubio as Engineer of Record after permits were issued based on the Rubio plans and stated “As discussed, Wade Trim will be appropriating design documents from Craig A. Smith & Associates (CAS) for the Neighborhood 13 Palm and Hibiscus Islands Right-of-Way Infrastructure Improvements project once 100% submittal has been fully approved by the City of Miami Beach and relevant permits acquired from South Florida Water Management District and Miami-Dade RER.” **(Exhibit 9)**

Chapter 61G15-27.001 of the Florida Administrative Code (FAC) identifies the “Procedures for a Successor Professional Engineer Adopting As Their Own the Work of Another Engineer”. **(Exhibit 9A)** It seems that the intent of Mr. Herrera was that Wade Trim would obtain the CAS drawings per the Rules of the Florida Board of Professional Engineers, modify the drawings and calculations and submit the modified plans to the permitting agencies as a modification to the permits issued.

The City issued a Second Notice to Proceed (NTP #2), with an effective date of January 28, 2016, to the DBF for Phase 2 Services – Construction Work. The SFWMD issued 5-year Environmental Resource Permit No. 13-06125-P on May 5, 2016 and DERM issued a 2-year Class II permit 20150058 on May 27, 2016. Unfortunately, the modifications to the original stormwater plans and calculations were never submitted to the permitting agencies.

The DERM Class II General Conditions, Section 31, states as follows:

*“If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit.”*

Focusing on the DERM Class II permit, it is my opinion that any major modifications to the permit would probably have had an immediate stop work order, thereby causing unknown construction delays and unknown additional costs.

#### **XXXVII. City approves alternative plans for drainage system that accommodates yard drains**

On May 18, 2016, Kremers and Wright completed work on the alternative plans. Consistent with Wade Trim’s plan and understanding with the City, however, Kremers and Wright did not immediately sign and seal the alternative plans. On May 27, 2016 DERM issued a Class II permit based on the Rubio plans. On June 10, 2016, Kremers signed and sealed the alternative stormwater drainage plans; Wright signed and sealed the alternative plans for the hardscape section. On June 10, 2016, Kremers signed and sealed the project’s alternative 100% Final Design plans.

On July 7, the City’s Public Works Department approved the Kremers plans. Thereafter DFB-Lanzo built the stormwater drainage system based on Kremers plans during 2016. During 2017, the City directed DBF-Lanzo/Wade Trim to design and construct a secondary drainage system that provided for additional 12-inch yard drains. The drawings for the new system extended over three pages of the stormwater drainage plans.

I analyzed the Lanzo **Primavera schedule** update of March 31, 2020 for completed Drainage and Roadway Construction activities during the DERM Class II permit No. 2015-0058 timeframe (Issue Date: May 27, 2016; Expiration Date: May 27, 2018). The focus in the table below is Palm Island: North/South Coconut Lanes and western Palm Avenue. My review of the entire schedule update indicates that all drainage construction on Palm/Hibiscus Islands was completed by January 31, 2018.

Palm Island

Zone 3 – North Coconut Lane

Zone 4 – South Coconut Lane

Zone 6 – west cul-de-sac

<u>Activities</u>	<u>Finish Date</u>
Z3PDR0030 Install Temporary Drainage	May 27, 2016
Z3PDR0060 Palm Avenue Drainage Installation	July 18, 2016
Z4PDR0060 Palm Avenue Drainage Installation	Nov. 8, 2016
Z4PDR0030 Install Temporary Drainage	Mar. 15, 2017
Z3PSR0060 Reconstruct Road Base	Nov. 30, 2017
Z3PSR0070 Paving 1 <sup>st</sup> Lift	Dec. 1, 2017
Z3PDR0070 North Coconut Lane Drainage	Jan. 12, 2018
Z3PSR0040 Sidewalks and Driveway	Nov. 24, 2017
Z4PDR0070 Palm Avenue 18+00 West Drainage Installation	Dec. 15, 2017
Z4PDR0080 South Coconut Lane Drainage Installation	Jan. 31, 2018

#### **XXXVIII. The City’s application for a Class II permit in 2018**

During 2017, the City directed DBF-Lanzo to make significant changes and additions to the Kremers plans for the alternative drainage system. At the City’s direction, DBF-Lanzo/Wade Trim designed and constructed a secondary drainage system on Palm Island West that was connected to additional swale and yard drains. The drawings for this additional infrastructure extended across three pages of the stormwater plans.

Class II permits are issued for two years. In May 2018, the City submitted a second application for a permit due to an expiring first permit. This permit application was signed by Carpenter (again), representing the City as Applicant and Wade Trim Engineer of Record, Daniel Garcia, P.E., the successor to Kremers. The DERM application required the City to submit construction plans and drainage calculations based on those plans. However, CIP project manager/CIP Project Coordinator Olga Sanchez did not include the plans or drainage calculations. In lieu of the Kremers plans, the City staff submitted correspondence signed by Daniel Garcia, P.E. A DERM supervising engineer, Mayra De Torres, sent Sanchez an email asking that the project’s Engineer of Record certify that no significant changes had been made to the Rubio plans.

**XXXIX. City tells DERM no significant changes were made to Rubio plans and obtains permit**

On May 17, 2018, Garcia, as a Professional Engineer, signed a letter to DERM that said in part, “The purpose of this letter is to state that the original signed and sealed plans dated February 22, 2016 for Hibiscus Island and February 26, 2016 for Palm Island and drainage calculations dated October 2015 approved under CLII-20150058 have not had significant changes.” **(Exhibit 11)**

DERM accepted Garcia’s representations. On May 27, 2018, DERM Senior Professional Engineer Maria Molina approved a second Class II permit (200180038) in official correspondence addressed to Carpenter that said the permit had been approved “per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates, dated February 19, 2016 and the letter from Daniel Garcia, P.E., from Wade Trim, Inc., dated May 17, 2018”.

As noted above, the DERM Class II Permit General Conditions, Section 31, is applicable:

*“If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit.”*

The evidence shows that the City/DBF never disclosed the Kremers plans to DERM or notified the agency of its new drainage design. During this investigation, DERM engineers Molina and De Torres testified that they believe they were deliberately misled by the City and its representatives. In my professional opinion, the evidence gathered during this investigation supports the testimony of the DERM engineers: they were misled and misled more than once.

In my opinion, the statement in the Garcia letter to DERM that “no significant changes” had been made to the Rubio plans was false and omitted facts that Mr. Garcia knew were material to the request from deTorres and material to DERM’s review of the City’s second permit application. The involvement of CIP staff in submitting the Garcia letter to DERM is consistent with other evidence that indicates the City and DBF-Lanzo/Wade Trim acted in concert on permitting matters.

By contract, it is the responsibility of the DBF-Lanzo to obtain all permits. Any modifications to the permit(s) required the DBF to adhere to the permit conditions from the permitting agencies for resubmittal of updated plans, specifications, calculations, etc.

**Therefore, in my professional opinion, the DBF-Lanzo has constructed the stormwater drainage system in the Palm/Hibiscus Infrastructure Improvements Project without a valid SFWMD permit and DERM Class II Permits as the DBF-Lanzo did not comply with the respective conditions of the said permits.**

#### XIV. Part 2: Exhibits and observations

This section contains excerpts from exhibits with observations. For purposes of comparison, it begins sequential excerpts of pages from Feb. 26, 2016 100% Design Submittal (Rubio plans) submitted to DERM and the May 16, 2016 WT/Kremer's plans and related items. Subsequent exhibits related to the installation of a secondary drainage system in Palm Island West in 2017, plans for WT engineer Kremers replaced CAS Rubio after DERM granted a Class II permit based on Rubio's plans; and representations to DERM in 2018 by the City and WT engineer Daniel Garcia that no significant changes had been made to the original Rubio plans.

I analyzed the following sets of Palm Island plans:

**The Rubio (CAS) Plans:** Neighborhood 13 Palm Island Right-of-Way Infrastructure Improvements February 26, 2016 SM-1205-A 100% Design Submittal (pages 1-72) and Set #2 Neighborhood 13 Hibiscus Island (pages 73-155) signed and sealed by Engineer of Record (EOR) Orlando A. Rubio, P.E. Craig A. Smith & Associates; submitted to DERM with City of Miami Beach application for Class II permit issued May 27, 2016.

**The Kremers (WT) Plans:** Set #1 May 18, 2016 SM-2015A Neighborhood 13 Palm island Right-of-Way Infrastructure Improvements; Signed and sealed by Holly Kremers P.E (Wade Trim Engineers) June 20, 2016; Hardscape page HS01-HS09 Signed & Sealed by Carey Wright. Stamped and Signed Public Works Department July 7, 2016 "for Stormwater only". Set #2 May 18, 2016 SM-2015-A Neighborhood 13 Hibiscus Island Right-of-Way Infrastructure Improvements. Signed and sealed by Holly Kremers June 16, 2016; Pages HS01-HS15) Signed and sealed by Carey Wright P.E. (Wade Trim Engineers) Stamped and signed by Public Works Department July 7, 2016 "for Stormwater only".

**The Mullen (WT) As-Built Plans:** Storm Drainage As Built plans signed and David Mullen, P. E. (Wade Trim Engineers) Dec. 13, 2019. Set #1 Neighborhood 13 Palm Island Stormwater Drainage As-Built Palm Island plans dated April 29, 2016 for Palm Island (pages 1-25) Set #2 Neighborhood 13 Hibiscus Island Stormwater Drainage As-Built (Undated) plans signed and sealed Nov. 27, 2019 by David Mullen, P.E. (December 13, 2019) submitted to DERM.

## XL. General observations

Comparisons of Palm Island plans were made between the February 2016 CAS drawings and the May 2016 WT drawings as identified in Exhibits 1 and 2 on the following pages. The storm drainage plans showed significant changes, mainly in the area of North and South Coconut Lanes on Palm Island. The WT storm drainage plans were advanced to show temporary/yard drains (and private drains by others) in the plans and typical cross sections. Rim/grate elevations also changed due to raising of the road elevations. The road elevations at North and South Coconut Lanes were raised approximately 12" on the WT plans, which created significant property harmonization problems.

Comparisons of WT Palm Island plans were made between the May 2016 WT drawings and the December 2019 WT storm water As-Built drawings. The said December 2019 WT storm As-Built plans incorporated the design changes recommended in the May 3, 2018 Drainage Report for Palm Island prepared by WT engineer, Daniel Garcia, P.E., but never permitted through Miami-Dade DERM.

The As-Built storm drainage plans had one major deviation: *the addition of secondary 24" drainage pipes on the south side of Palm Avenue west, draining towards the stormwater pump station and new 30" drainage pipes connecting the west cul-de-sac drainage eastward towards the stormwater pump station.* There were other minor modifications in the storm water drainage piping. Review of the roadway manhole rim elevations indicated the roadway was built in substantial conformance with the WT May 2016 plans.

Comparisons of Hibiscus Island plans were also analyzed between the February 2016 CAS drawings and the May 2016 WT drawings. The storm drainage plans were essentially the same, with minor changes in storm water drainage piping. The pipe diameters remained the same. The road elevations and roadway cross sections were essentially the same with only minor variances.

1. Exhibit 1 consists of two separate sheets. The first cover page is that of the CAS/Rubio plans that served as basis of Class II permit issued May 27, 2016. The second cover page is that of the WT/Kremers plans dated May 18, 2016 used by City to construct drainage system.

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MIAMI BEACH

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3	0-3	ADJUSTMENTS AND DRAINAGE LAYOUT
4	0-4	KEY SHEET
5-15	001 - 005	MAP OF IMPROVEMENTS SURVEY
16	006	DEMARCATION KEY SHEET
17-18	007 - 008	ADJUSTMENT PLANS
19	009	ADJUSTMENT PLAN
20-21	010 - 011	FINAL PLACEMENT DETAILS
22-23	012 - 013	FINAL PLACEMENT DETAILS
24	014	WATER MAIN PLAN AND PROFILE KEY SHEET
25-26	015 - 016	WATER MAIN PLAN AND PROFILE
27-28	017 - 018	WATER MAIN PLAN AND PROFILE
29-30	019 - 020	STORM WATER PLAN AND PROFILE
31-32	021 - 022	STORM WATER PLAN AND PROFILE
33	023	STORM WATER PUMP STATION
34-35	024 - 025	PUMP STATION STRUCTURES GENERAL NOTES
36	026	PUMP STATION STRUCTURES SPECIFIC STRUCTURAL PLAN AND SECTION
37	027	PUMP STATION STRUCTURES SPECIFIC STRUCTURAL PLAN AND SECTION
38	028	ELECTRICAL NOTES, SYMBOLS AND CONVENTIONS
39	029	POWER PLUMBING ELECTRICAL KEY SHEET
40-41	030 - 031	POWER PLUMBING ELECTRICAL KEY SHEET
42	032	POWER PLUMBING ELECTRICAL KEY SHEET
43	033	POWER PLUMBING ELECTRICAL KEY SHEET
44	034	POWER PLUMBING ELECTRICAL KEY SHEET
45	035	POWER PLUMBING ELECTRICAL KEY SHEET
46	036	POWER PLUMBING ELECTRICAL KEY SHEET
47	037	POWER PLUMBING ELECTRICAL KEY SHEET
48	038	POWER PLUMBING ELECTRICAL KEY SHEET
49	039	POWER PLUMBING ELECTRICAL KEY SHEET
50	040	POWER PLUMBING ELECTRICAL KEY SHEET
51	041	POWER PLUMBING ELECTRICAL KEY SHEET
52	042	POWER PLUMBING ELECTRICAL KEY SHEET
53	043	POWER PLUMBING ELECTRICAL KEY SHEET
54	044	POWER PLUMBING ELECTRICAL KEY SHEET
55	045	POWER PLUMBING ELECTRICAL KEY SHEET
56	046	POWER PLUMBING ELECTRICAL KEY SHEET
57	047	POWER PLUMBING ELECTRICAL KEY SHEET
58	048	POWER PLUMBING ELECTRICAL KEY SHEET
59	049	POWER PLUMBING ELECTRICAL KEY SHEET
60	050	POWER PLUMBING ELECTRICAL KEY SHEET
61	051	POWER PLUMBING ELECTRICAL KEY SHEET
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86	076	POWER PLUMBING ELECTRICAL KEY SHEET
87	077	POWER PLUMBING ELECTRICAL KEY SHEET
88	078	POWER PLUMBING ELECTRICAL KEY SHEET
89	079	POWER PLUMBING ELECTRICAL KEY SHEET
90	080	POWER PLUMBING ELECTRICAL KEY SHEET
91	081	POWER PLUMBING ELECTRICAL KEY SHEET
92	082	POWER PLUMBING ELECTRICAL KEY SHEET
93	083	POWER PLUMBING ELECTRICAL KEY SHEET
94	084	POWER PLUMBING ELECTRICAL KEY SHEET
95	085	POWER PLUMBING ELECTRICAL KEY SHEET
96	086	POWER PLUMBING ELECTRICAL KEY SHEET
97	087	POWER PLUMBING ELECTRICAL KEY SHEET
98	088	POWER PLUMBING ELECTRICAL KEY SHEET
99	089	POWER PLUMBING ELECTRICAL KEY SHEET
100	090	POWER PLUMBING ELECTRICAL KEY SHEET

*50' outside*  
*37.5' inside*

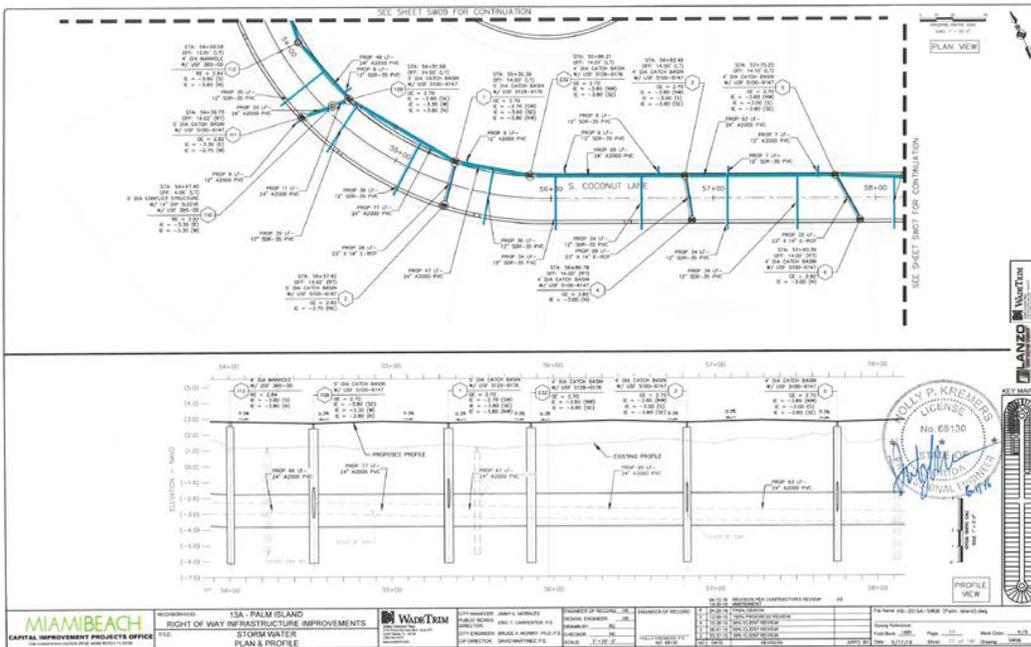
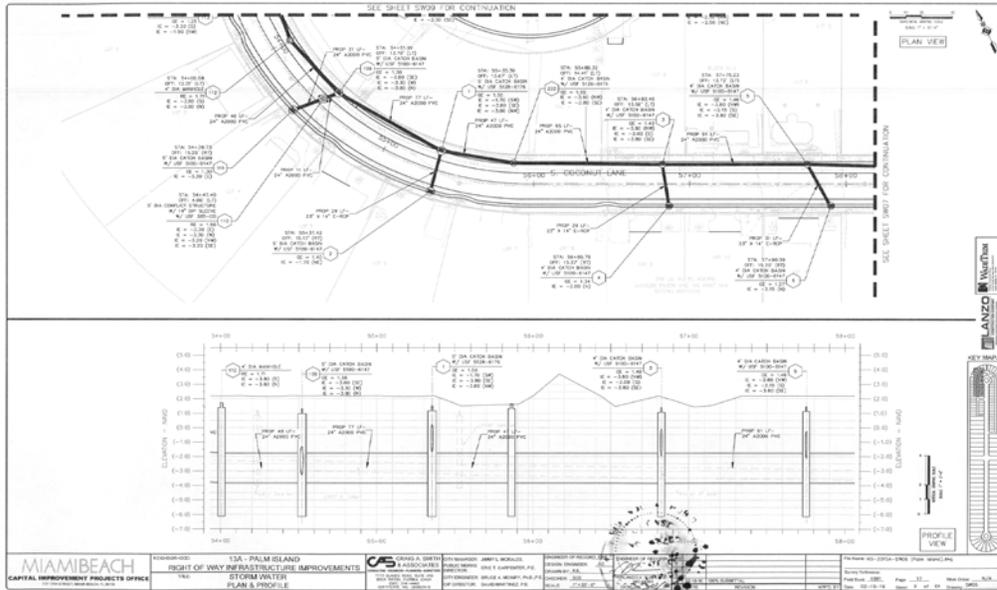
*Do paving*

City of Miami Beach  
Public Works Department  
Approved: *[Signature]* Not Approved: \_\_\_\_\_  
By: *[Signature]* Date: *5/18/16*  
Comments: *enter for stormwater only*

**MOLLY P. KREMERS**  
No. 68130  
Professional Engineer  
State of Florida

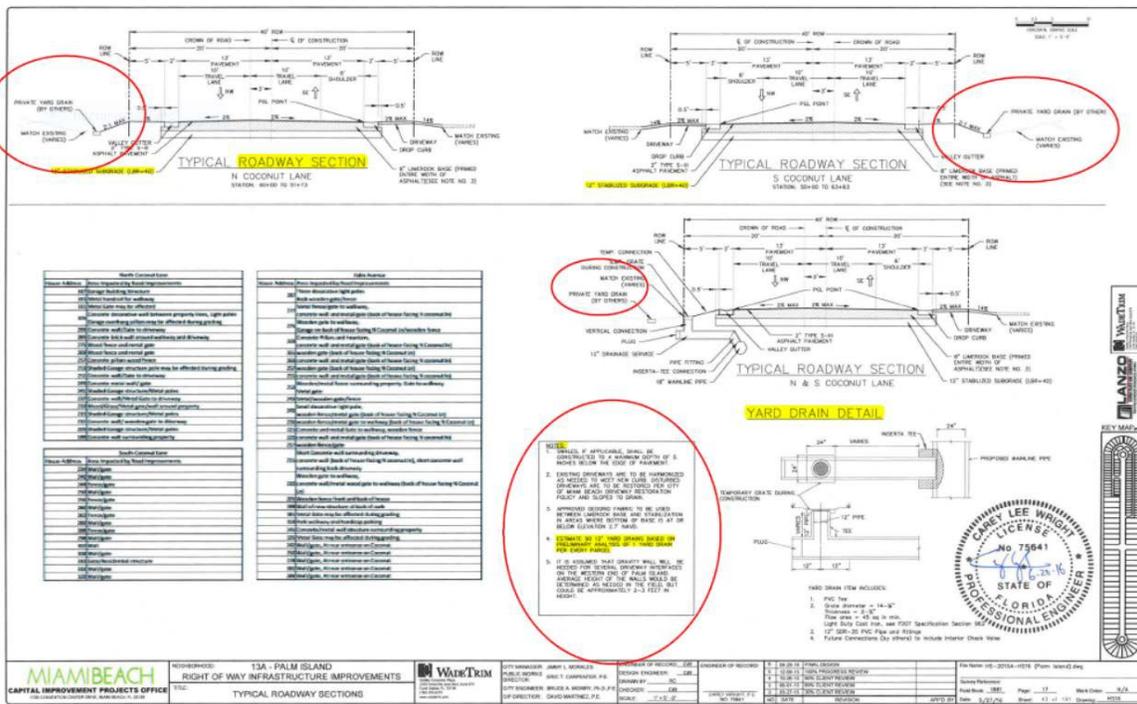
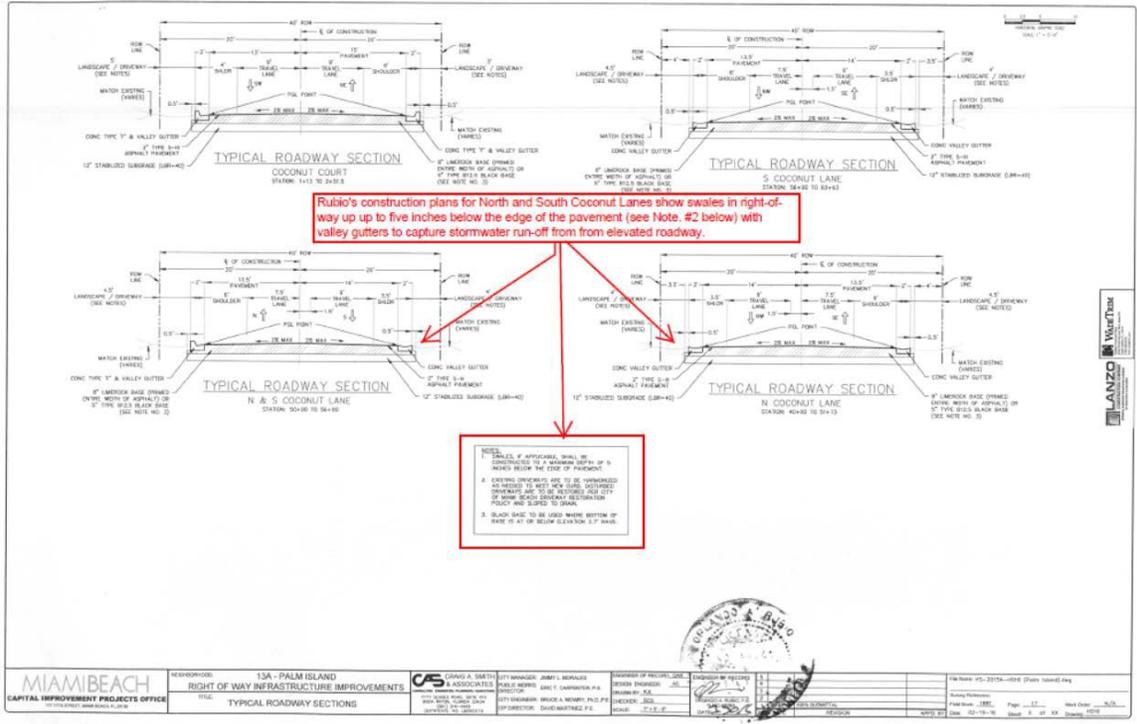
2. Exhibit 2 consists of two separate sheets. Page SW06 from Rubio plans is a drawing of the stormwater drainage system for South Coconut Lane. Page SW06 from Kremers plans showing the stormwater drainage system with additional lateral pipes that extend to the front of each lot.

Exhibit 2



3. Exhibit 3 consists of two sheets. The Typical Roadway Sections from Rubio plans for N. & S. Coconut Lanes and Coconut Ct. shows a swale-based drainage system within Rights-of-Way (ROW). The Typical Roadway Sections by WT EOR Wright show plans for connecting private yard drains and drains at edge of ROW; estimates called for 90 12-inch yard drains.

Exhibit 3



4. **Exhibit 4 (4 pages) Request for Information #035 “Private Property Drainage Water Accommodation” dated Oct. 30, 2015 and attachments that included as attachments WT drawings for Coconut Lane Tie-ins to yard drains installed in private lots or in ROW adjacent to property line and subsequent email from former City Engineer Bruce A. Mowry, P.E., also dated Oct. 30, 2015, approving proposed design.**

Exhibit 4

**REQUEST FOR INFORMATION**

PROJECT NAME: Neighborhood #13, Palm & Hibiscus Islands PROJECT No. F-430  
RFI No. 035 Request for Information Date: October 30, 2015  
TO: Jeff Crews, PE - Stantec, Olga Sanchez – Miami Beach CIP  
FROM: Bob Beaty, PE, Lanzo

REFERENCES:

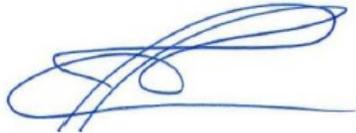
PLAN No. Sections SPEC SECTION: \_\_\_\_\_ SHOP DRAWING: \_\_\_\_\_

INFORMATION REQUESTED: Private Property Drainage Water Accommodation

The attached section for elevating roadways provides drainage accommodation for Private Surface Water Runoff. I understand from discussions that this drainage system should be “Capped” at the Right-of-Way for future connection by the Private Property Owner. This future connection will include a check valve on the private property side to ensure City drainage water does not “Back-up” onto private property.

Future Connection will be installed “By Others”.

Please confirm this expectation.



REPLY: \_\_\_\_\_ TITLE: Project Manager



**McGee, James**

**From:** Mowry, Bruce  
**Sent:** Friday, October 30, 2015 3:39 PM  
**To:** 'Crews, Jeff'  
**Cc:** Tomczyk, Mark; Sanchez, Olga; Egemba, Eugene; Buell, Roger  
**Subject:** RE: ACTION REQ'D - ROW Palm & Hibiscus Island Enhancement - Private Property Drainage Water Accommodation

Jeff,  
 The City agrees with the connection to be made as described in the RFI.  
 Thanks,  
 Bruce

**MIAMIBEACH**

**Bruce A. Mowry, Ph.D., P.E.**  
**City Engineer**  
 1700 Convention Center Drive, Miami Beach, FL 33139  
 Tel: 305-873-7080 ext. 6565 / Cell: 786-759-8941  
[BruceMowry@MiamiBeachFL.gov](mailto:BruceMowry@MiamiBeachFL.gov)

*We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic community*

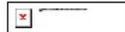
**From:** Crews, Jeff [mailto:jeff.crews@stantec.com]  
**Sent:** Friday, October 30, 2015 2:48 PM  
**To:** Mowry, Bruce  
**Cc:** Tomczyk, Mark; Sanchez, Olga  
**Subject:** FW: ACTION REQ'D - ROW Palm & Hibiscus Island Enhancement - Private Property Drainage Water Accommodation

Bruce can you please provide a response to the RFI below so that we can appropriately communicate the directive to the design-build team

Thank you

**Jeffrey Crews, PE**

Senior Associate  
 Stantec  
 21301 Powerline Road Suite 311 Boca Raton FL 33433-2305  
 Phone: 561-487-3379 ext 235  
 Cell: 954-804-2713  
 Fax: 561-487-3466  
[jeff.crews@stantec.com](mailto:jeff.crews@stantec.com)



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 Please consider the environment before printing this email.

**From:** Bob Beatty via e-Builder [mailto:bounces@e-builder.net]  
**Sent:** Friday, October 30, 2015 2:01 PM  
**To:** Crews, Jeff  
**Subject:** ACTION REQ'D - ROW Palm & Hibiscus Island Enhancement - Private Property Drainage Water Accommodation

**5. Exhibit 5 Excerpt from Kremers plans (page G03) Construction Sequencing Notes stating lateral pipes under road and yard drains “shall be temporary drainage...during construction.”**

**Exhibit 5**

- NURSERY.
5. UPON REMOVAL OF TREES TO BE RELOCATED WITHIN A GIVEN SECTION OF A WORK AREA (BEGINNING WITH AREA 1), CONTRACTOR SHALL BEGIN CONSTRUCTION OF PHASE "B" AS SHOWN ON CONSTRUCTION PHASING AND MOT SCHEMATICS, INCLUDING CONSTRUCTION OF DRAINAGE STRUCTURES AND PIPES, ETC.
- A. PORTIONS OF STORM WATER DRAINAGE PIPES CROSSING UNDER THE ROADWAYS SHALL BE TEMPORARY. DRAINAGE SHALL BE PROVIDED THROUGHOUT THE PROJECT TO ENSURE MINIMUM SERVICE TO PREVENT FLOODING DURING CONSTRUCTION. DURING PHASE "B" CONSTRUCTION, CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTION(S) FROM THE NEW DRAINAGE STRUCTURES / PIPE TO EXISTING STORM WATER DRAINAGE SYSTEM AND / OR PROVIDE GAPS IN NEW CURB AND GUTTER AT EXISTING LOW POINTS, AS DIRECTED BY THE ENGINEER. IN THE FIELD, TEMPORARY PAVEMENT SHALL BE USED BEFORE MOVING TO THE NEXT ZONE AND TRENCHES WILL NOT REMAIN UNCOVERED FOR MORE THAN 14 DAYS. PROPER DUST CONTROL AND STORM WATER POLLUTION PREVENTION BMP'S SHALL BE USED.
- B. DURING INSTALLATION OF PORTIONS OF DRAINAGE PIPE CROSSING UNDER THE ROADS, IT MAY BE NECESSARY TO REDUCE TRAFFIC TO ONE LANE; IN SUCH CASES THE CONTRACTOR SHALL PROPERLY MAINTAIN TRAFFIC REGULATED BY FLAG MEN AND ADEQUATE SIGNAGE.
- C. ALL EXISTING AND NEW INLETS SHALL BE COVERED WITH FILTER CLOTH THAT WILL BE MAINTAINED AND CLEANED ON A DAILY BASIS. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AS NEEDED TO MAINTAIN THE CURRENT FLOOD PROTECTION AT MINIMUM THROUGHOUT CONSTRUCTION.
- D. ONCE THE STORM WATER DRAINAGE PORTION OF PHASE "B" IS COMPLETED WITHIN A GIVEN SECTION OF AN AREA, DRAINAGE CONSTRUCTION CREWS SHALL WORK ON DRAINAGE CONSTRUCTION SEQUENTIALLY (WORK AREA 1, 2, 3, 4), UNTIL ALL PHASES ARE CONSTRUCTED AND THE COMMENCEMENT OF PHASE "C".
6. THE CONTRACTOR SHALL BEGIN CONSTRUCTION OF PHASE "C" WITHIN THE SAME ZONE AS SHOWN CONSTRUCTION PHASING AND MOT SCHEMATICS, INCLUDING CONSTRUCTION OF CURB AND GUTTER, DRIVEWAY CURBS, SIDEWALK, UTILITY DUCT BANK (FPL, AT&T ATLANTIC

**6. Exhibit 6 is cover of City’s Technical Report submitted to DERM with permit application in October 2015 with CAS (Rubio) as the Engineer of Record.**

**CITY OF MIAMI BEACH**

SFWMD/ACOE/FDEP JOINT  
ENVIRONMENTAL RESOURCE PERMIT  
APPLICATION  
&  
MIAMI-DADE COUNTY DRER CLASS II PERMIT  
APPLICATION  
FOR

Neighborhood No. 13A: Palm and Hibiscus Islands  
Right-of-Way Infrastructure Improvement Project

**October 2015**

CAS Project Nos. 14-1786

Prepared By:

**CAS**

Corporate Office:  
7777 Glades Road, Suite 410  
Boca Raton, FL 33434  
561.314.4445  
Fax 561.314.4457

Orlando A. Rubio, PE  
FL Reg. #48265

Date  
11/2/15



7. **Exhibit 7 is excerpt from report, identified in Exhibit 6, explaining use of minimum crown-of-road elevation of 2.2 feet NAVD for North & South Coconut Lanes and Coconut Court. The design criteria elevation of 3.7 feet NAVD is “not possible” because first finished floor elevations are below “future design groundwater design basis 2.7 feet NAVD).**

Exhibit 7

- g. Roadways: CMB criteria requires that minimum road crowns are set at or above elevation 3.7' NAVD. For the Palm Island West System and primarily on North and South Coconut Lane, this was not possible due to the existing topography (garages and existing yard grades) encountered below the future design groundwater elevation of 2.7' NAVD (see Figures 2 and 3). The criteria posed significant driveway harmonization and resident accessibility issues which cannot be addressed at this time unless each affected lot undergoes full blown redevelopment. As such, North and South Coconut Lane road crown elevations will be no lower than 2.2' NAVD as allowed by CMB with edge of pavement grades matching existing elevations. As redevelopment occurs on the islands, either by choice or by the effects of climate change conditions, the CMB will require the redevelopment or new construction to comply with the intended criteria. This will allow the CMB to elevate the road and drainage rims/grates at a later date.

8. Exhibits 8 (4 pages) is excerpt from Drainage Report prepared by WT Engineer of Record, Daniel Garcia, P.E., dated May 3, 2018, that show additional installations of secondary drainage pipes on Palm Avenue that connect to private yard drains. (Annotations and markups added for emphasis).

Exhibit 8

**DRAINAGE REPORT**  
**Palm Island**

Wade Trim Job Number:  
 LNZZ2003.01S

Prepared For:  
 CITY OF MIAMI BEACH



Submittal Date:  
 May 3, 2018

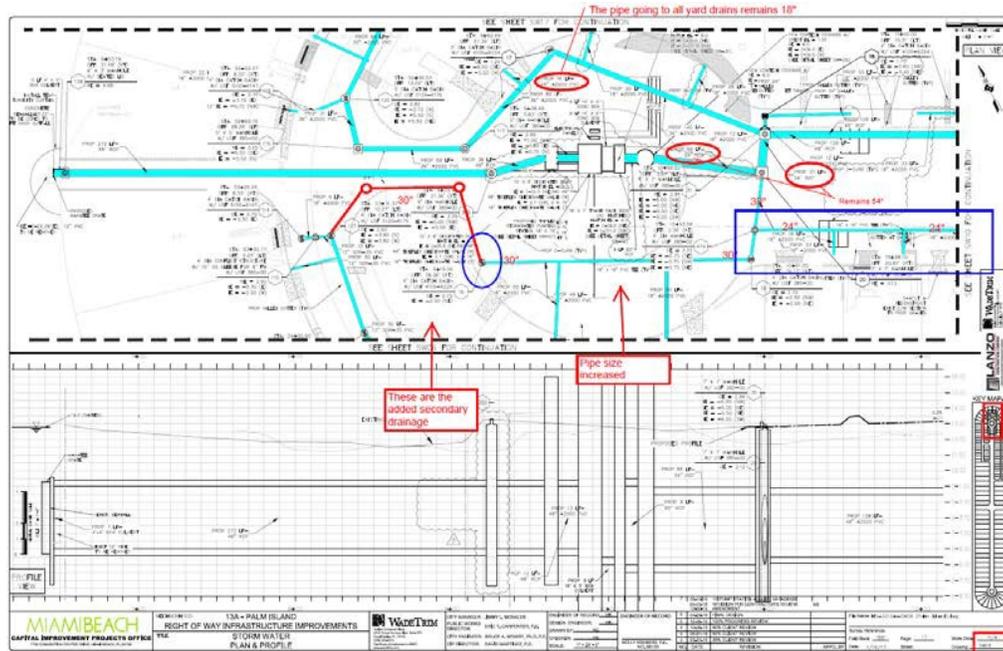
Prepared by:



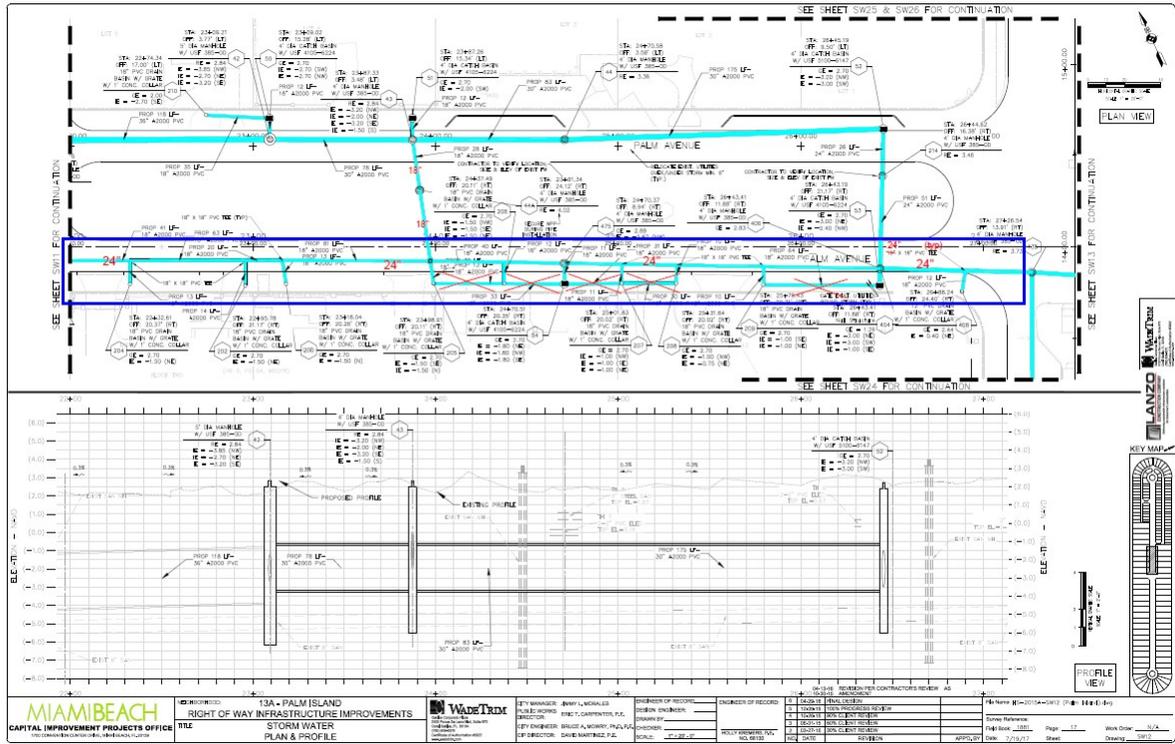
2100 Ponce de Leon Blvd, Suite 970  
 Coral Gables, FL 33134  
 Phone: (786) 361-1645

Engineer of Record:

Daniel I. Garcia  
 P.E. No. 62299



# TECHNICAL REPORT



<b>MIAMI BEACH</b> CAPITAL IMPROVEMENTS PROJECTS OFFICE <small>1300 BAYVIEW DRIVE, SUITE 100, MIAMI BEACH, FL 33134</small>	<b>13A - PALM ISLAND</b> RIGHT OF WAY INFRASTRUCTURE IMPROVEMENTS STORM WATER PLAN & PROFILE	<b>WADE TRIM</b> <small>1300 BAYVIEW DRIVE, SUITE 100, MIAMI BEACH, FL 33134</small> (305) 551-1111 www.wadetrimsolutions.com	PROJECT MANAGER: BRUCE A. MORSE, P.E. PROJECT ENGINEER: BRUCE A. MORSE, P.E. PROJECT SUPERVISOR: DAVID MARTINEZ, P.E.	ENGINEER OF RECORD: BRUCE A. MORSE, P.E. CHECKED BY: BRUCE A. MORSE, P.E. DATE: 07/23/17	REVIEWED BY CONTRACTORS REVIEW: AS REVIEWED BY: [ ] REVIEWED BY: [ ] REVIEWED BY: [ ] REVIEWED BY: [ ] REVIEWED BY: [ ]	FILE NUMBER: 16-00154-0002 (P) 14 of 8 (S) SHEET REFERENCE: 16810-00-0000 DATE: 7/23/17 PAGE: 12 WORK ORDER: 13A DENSITY: 3610
			PROJECT NUMBER: 16810-00-0000 SHEET DATE: 07/23/17			



9. Exhibit 9 is correspondence dated from Wade Trim South Florida Manager to CIP Senior Project Manager explaining that “once 100% submittal has been fully approved by the City of Miami Beach and relevant permits acquired from South Florida Water Management District and Miami-Dade RER” WT would replace CAS as the Engineer of Record (*no record of the transfer is provided per Exhibit 9A - Chapter 61G15-27 of the Florida Administrative Code*).



March 2, 2016

Mark Tomczyk  
Senior Capital Improvement Projects Coordinator  
Office of Capital Improvements  
City of Miami Beach  
777 17<sup>th</sup> Street, Miami Beach, FL 33139

Re: City of Miami Beach, Florida  
Neighborhood 13 Palm and Hibiscus Islands Right-of-  
Way Infrastructure Improvements

Dear Mr. Tomczyk:

As discussed, Wade Trim will be appropriating design documents from Craig A. Smith & Associates (CAS) for the Neighborhood 13 Palm and Hibiscus Islands Right-of-Way Infrastructure Improvements project once 100% submittal has been fully approved by the City of Miami Beach and relevant permits acquired from South Florida Water Management District and Miami-Dade RER. CAS has been informed of our intent to appropriate design documents and will be duly notified in releasing responsibility of all their project documents. We respectfully request approval from the City for this transfer of responsibility.

Very truly yours,

Wade Trim, Inc.

Victor H. Herrera, PE  
South Florida Area Manager

cc: file

Wade Trim, Inc. 786.361.1645  
2100 Ponce de Leon Boulevard 888.499.9624  
Suite 970 786.361.1646 fax  
Coral Gables, FL 33134 [www.wadetrim.com](http://www.wadetrim.com)

## CHAPTER 61G15-27

### PROCEDURES FOR THE ADOPTION OF ANOTHER'S WORK

61G15-27.001 Procedures for a Successor Professional Engineer Adopting As Their Own the Work of Another Engineer

**61G15-27.001 Procedures for a Successor Professional Engineer Adopting As Their Own the Work of Another Engineer.**

(1) A successor professional engineer seeking to reuse already sealed plans, prints, engineering specifications, and/or engineering calculations under the successor professional engineer's seal shall do so in compliance with Section 471.025(4), F.S. In other words, calculations, site visits, research and the like must be documented and producible upon demand. Plans, prints, engineering specifications, and/or engineering calculations need not be redrawn by the successor professional engineer; however, justification for such action must be available through well kept and complete documentation on the part of the successor professional engineer as to their having rethought and reworked the entire design process. A successor professional engineer must use their own title block, seal and signature and must remove the title block, seal and signature of the original professional engineer before reusing any sealed, prints, engineering specifications, and/or engineering calculations used for permitted works.

(2) Prior to sealing and signing such work a successor professional engineer shall be required to notify the original professional engineer, their successors, or assigns of the successor's intention to use or reuse the original professional engineer's work. Notification shall be by certified letter or other verifiable communication to the last known physical or electronic address of the original professional engineer.

(3) A professional engineer's reliance upon and legal use of another's engineering work, in the normal course of providing original service, is not reuse or adoption of such other engineer's work as contemplated by Section 471.025(4), F.S., and the professional engineer relying upon such work is not a "successor engineer" as used in that section. Such engineering work includes but is not limited to, geotechnical reports, soil investigation reports, legal surveys, and other works that may be sealed, but which are used to support the professional engineer's work and are not adopted as the professional engineer's original service or work product.

*Rulemaking Authority 471.033(2) FS. Law Implemented 471.025(4), 471.033(1)(j), 471.005(6) FS. History—New 8-25-87, Amended 4-21-88, 8-3-88, Formerly 21H-27.001, Amended 8-8-18, 12-29-19.*

**10. Exhibit 10 is May 17, 2018 exchange of emails between DERM Engineer Mayra De Torres to CIP Project. De Torres asks that the City submit a statement from EOR certifying that no significant changes had been made to the Rubio plans that had served as the basis of Class II permit issued May 27, 2016. Sanchez transmits correspondence from Engineer of Record, Daniel Garcia.**

Exhibit 10

**McGee, James**

---

**From:** OlgaSanchez@miamibeachfl.gov  
**Sent:** Thursday, May 17, 2018 12:29 PM  
**To:** Mayra.DeTorres@miamidade.gov  
**Cc:** VictorS@Lanzo.org; Maria.Molina@miamidade.gov; PabloR@Lanzo.org  
**Subject:** RE: Palm & Hibiscus Class II Drainage Construction Permit-Palm and Hibiscus Permit No. 20150058  
**Attachments:** 20180517\_MDRER permit renewal.pdf

Good afternoon Mayra,

Please see attached letter from EOR.

Also let me know when we can pay for the permit.

Thanks,

**MIAMIBEACH**

Olga Sanchez, E.I., LEED AP, Capital Projects Coordinator  
CAPITAL IMPROVEMENT PROJECTS OFFICE  
1700 Convention Center Drive, Miami Beach, FL 33139  
Tel: 305.673.7071/ Fax: 786.673.7073 / Cell: 786.367.7253  
olgasanchez@miamibeachfl.gov  
We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic community.

---

**From:** De Torres, Mayra (RER) [mailto:Mayra.DeTorres@miamidade.gov]  
**Sent:** Tuesday, May 15, 2018 4:03 PM  
**To:** Sanchez, Olga  
**Cc:** Victor Serrano; Molina, Maria, P.E. (RER); 'Pablo Riano'  
**Subject:** RE: Palm & Hibiscus Class II Drainage Construction Permit-Palm and Hibiscus Permit No. 20150058

Good Afternoon Olga,

We need a certification from the Engineer of Record of the original permit to certify that not changes to the original signed and sealed plans dated \_\_\_\_\_ and drainage calculations dated \_\_\_\_\_ approved under CLII-20150058 have changed.

If you have any questions, please do not hesitate to contact me.

Mayra De Torres, Engineer II  
Department of Regulatory and Economic Resources  
Environmental Resources Management  
701 NW 1<sup>st</sup> Court, 6<sup>th</sup> Floor, Miami, Florida 33136  
(305) 372-6638 (305) 372-6489 fax  
<http://www.miamidade.gov/economy>  
"Delivering Excellence Every Day"  
Please consider the environment before printing this email.

**11. Exhibit 11 is WT correspondence dated May 17, 2018 that Sanchez emailed as attachment to DERM Engineer Mayra De Torres, wherein WT EOR Daniel Garcia stated that Rubio plans that had served as the basis of the first Class II permit, and Rubio plans and the drainage study calculations based on those plans, “had no had significant changes” during construction.**

Exhibit 11



FL LC Reg. No. C000121

Wade Trim, Inc.  
2100 Ponce de Leon Boulevard, Suite 940 • Coral Gables, FL 33134  
786.361.1645 • www.wadetrim.com

May 17, 2018

Department of Regulatory and Economic Resources  
Environmental Resources Management  
701 NW 1st Court, 6th Floor  
Miami, Florida 33136

Attention: Mayra De Torres, Engineer II

Re: City of Miami Beach Neighborhood 13A Infrastructure Improvements  
Palm and Hibiscus Islands  
Class II Permit Renewal (Permit No. CLII-20150058)

Dear Ms. De Torres:

The purpose of this letter is to state that the original signed and sealed plans dated February 22, 2016 for Hibiscus Island and February 26, 2016 for Palm Island and drainage calculations dated October 2015 approved under CLII-20150058 have not had significant changes.

The City of Miami Beach has recently revised the project's stormwater design criteria, which we are currently evaluating. Should the new criteria result in any significant changes, as they relate to the original signed and sealed plans and drainage calculations, they will be reflected in the project permit certification documents.

Please do not hesitate in contacting me with any questions.

Very truly yours,

A handwritten signature in blue ink that reads "Daniel I. Garcia".

Wade Trim, Inc.

Daniel Garcia, PE  
Project Manager

LNZ2003.02S

cc: Pablo Riano (Lanzo)

12. Exhibit 12 is excerpt from DERM Class II permit dated May 27, 2018 issued to designated City permittee Assistant City Manager Eric Carpenter and Wade Trim EOR Holly Kremers, P. E. stating permit was issued "per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates., dated February 19, 2016 and the letter from Daniel Garcia, P.E., from Wade Trim, Inc., dated May 17, 2018.

Exhibit 12

2018052915315824

OFFICIAL DOCUMENT



Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources

Environmental Resources Management  
701 NW 1st Court, 6th Floor  
Miami, Florida 33136-3912  
T 305-372-6567 F 305-372-6407  
miamidade.gov

Class II Drainage Construction Permit

Permit Number: CLII-20180038  
Project Manager: MAYRA A DE TORRES

Issue Date: 05/29/2018  
Expiration Date: 05/29/2020

Permittee:

City of Miami Beach Public Works Dept.  
Mr. Eric Carpenter, P.E.  
1700 Convention Center Drive  
Miami Beach, FL 33139-

Contractor:

LANZO CONSTRUCTION CO., FLORIDA  
Mr. Bob Beaty, P.E.  
125 SE 5TH COURT  
DEERFIELD BEACH, FL 33441-

Professional Engineer:

WADETRIM ONE TAMPA CENTER  
Mr. Holly Kremers  
201 NORTH FRANKLIN STREET, SUITE 1350  
TAMPA, FL 33602-

Application Name: CITY OF MIAMI BEACH INFRASTRUCTURE IMPROVEMENTS PALM AND HIBISCUS ISLANDS

Project Location: ALL RIGHTS-OF-WAY ON PALM ISLAND & HIBISCUS ISLAND MIAMI BEACH, FL 00000-

Project Description:

The proposed infrastructure improvement is to serve the City of Miami Beach (CMB) Palm and Hibiscus Islands otherwise known as "Neighborhood No. 13". The project will consist of elevated roadways where possible, installation of stormwater collection system, three (3) stormwater pump stations equipped with water quality treatment units with a gravity bypass and stormwater outfalls with dissipation structures discharging into Biscayne Bay. Backflow prevention devices will be installed at the outfalls to prevent extreme high tides from backing up into the system, as per signed and sealed plans by Orlando A. Rubio, P.E., from Craig A. Smith & Associates., dated February 19, 2016 and the letter from Daniel Garcia, P.E., from Wade Trim, Inc., dated May 17, 2018.

Specific Conditions:

1. Prior to any additional work in tidal waters, the following shall be submitted to

THE ABOVE NAMED PERMITTEE IS HEREBY AUTHORIZED TO PERFORM THE WORK SHOWN ON THE APPLICATION AND APPROVED DRAWINGS, PLANS, AND OTHER DOCUMENTS ATTACHED HERETO OR ON FILE WITH THE DEPARTMENT AND MADE PART HEREOF, SUBJECT TO THE ATTACHED GENERAL AND SPECIAL CONDITIONS.

THIS PERMIT AND PLANS SHALL BE KEPT ON SITE DURING ALL PHASES OF CONSTRUCTION *Every Day*

Page 1 of 6

## XV. Part 3 Evaluation of explanations by the City and Wade Trim

This section addresses the responses and explanations that witnesses from the City, Lanzo, and Wade Trim provided during interviews with OIG and in statements to the City Commission. I was asked by OIG Special Agent Jim McGee to consider the testimony by Garcia that he did not intend to mislead DERM or conceal the Kremers plans from DERM, and testimony from both Garcia and Kremers that it was permissible to disclose the changes to the Rubio plans to DERM in As-Built plans at the end of the project. Garcia said this was always his intention. I was also asked to consider statements by Carpenter during a hearing of the City Commission on Oct. 30, 2017, wherein he said that “ultimately, it is a judgment call of DERM as to when is the most appropriate time to go through that modification process, because the vast majority of all Class II permits are modified at their closeout. Very seldom does anybody install a stormwater project that is exactly the same as what was designed and funded.”

In my professional opinion, Ms. Kremers and Mr. Carpenter misstated the disclosure obligations of a permittee and mischaracterized the Rubio plans. Carpenter twice signed DERM applications (as the Permittee/Owner) for a Class II permit wherein he affirmed that “I will apprise the Department of any changes to information provided in this application.” Carpenter also signed an application for an Environmental Resources Permit from the South Florida Water Management District (issued May 5, 2016) based on the Rubio plans. The state permit’s first general condition said the following: “All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S. for the Palm and Hibiscus project.”

In my opinion, Carpenter also mischaracterized the practices of DERM and other regulatory agencies regarding the use of As-Built plans. DERM and other agencies do recognize that unforeseen circumstances occur during construction projects that require the general contractor to make minor adjustments in the field that differ from construction plans. For reasons of efficiency, permitting agencies typically allow the disclosure of minor changes in As-Built plans submitted at the end of a project. If the agency concludes that the changes are significant enough to warrant a modification of the permit, the original permit will be modified. As Carpenter said, in such instances “it is a judgment call of DERM” whether a permit needs to be modified.

However, this is not one of those instances. In this case, the evidence shows that the project’s owner (the City), the DBF-Lanzo and its subconsultant engineering firm (Wade Trim) seemed to knowingly engaged in a concerted effort during the DERM permit review process to develop an alternative set of construction plans to accommodate the connection of private yard drains. During 2016, Lanzo used the Kremers plans to construct dozens of 12-inch yard drains and an array of pipes to connect those drains to the stormwater main pipe.

During construction of the stormwater drainage system on Palm Island West, the City was in possession of a Class II permit for the Palm and Hibiscus project. However, the evidence shows that DERM unwittingly issued that permit based on plans to construct a different drainage system, one that was not designed to accommodate swale/private yard drains. In my opinion, the exhibits and testimony I reviewed support a conclusion that the City constructed a stormwater drainage system on Palm Island West without a valid permit.

**XLI. Claim that unpermitted yard drains were a temporary condition**

I was asked to consider the testimony of Kremers, Garcia, and other witnesses who contended that the 12-inch yard drains installed in the Rights-of-Way were a “temporary condition” to mitigate flooding of private lots during construction of the system and, further, that it was always their intention that these “temporary yard drains” would be capped and abandoned at the end of construction.

Given the totality of the evidence, it is my opinion that the designation of the 12-inch yard drains as “temporary yard drains” may have been mislabeled. Any temporary drains would be considered a means and method of construction by the contractor to keep the area as dry as possible where work was to be performed. Temporary drains for means and methods of construction are not typically shown on construction plans as they will have been removed before the completion of the stormwater drainage construction. Permanent drains can function as temporary drains, however, these permanent drains must be shown on the construction plans. There was no reason to obscure the purpose of the yard drains and evade responsibility for failing to disclose the existence of these drains during the 2018 DERM application process. On this subject, I credit the testimony of Public Works Director, Roy Coley, who stated that the laterals and yard drains were always intended to be permanent installations and were approved for permanent use by the Public Works Department.

## **XVI. Part 4: Factors the contributed to the project unfinished status.**

The balance of this report provides additional observations about the factors that had an adverse impact during planning, design, and construction phases of the project and the administration of the City's progressive design-build contract with DBF-Lanzo. In my professional opinion, two related factors were the primary cause of the project's troubled history and unfinished status.

The first was the sustained and intense pressure that former Mayor Levine, the Mayor's Blue Ribbon Committee, and the Homeowners Association from Palm and Hibiscus Islands placed on City staff to accelerate their work on the project during the development of the project Design Criteria Package (DCP) and during the project's pre-construction design phase and the construction phase.

The second was the concurrent and also sustained pressure on City staff to incorporate the new design criteria into the project, specifically including the minimum grate elevation of 2.7 NAVD and the minimum crown-of-road elevation criteria of 3.7 feet NAVD. Accelerating work on a complex design-build construction project was a challenging and high risk assignment for the Capital Improvement Projects (CIP) staff, the Design Criteria Professional, and the design-build team DBF-Lanzo and its engineering consultants, Wade Trim, and Craig A. Smith & Associates. Incorporating the City's new design criteria into the Palm and Hibiscus project was a separate, distinct and equally challenging high-risk assignment.

Requiring that both of these complex tasks be accomplished simultaneously with the resources available to CIP was, in my judgement, an error. There is virtual certainty that the generation of engineering design changes and contract administration issues would be costly and complicated to mitigate. The City's decision at the end of the project's design phase to change the minimum crown-of-road criteria to 3.7 feet NAVD was a serious error of design management. It compounded the already intense pressure on CIP and Lanzo exponentially.

Below is a chronology of events leading to the City Commission approval of the Guaranteed Maximum Price (GMP):

- The City negotiated Phase 1 - Design and Pre-Construction Services with the DBF in the amount of \$599,464 approved on September 18, 2014 based on the original DCP in the RFQ.
- During the period from June 2013 and October 2014, the City's Stormwater Master Plan Consultant, AECOM, was contracted to review the DCP. City staff from the Public Works Department were also tasked to review the DCP to implement modifications as outlined in the Stormwater Master Plan.
- The City Commission adopted Resolution No. 2014-28852, (dated November 19, 2014) approving Amendment No. 1 with DBF-Lanzo in the amount of \$251,016 for additional design services associated with the adopted enhanced stormwater criteria.

- The City Commission adopted Resolution No. 2015-29178, (dated October 14, 2015) approving Amendment No. 2 with the DBF in the amount of \$73,240 for additional design services required to meet the revised City Landscape ordinance, comments from the Home Owners Association, and the changes in criteria from the City's Fire and Public Works Departments related to the placement of Florida Power and Light (FPL) transformers within the public rights-of-way.
- City CIP Staff contracted with Rib U.S. Cost to provide a 90% Construction Cost Estimate for the Palm and Hibiscus Islands Neighborhood Improvement Projects. The November 25, 2015 report estimated a base cost of \$31,008,940, which did not include the 7.5% design-build fee and owner's contingency fee.
- The Agreement between the City and Lanzo for Progressive Design Build Services, dated September 18, 2014, contained Article 4.3 Guaranteed Maximum Price (GMP) (Phase 2 Services), which described the acceptance/rejection procedures for the GMP. **The City had the option at this point to terminate the contract and re-examine the project. However, the City decided to proceed and accepted the DBF's GMP.**
- The City Commission adopted Resolution No. 2015-29643, (dated December 9, 2015) approving Amendment No. 3 with the DBF for a Guaranteed Maximum Price (GMP) of \$36,500,000 plus a \$2,000,000 City contingency for Phase 2 – Construction Services.
- The Office of Capital Improvement Projects (CIP) issued Notice to Proceed #2 to the DBF dated January 28, 2016 for the commencement of construction work (Phase 2). The DBF was given **540 days** to complete Phase 2, by July 22, 2017, as documented in the DCP.

At that point, CIP was managing a fundamentally different project that required the DBF-Lanzo and its subconsultant engineer, Wade Trim, to design a modified stormwater drainage system. In my professional opinion, adopting that strategy was a fundamental error. Under pressure to begin construction, the City/DBF failed to consider that a modified stormwater drainage system design and change in the EOR may have caused DERM to stop the project for additional modified permit review time. After concluding that the King Tide phenomenon made it imperative that the minimum crown-of-road elevations for North and South Coconut Lanes and Coconut Court be raised by an additional 1.5 feet, the City should have stopped the project, refined the DCP, and issued a new solicitation. However, stopping or deferring the project was not a serious option due to the pressure placed on City staff.

Under pressure to begin construction, the City took a different path. At that point in time, the combined pressure to speed up their work and the imperative to embed the design criteria in the project's construction plans compelled the City/DBF-Lanzo to proceed with a design that the responsible City officials knew would cause flooding of homes on Palm Island West. The exhibits and testimony are replete with indicators of this pressure and the deleterious consequences that stemmed from the pressure City staff felt to continue the progress of this project.

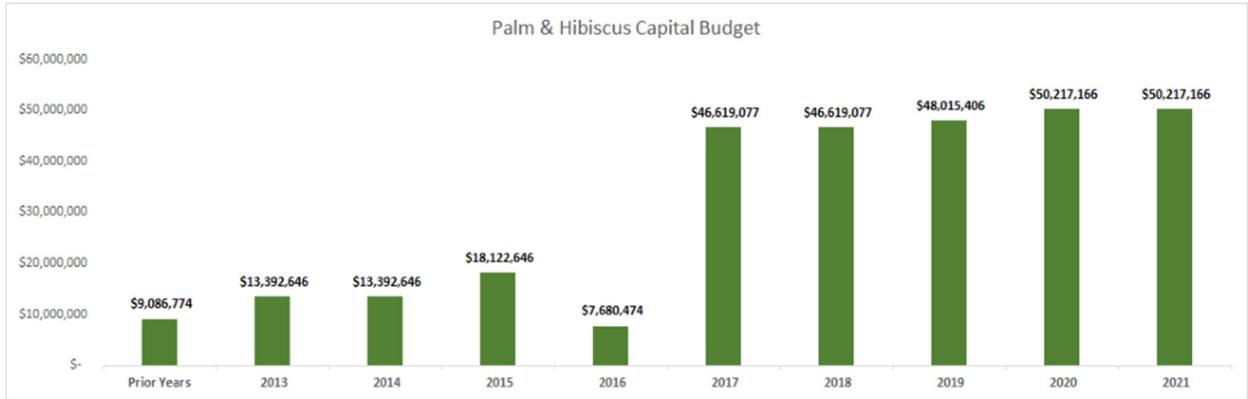
**Appendix #2**

**Financial Analysis**

**Palm and Hibiscus Right-of-Way Infrastructure Improvement Project**

**By OIG Internal Auditor Jessica Romero**

*PALM AND HIBISCUS NEIGHBORHOOD IMPROVEMENT PROJECT'S CAPITAL BUDGET ESTIMATE INCREASED FROM \$9,086,774 TO \$50,217,166 MAINLY DUE TO DESIGN AND SCOPE CHANGES*



The original intent of the project was completely different from the actual construction. The City requested changes during the design phase and the construction process that increased the project budget from \$9 million to a \$50 million-dollar project. Those changes included adding generators, increasing the roadway crowns generally to 3.7' NAVD, raising the Palm lower areas, Coconut Lane one-way redesign, re-design and relocation of drainage system to avoid Tree / Hedges Removal, lowering roadway elevations and additional secondary drainage on Hibiscus Island installation of underground sleeves and conduits design on Coconut Lane, permitting, construction and harmonization of additional private storm drains , among other changes. It seems that the City did not have a clear understanding of the scope of the project during the design phase prior to construction.

**MIAMI BEACH**

Line Item	Description	Original Budget	Approved Changes	Current Budget	Projected Budget
1000	New Construction	7,298,711.00	35,274,704.07	42,573,415.07	42,573,415.07
2000	Furnishings, Fixtures, and Equipment	0	1,396,329.00	1,396,329.00	1,396,329.00
4000	A/E Professional Fees	837,245.00	1,564,990.65	2,402,235.65	2,402,235.65
5000	CIP Fees	299,406.00	3,169,339.50	3,468,745.50	3,468,745.50
7000	Contingency	266,954.00	-259,408.20	7,545.80	7,545.80
8000	Program Management Fees	384,458.00	0	384,458.00	384,458.00
<b>Totals</b>		<b>9,086,774.00</b>	<b>41,145,955.02</b>	<b>50,232,729.02</b>	<b>50,232,729.02</b>

Actual Cost For PALM & HIBISCUS ISLANDS ENHANCEMENTS

Actual Cost Summary			
Project:	PALM & HIBISCUS ISLANDS ENHANCEMENTS		
Current Commitment Costs:	45,304,288.10	Non-commitment Costs:	4,429,982.40
Received Commitment Invoices:	42,455,812.95	Received General Invoices:	4,536,603.40
Approved Commitment Invoices:	42,453,467.23	Approved General Invoices:	4,429,982.40
Paid Commitment Invoices:	42,453,467.23	Paid General Invoices:	4,429,982.40
Remaining to be Invoiced:	2,848,475.15		

Quick Cost Summary				
Current Budget	Current Commitments	Actuals Approved	Actual Cost To Complete	Forecasted Over/(Under)
50,232,729.02	49,734,270.50	46,883,449.63	2,850,820.87	0.00

Over the years, Palm and Hibiscus had problems with the inadequate drainage infrastructure and low ground elevations that created a condition of moderate flooding in the area and contributed to deteriorated roadways.

The City made the decision to address these issues, and, on June 8, 2012, entered into an agreement with Stantec (formerly Corzo Castella Carballo Thompson Salman, PA or C3TS) to develop a Design Criteria Package (DCP) for the Right-of-Way Infrastructure Improvement for Neighborhood No.13 Palm & Hibiscus Islands and to evaluate compliance of the project construction.

The Mayor and City Commission at that time approved the issuance of Request for Qualifications (RFQ) No. 251- 2013TC on October 24, 2012, for Design/ Build Services for Neighborhood No. 13: Palm & Hibiscus Islands Right-of-Way Infrastructure Improvement Project. The RFQ was issued on June 10, 2013, with an opening date of July 11, 2013, with the Design Criteria Package provided by Stantec dated June 14, 2013.

On September 18, 2014 the City of Miami Beach entered into an agreement with Lanzo Construction Co. Florida to perform design, and construction of the Palm & Hibiscus Islands Right of Way (ROW) Infrastructure Improvement Project under the progressive design- build methodology in the amount of \$599,464. The Design-Builder was to initiate the design period, encompassing the completion of the design to the level needed to define actual construction costs and begin construction activities in the field; collaborate with the City during the design process to ensure that design solutions reflect the most efficient construction means and methods and that the Project would meet the schedule, quality, permitting, and safety requirements; and procure long lead items, conduct field investigations, and early release construction packages; and once Design- Builder had advanced in the design to a sufficient level of detail to produce a reliable estimate with well- understood risks and contingencies, a cost of construction (Guaranteed Maximum Price) will be submitted by the Design- Builder to the City for its approval.

Soon after the City entered into an agreement with Lanzo Construction Co. the City passed (Resolution No. 2014-28852) on recommendation of the Mayor's Blue Ribbon Panel on Flooding and Sea Rise and the Flooding Mitigation Committee, as well as the City's Flooding Mitigation Consultant (AECOM) calling for design services for additional pump stations on both Palm and Hibiscus Islands, new surveying services, revisions to the 30% Design Drawings, increasing the road minimum elevation, and Design Review meetings with the Community; and pursuant to these required design modifications, the Design-Build Firm submitted a proposal for these additional services in the not-to exceed amount of \$251,016.

The contractor, Lanzo, hired Orlando Rubio from Craig A. Smith Associates to design the drainage system for "Neighborhood No.1 3A: Palm and Hibiscus Islands Right-of-Way Infrastructure Improvement Project" consisting of elevated roadways, where possible, installation of new potable water main systems, installation of stormwater collection systems with three stormwater pumping stations equipped with water quality treatment units and gravity bypass stormwater outfalls with dissipation structures discharging into Biscayne Bay within 25.53 acres of existing rights-of-way.

The technical report dated October 2015 submitted with the permit application stated that the City's criteria requires that minimum road crowns are set at or above elevation 3.7' NAVD; however, for the Palm Island West System and primarily on North and South Coconut Lane, this was not possible due to the existing topography encountered below the future design groundwater elevation of 2.7' NAVD. As such, North and South Coconut Lane road crown elevations would be no lower than 2.2' NAVD as allowed by CMB. The criteria posed significant driveway harmonization and resident accessibility issues, which could not be addressed at that time unless each affected lot underwent total or complete redevelopment. The City would then elevate the road and drainage rims/grates in that area at a later time. However, after a king tides event on October 2015, Bruce Mowry the former City Engineer eliminated the relaxed 2.2' NAVD on the Coconut Lanes, triggering a chain of events that caused scope changes that substantially increased the project budget.

On October 14, 2015, the City Commission authorized the Mayor and the City Clerk to execute the Lanzo Construction Amendment No. 2 (Resolution No. 2015-29178) to incorporate additional design services required to meet the revised City landscape ordinance, comments from Home Owners Association (HOA), the City's Fire Department analysis, the City's Public Works Department (PWD) change in criteria relating to the placement of Florida Power and Light (FPL) transformers within the City Right-of-Way, and other design criteria clarifications. This amendment increased the contract price by a not-to-exceed sum of \$73,240.

At this point, Lanzo Construction had already billed the City \$923,720 on design services (Phase 1). The 90% design plans completed by Rubio were used as the basis to develop a guaranteed maximum price. If the City did not agree with the price, the manager would have the alternative to exercise the "off-ramp" provision of the Agreement, allowing the City to terminate Lanzo's services and seek alternate contractors to complete the Phase 2 construction services.

On December 9, 2015, the City Commission authorized the Mayor and the City Clerk to enter into further negotiations with Lanzo Construction Co. (Resolution No. 2015-29243) to execute guaranteed maximum price (GMP) Amendment No. 3 in the amount not to exceed \$35,000,000 plus a ten percent owner's project contingency, and 2,000,000 owners contingency for a grand total of \$38,500,000.

After the execution of the project Guaranteed Maximum Price (GMP), the Public Works Department requested the addition of 2,700 linear feet (LF) of 6" diameter ductile iron pipe and 9 gate valves to be installed in all side streets (courts) within Hibiscus Island. On July 21, 2016 **Change Order No.1**, was issued from the approved contingency funds in the amount of \$313,905.06 for the additional watermain installation and to supply and maintain temporary pumps to mitigate king tides on Palm and Hibiscus Islands.

On October 29, 2018, **Change Order No. 2**, was issued from the approved contingency funds in the amount of \$686,094.94, for additional services requested by the City, which included, force main replacement; additional water main drainage on Hibiscus Island; additional temporary pavement; Hurricane Irma impacts; associated general conditions and other

miscellaneous work; credits related to scope of work reductions in street lighting, speed tables and road width reduction along North and South Coconut Lanes; and a time extension of four hundred and sixty-seven (467) calendar days.

Item	Change Order 2	Amount
RCO#3	Credit for Street light elimination	\$ (700,000.00)
RCO#4	Credit for road width reduction of Coconut Lanes	\$ (138,989.00)
RCO#5	Credit for Speed Tables Elimination	\$ (96,000.00)
RCO#6	Credit for Valley Gutter	\$ (4,856.40)
RCO#7	Additional Water Meters and Relocations	\$ 21,623.60
RCO#8	Fire Hydrant Relocation at 199 N. Coconut Lane	\$ 6,082.08
RCO#9	Fire Hydrant Relocation at 285 S. Hibiscus Dr.	\$ 5,564.20
RCO#10	Existing service Repair @ 39 Palm Avenue	\$ 4,788.81
RCO#11	Coconut Lane One-Way Redesign (Wade Trim)	\$ 92,080.39
RCO#12	Palm Island Force Main Repair	\$ 3,802.55
RCO#13	Palm Island King Tide Mitigation	\$ 4,820.67
RCO#14	Palm Island Force Main Replacement	\$ 56,894.96
RCO#15	Additional Water Main Valves	\$ 42,617.17
RCO#16	Clean and CCTV Existing Outfalls	\$ 24,645.00
RCO#17	Palm Ave. South Drainage Re-Design and Installation	\$ 465,343.62
RCO#18	Hibiscus Outfall Tree Accommodation	\$ 23,007.75
RCO#19	Hibiscus Island Additioanl Secondary Drainage/ Lowering Roads	\$ 197,055.36
RCO#20	Coconut Lane Underground Sleeves	\$ 157,172.40
RCO#21	Hibiscus Island Force Main Replacement	\$ 37,713.56
RCO#22	Hurricane Irma Impact	\$ 51,419.00
RCO#23	Additional General Conditions	\$ 431,309.22
<b>Total Change Order #2</b>		<b>\$ <u>686,094.94</u></b>

The most significant changes included as part of Change Order No. 2 are the following:

1. RCO# 11 - Coconut Lane One-Way Redesign - After the construction plans were approved for the project, the Palm and Hibiscus Home Owners Association requested the conversion of the Coconut Lanes to a one-way roadway in order to accommodate the underground utilities equipment for the future franchise utility undergrounding of West Palm Island per Resolution No.2016-29643. In order to accommodate this request, the portion of the island had to be re-designed. This additional work includes additional design efforts. The impact to the schedule for this additional design effort is 70 days.
2. RCO#17- Palm Avenue South Re-Design and Relocation of Drainage System to Avoid Tree/Hedges Removal - The original project construction documents included the stormwater collection system along the south side of Palm Avenue to be installed in the swale area. The City of Miami Beach Commission voted on July 13, 2016, not to remove

any tree/hedges located two or more feet behind the existing curb and gutter. The Design/Build Team re-designed and re-routed the storm water collection system to be constructed within the roadway and installed additional piping and drainage structures to accommodate the existing trees and hedges within the swales. This additional work includes the design, labor and material associated with the shifting of the system to the roadway. The impact to the schedule for this additional work is 55 days.

3. RCO#19- Hibiscus Island Lowering Roadway Elevations and Additional Secondary Drainage - The original project construction documents for Hibiscus Island included the raising of the roadway at locations to an elevation higher than the 3.7' NAVD minimum City standards to minimize the restoration efforts and reduce the need for harmonization within private property. CIP requested that the Design/Build Team revise and re-design these affected areas. The new design included the lowering of the roadways and installing additional secondary drainage at these locations. This additional work includes the redesign of the hardscape plans, revision of the drainage modeling for Hibiscus Island, recalculation of the proposed swale grading, addition of collection structures in some areas, depiction of existing elevations, final design elevations and new proposed elevations. This additional work includes, re-design, labor and material associated with the lowering of the roadways and adding secondary drainage. The impact to the schedule for this additional work is 45 days.

4. RCO#20- Coconut Lane Underground Sleeves - The Homeowners Association informed the City about their future plans to underground the overhead utilities on the west side of Palm Island. In an effort to minimize the need of excavate the new constructed roadway CIP requested the installation of underground sleeves and conduits while building the North and South Coconut Lane streets. These sleeves were installed at strategic locations crossing the road from one side to the other in order to facilitate the future installation of FPL, ATT and ABB systems. This additional work includes labor and material associated with the installation of the underground sleeves. The impact to the schedule for this additional work is 35 days.

5. RCO #23- Additional general conditions (467 days x amount per day \$923.57 as per negotiated number).

General Conditions				
RCO No.	Work Description	Impact to Schedule (days)	Amount per Day	Total Amount
7	Additional Water Meters and Relocations	15	\$923.57	\$13,853.62
8	Fire Hydrant Relocation at 199 N. Coconut Lane	15	\$923.57	\$13,853.62
9	Fire Hydrant Relocation at 285 S. Hibiscus Dr.	15	\$923.57	\$13,853.62
10	Existing service Repair @ 39 Palm Avenue	12	\$923.57	\$11,082.89
11	Coconut Lane One-Way Redesign (Wade/Trim)	70	\$923.57	\$64,650.20
12	Palm Island Force Main Repair	15	\$923.57	\$13,853.62
13	Palm Island King Tide Mitigation	0	\$923.57	\$0.00
14	Palm Island Force Main Replacement	35	\$923.57	\$32,325.10
15	Additional Water Main Valves	20	\$923.57	\$18,471.49
16	Clean and CCTV Existing Outfalls	50	\$923.57	\$46,178.72
17	Palm Ave. South Drainage Re-Design and Installation	55	\$923.57	\$50,796.59
18	Hibiscus Outfall Tree Accommodation	15	\$923.57	\$13,853.62
19	Hibiscus Island Additional Secondary Drainage / Lowering Roads	45	\$923.57	\$41,560.85
20	Coconut Lane Underground Sleeves	35	\$923.57	\$32,325.10
21	Hibiscus Island Force Main Replacement	25	\$923.57	\$23,089.36
22	Hurricane Irma Impact	45	\$923.57	\$41,560.85
		467	Total	\$431,309.22

On December 26, 2018, **Amendment No. 4 (Change Order No. 3)**, was issued in the amount of \$1,900,000, for work associated with the design, permitting, installation, testing, start-up and certification of auxiliary power bi-fuel generator for the three (3) stormwater Pumps Stations.

On April 18, 2019, **Amendment No. 5 (Change Order No. 4)**, was issued in the amount of \$775,000 for costs associated with additional design, permitting and construction services including installation of a yard drain and connection to the City's drainage system, harmonization and restoration within the private property to its original or better condition as well as General Conditions Costs, General Allowance, Design Builders Fee and Specific Allowance for certain required tasks, which level of effort is unknown at this time.

On July 19, 2019, **Amendment No. 6 (Change Order No. 5)** was approved to include a credit in favor of the City in the amount of \$50,000 for the removal of a portion of landscaping scope not to be performed by Lanzo under this Agreement, the portion of landscape work also establishes a General Allowance in the amount of \$500,000 from the previously authorized Project contingency funds to be allocated towards future unforeseen tasks associated with the completion of this Project and as further set forth in the Agreement.

On September 11, 2019, pursuant to the additional scope required for the implementation of the new drainage directive (Resolution No. 2019-30683), the Mayor and the City Commission adopted Resolution No. 2019-30984 authorizing the City Manager to execute Amendment No. 7 in the amount of \$840,000 plus 84,000 City contingency for the design, permitting, construction and harmonization of additional private storm drain connections, inclusive of additional work on the previously approved properties, for a total of approximately 95 properties. This Amendment shall be subject and conditioned upon Mayor and City Commission's approval of the fiscal year 2020 Capital Budget pertaining to this project.

On September 24, 2019, **Amendment No. 7 (Change Order No. 6)** was approved in the amount of \$840,000 plus \$84,000 City contingency for additional scope required for the implementation of the new drainage directive, increasing the number of private drain connections and augmented the treatment requirements for previously approved properties for the design, permitting, construction and harmonization of additional private storm drain connections, inclusive of additional work on the previously approved properties, for a total of approximately 95 properties.

<b>Lanzo Construction Co.</b>	<b>Date</b>	<b>Amount</b>
Progressive Design & Build Agreement	18-Sep-14	\$ 599,464.00
Amendment #1	19-Nov-14	\$ 251,016.00
Amendment #2	14-Oct-15	\$ 73,240.00
<b>Total Design Phase 1</b>		<b>\$ 923,720.00</b>
		\$ 35,000,000.00
Amendment #3	14-Jan-16	\$ 1,500,000.00
Change Order No. 1	21-Jul-16	\$ 313,905.06
Change Order No. 2	30-Oct-18	\$ 686,094.94
Change Order No. 3 Amendment #4	19-Dec-18	\$ 1,900,000.00
Change Order No. 4 Amendment #5	25-Mar-19	\$ 775,000.00
Change Order 5 Amendment #6	19-Jul-19	\$ (50,000.00)
Change Order 6 Amendment #7	24-Sep-19	\$ 840,000.00
<b>Total Construction Phase 2</b>		<b>\$ 40,965,000.00</b>
<b>Total Lanzo's Contract</b>		<b>\$ 41,888,720.00</b>

Per Eric Carpenter's January 21, 2021 memorandum, he stated "The City entered into a progressive design/build contract with Lanzo Construction that resulted in a Guaranteed Maximum Price authorization by the City Commission for \$38.5 Million. The addition of several scope changes directed by the Commission has resulted in a final construction cost of \$40.9 Million."

However, in addition to the amounts paid to Lanzo Construction Co. for the Progressive Design Build, the City also hired contractors to provide additional consulting services that increased the total Project Cost. As shown below, the total amount paid according to E-builder was \$46.9 million, the current commitments are \$49.7 million, and the total Budget is \$50.2 million as of February 4, 2021.

Actual Cost For

**Actual Cost Summary**

Project:		PALM & HIBISCUS ISLANDS ENHANCEMENTS	
Current Commitment Costs:	45,304,288.10	Non-commitment Costs:	4,429,982.40
Received Commitment Invoices:	42,455,812.95	Received General Invoices:	4,536,603.40
Approved Commitment Invoices:	42,453,467.23	Approved General Invoices:	4,429,982.40
Paid Commitment Invoices:	42,453,467.23	Paid General Invoices:	4,429,982.40
Remaining to be Invoiced:	2,848,475.15		

**Quick Cost Summary**

Current Budget	Current Commitments	Actuals Approved	Actual Cost To Complete	Forecasted Over/(Under)
50,232,729.02	49,734,270.50	46,883,449.63	2,850,820.87	0.00

In addition, AECOM’s Task Order 2 Flood Mitigation Consulting Services, Task 0001 Develop Project Work Plan includes the following tasks that were already performed:

- Project Management Activities including meetings with City staff
- Review of various documents and projects including Lower North Bay Road, **Palm & Hibiscus Islands**, and Sunset Islands 3 & 4
- **Prepare drainage portions of Design Criteria Packages for Palm & Hibiscus Islands** and Central Bayshore South
- Attend Blue Ribbon Panel, Land Use and Sustainability & Resiliency Committee meetings.
- Preparation of Deep Well Injection Feasibility White Paper
- Assistance with Florida Stormwater Association Presentation
- Resiliency Study – Code Review
- Stormwater Utility Rate Study Evaluation for ERU adjustment and Impact Fees.
- Develop preliminary methodology for Payment in Lieu of stormwater connection fee.
- Historic Neighborhoods and Elevation Maps
- Base Flood Elevation White Paper
- Indian Creek Linear Park State Revolving Fund RFI
- Indian Creek Linear Park Facilities Plan and Preliminary Design
- Statement of Work and Use of Vulnerability and Risk Assessment Models
- Engineer’s Bond Report and Updates to 5-year Master Plan
- Meetings concerning the bonding and preparation of the Engineer’s Report for the bonds
- Engineer’s Opinion of Preliminary Construction Cost for pumping station and surface facilities costs
- Research, review, and revise Miami Beach City Code – Building Code and Flood Ordinances

Although Task Order 2 included work performed on Palm and Hibiscus islands, there was no known means to accurately allocate these expenditures among the other projects. Therefore, the actual cost of the Palm and Hibiscus island project is likely higher than the \$49.7 million already committed.

The followings are Palm and Hibiscus Island Enhancement expenditures actuals paid as of February 4, 2021:

## MIAMI BEACH

Company	Invoice Amount
Atlantic Broadband Total	\$ 55,717.50
C3TS ARCHITECTS Total	\$ 329,440.90
CAP Government Inc Total	\$ 89,969.00
City of Miami Beach Total	\$ 4,738.56
City of Miami Beach - Building Department Total	\$ 50,999.28
City of Miami Beach - CIP Office Total	\$ 3,373,072.27
Craven Thompson & Associates, Inc. Total	\$ 150,484.07
DERM (NOT TO BE USED FOR PAYMENTS) Total	\$ 3,336.71
EDAW Total	\$ 104,448.00
EnviroWaste Services Group, Inc. Total	\$ 11,895.75
Florida Department of Health Total	\$ 650.00
Florida Transportation & Engineering Total	\$ 2,317.95
FPL Total	\$ 424,492.00
Hazen & Sawyer Total	\$ 384,458.00
Infinite Source Communications Group Total	\$ 328,147.50
J. FLETCHER ENTERPRISES, INC. DBA Trimac Outdoor Total	\$ 4,640.00
LAKDAS/YOHALEM ENGINEERING, INC Total	\$ 9,290.00
Lanzo Construction Company of Florida Total	\$ 39,810,864.23
Lee Construction Group, Inc. Total	\$ 297,057.16
Media Relations Group, LLC. Total	\$ 27,691.25
Metro Express Inc Total	\$ 4,422.00
MIAMI DADE COUNTY Total	\$ 40,750.08
MIAMI DADE COUNTY - DERM (2) NOT TO BE USED FOR PAYMENTS Total	\$ 20,261.50
Nutting Engineers of Florida Total	\$ 3,515.00
PALM-HIBISCUS-STAR ISLANDS ASSOC. INC. Total	\$ 17,276.00
South Florida Water Management Total	\$ 5,500.00
STANTEC CONSULTING SERVICES Total	\$ 1,312,835.10
U.S. Cost Incorporated Total	\$ 56,700.00
Universal Engineering Sciences Total	\$ 30,812.64
WADE TRIM, INC. Total	\$ 36,633.90
<b>Grand Total</b>	<b>\$ 46,992,416.35</b>

Received \$ 108,966.72  
 Paid \$ **46,883,449.63**  
 \$ 46,992,416.35

**Recommendations:**

It is important that the Capital Improvement Projects office (CIP) implement aspects of best practices for managing projects, including the following recommendation intended to strengthen the City’s ability to manage future projects and avoid the problems that drove up costs in Palm & Hibiscus project:

1. The City should have a better understanding of the intended project before starting the procurement process.
2. If the City’s policies change, City staff should analyze and consider the impact (financial, design, time, etc.) of applying those changes to projects that are in the

construction process already. The Commission could consider requiring the project manager to certify that any proposed change is essential to the success of the project and provide realistic estimates of the estimated costs and impact on the project's schedule.

3. Making significant changes to a project's design criteria or construction plans after work has begun poses a significant risk to the success of a neighborhood infrastructure improvement project and should be avoided. To mitigate the risk of cost escalation caused by changes in a project's design criteria or construction plans the city can establish a formal mechanism to evaluate, document, and authorize any significant change that is proposed after a project's bid is issued.

4. The City could enhance its ability to provide oversight of CIP's capital improvement program by completing an annual Affordability Analysis based on current cost estimates and schedules for all stormwater drainage and neighborhood improvement projects. An Affordability Analysis would help decisionmakers determine if there is adequate funding to complete CIP's capital projects.

## **Appendix #3**

**Written responses to draft report from named entities and individuals**

## McGee, James

---

**From:** Markle, Jesse <jmarkle@sfwmd.gov>  
**Sent:** Wednesday, February 3, 2021 2:05 PM  
**To:** McGee, James  
**Cc:** Creech, Jill; Waterhouse, Anthony; Wood, Dustin; Lomonico, Julia; Centorino, Joseph  
**Subject:** RE: Request for assistance from the City of Miami Beach Office of Inspector General

[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]

Mr. McGee,

The District appreciates the opportunity to provide comments regarding the City's *Office of the Inspector General Report of its investigation of the management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project* provided as a draft on December 4, 2020.

As we discussed in our meeting of February 2, 2021, the District offers the following comments:

- The District's July 30, 2020 response to the e-mail from Wade Trim engineer Jim Penkosky of the same date was based solely on the information provided in the e-mail without benefit of review of the Wade Trim/Kremers construction plans or any supporting stormwater management (SWM) calculations, which were not provided. As such, our position that "[t]he installation of yard drains within the permitted surface water management system...will not require a permit modification" is no longer the case.
- A modification to Environmental Resource Permit (ERP) 13-06125-P to address the changes made to the SWM system during construction that were not contemplated by the ERP will be required. The permit modification shall meet the criteria in Chapter 373, Florida Statute, Chapter 62-330, FAC, and ERP Information Manual Volumes I & II including, but not limited to:
  - Demonstration that the City has real property interest as defined by Section 4.2.3, ERP Information Manual Applicant's Handbook Volume II to operate and maintain the portion of the SWM system that extends into private property,
  - Demonstration that any area that was not considered under the permit that is now contributing discharge to the SWM system does not lead to a violation of State water quality standards
  - Demonstration that any area that was not considered under the permit that is now contributing discharge to the SWM system does not lead to substantially different flood protection
- Please revise the last sentence of the second full paragraph on page 111 of the draft report to clarify that the District was not one of the agencies informed of the "non-standard drainage system" by the whistleblower.

Please contact me should you have any questions or comments.

Thanks,



**JESSE MARKLE, P.E.**

*Bureau Chief*

*Environmental Resource Bureau | Regulation Division*

*South Florida Water Management District*

*3301 Gun Club Road, West Palm Beach, FL 33406*

*Phone: 561.682.6274 | Toll Free: 800.432-2045, x6274*



Wade Trim Group, Inc.  
25251 Northline Road • Taylor, MI 48180  
734.947.9700 • www.wadetrim.com

January 15, 2021

Office of Inspector General  
City of Miami Beach  
1130 Washington Avenue  
6<sup>th</sup> Floor  
Miami Beach, FL 33139

Attention: Mr. Joseph M. Centorino, Inspector General

Re: Office of Inspector General Report of its Investigation on the  
Management of the Palm and Hibiscus Islands Neighborhood  
Infrastructure Improvement Project (OIG No. 20-07)

Dear Mr. Centorino:

Wade Trim has reviewed the Office of Inspector General Report of its Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project (OIG No. 20-07). Relative to Wade Trim, we find the report to contain numerous misrepresentations and faulty conclusions; so many that responding to each would be overly burdensome, adding to the significant effort already expended cooperating with the Inspector General's investigation. The sum of these misrepresentations and faulty conclusions is the implication of intentional wrongdoing by Wade Trim to deceive parties, which was not the case.

Article 7.3 of the Agreement Between City of Miami Beach, Florida and Lanzo Construction Co., Florida For Progressive Design-Build Services For Neighborhood No. 13: Palm & Hibiscus Islands Right-of-Way Infrastructure Improvement Project defines the Design-Builder Standards of Performance. Article 7.3.1 states the following:

*"Services and Work provided by Design-Builder and all of its agents, subconsultants, subcontractors, and employees under this Agreement shall be performed in a manner consistent with the degree of care and skill customarily accepted as good professional practices and procedures by members of the same profession currently practicing under similar circumstances in Miami-Dade County, as well as having the experience and qualifications to complete the Services and Work."*

This is the standard of performance against which Wade Trim should be measured. From our review, it appears that the Inspector General, not "...members of the same profession currently practicing under similar circumstances in Miami-Dade County..." is judging and drawing conclusions about Wade Trim's performance and stating such in the referenced report. The report should clearly indicate that the conclusions are being drawn, not by a "member of the same profession" as required by the contract, but by a party limited in familiarity with design engineering, construction, and design-build delivery, making it unqualified to assess the performance or standard of care.

Further, the report implies that Wade Trim intentionally deceived parties involved in the project without providing any supporting factual evidence. The design-build team worked with and at the direction of the City of Miami Beach. We were transparent in our dealings with the City and other stakeholders. Wade Trim never intentionally misled or deceived any party and the implication of such is simply false. The report should present any factual evidence to support the implications being made. Prior to finalizing the report, please revise to either include factual evidence or eliminate the implication of intentional wrongdoing by Wade Trim.

Wade Trim is proud of the projects we have delivered with the City of Miami Beach staff for the residents of the City. Our services are always delivered in a transparent manner with all involved parties for the good of the community. We have enjoyed the professional relationship built with City staff and look forward to other future projects.

This letter should be included in the final Report as Wade Trim's statement.

Very truly yours,

Wade Trim Group, Inc.

A handwritten signature in blue ink, appearing to read "Andrew J. McCune".

Andrew J. McCune, PE  
President/CEO

AJM:ka  
LNZ 2003-02S  
Report Response Ltr 1-15-21.docx



*Delivering sustainable infrastructure solutions  
for tomorrow's communities*

January 15, 2021

**Via Email and U.S. Mail**

City of Miami Beach Office of Inspector General  
Old City Hall, Sixth Floor  
1130 Washington Ave.  
Miami Beach, Florida 33139

Attn: Mr. Joseph M. Centorino  
Inspector General  
City of Miami Beach

Ref: Lanzo Construction Co., Florida  
Case No. OIG No. 20-07  
Response to OIG Letter of December 4, 2020

Dear Mr. Centorino:

Lanzo does not agree with many of the opinions and conclusions contained in the Draft Report, OIG No. 20-07, dated December 4, 2020. The Draft includes representations characterized as statements of fact which have no basis. Furthermore, many erroneous conclusions were incorrectly drawn. A picture of deception by the City of Miami Beach, Wade Trim and Lanzo is seemingly presented which is not factual and far from the truth.

Lanzo does not cast blame upon the OIG for its erroneous presentation, understanding that the engineering and construction aspects of the Palm and Hibiscus Neighborhood Infrastructure Project are quite complex and beyond the normal report and recommendation background of your office. However, Lanzo respectfully requests that your Draft be substantially amended to delete suppositions and conclusions that have no basis in fact.

The Contract Design Criteria Package under which Lanzo proceeded with its work defines the Stormwater System for a Drainage area including at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots (DCP-1.04-C-2-g). This stormwater system drainage area has not changed despite what your draft Report concluded.

As a Progressive Design Build, Lanzo partnered with engineering firm Wade Trim, the City of Miami Beach, and the City's engineer Stantec Consulting to develop plans and construct the Palm and Hibiscus project in accordance with the Contract Design Criteria, all in full public view. Please note the following points associated with this endeavor:

- Twice monthly coordination meetings were typically held with the partners and stakeholders to update progress and path. The planning was well-coordinated and transparent.
- Plans were updated as required to accommodate current work definitions. There were no separate parallel plans as implied by the Draft OIG report.
  - o Permit plans of February 19, 2016 represented the proposed stormwater system as of February 19, 2016.
  - o The plans of February 19, 2016 evolved into the May 27, 2016 plans initially used for construction.
  - o The May 27, 2016 Plans have currently evolved into the May 20, 2020 as-built plans being utilized for Permit Modifications.
  - o Drainage areas, treatment and outfalls did not change through this evolution.

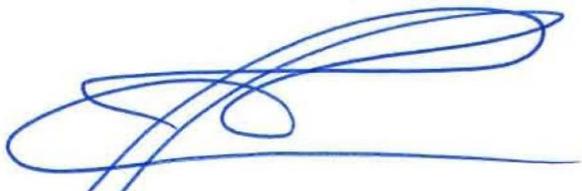
Please note that South Florida Water Management District (SFWMD) issued Environmental Resource Permit 13-06125-P for the Palm and Hibiscus surface water management system. In response to the discussion concerning the addition of yard drains to the system, SFWMD stated “The installation of yard drains within the permitted surface water management system as described below will not require a permit modification.” (July 30,2020 email attached).

The Draft OIG report discussed the innovative design associated with the Lanzo-constructed City of Miami Beach Sunset Harbour Neighborhood Improvements Project. The national publication, Engineering News-Record, recognized the Sunset Harbour Neighborhood Improvements Project with an award for Best Water / Environment Project – 2017 (attached). The City of Miami Beach, Lanzo / Wade Trim partnership was recognized nationally for innovative design and construction. It is important to recognize that Sunset Harbour Project was the first of its kind in a Miami Beach commercial area. The Palm and Hibiscus Neighborhood Infrastructure Project is also the first of its kind in a Miami Beach residential area, yet somehow the Draft Report seeks to cloud this accomplishment with some darkness that is not deserved.

Please correct the misrepresentations in your report. Lanzo did not deceive the City or other Stakeholders regarding this Project.

Lanzo is proud of the work performed for the City of Miami Beach and looks forward to future contracts with the City.

Sincerely,



Bob Beaty, PE  
Assistant Secretary  
Lanzo Construction Co., FL.

## Bob Beaty

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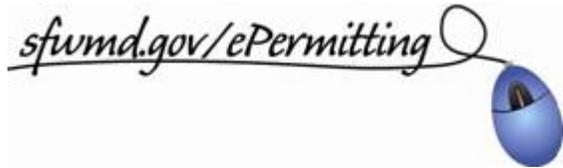
**From:** Wood, Dustin <duwood@sfwmd.gov>  
**Sent:** Thursday, July 30, 2020 3:30 PM  
**To:** Penkosky, Jim  
**Cc:** Gomez, David; Samadi, Mina; Perez, Rodney; Jeffrey Crews (jeff.crews@stantec.com); Bob Beaty; Victor Serrano; Mullen, David; Suarez Toledo, Lisel  
**Subject:** RE: Miami Beach P&H ERP Permit 13-06125-P: No permit mod action required

Jim,

The installation of yard drains within the permitted surface water management system as described below will not require a permit modification.

Thanks,

DUSTIN WOOD, P.E.  
SECTION LEADER  
ENVIRONMENTAL RESOURCE BUREAU  
3301 Gun Club Road, West Palm Beach, Florida 33406  
561 682-2624 • 800 432-2045 Ext. 2624



### NOTE:

While the District supports that it is commonplace and convenient to collaborate via email during the pre-application/application process, Permit Applications and Responses to a Request for Additional Information (RAI) submitted via email are not an official submittal (Section 4.4 of Environmental Resource Permit Applicant's Handbook Volume I). For timely and efficient processing of permit applications and RAI responses, please submit online using ePermitting (link above).

*Florida enjoys a broad public records law. Any emails sent to or from this address will be subject to review by the public unless exempt by law.*

---

**From:** Penkosky, Jim <jpenkosky@wadetrim.com>  
**Sent:** Thursday, July 30, 2020 2:01 PM  
**To:** Wood, Dustin <duwood@sfwmd.gov>

**Cc:** Gomez, David <DavidGomez@miamibeachfl.gov>; Samadi, Mina <MinaSamadi@miamibeachfl.gov>; Perez, Rodney <RodneyPerez@miamibeachfl.gov>; Jeffrey Crews (jeff.crews@stantec.com) <jeff.crews@stantec.com>; Bob Beaty <BobB@Lanzo.org>; Victor Serrano <VictorS@Lanzo.org>; Mullen, David <dmullen@wadetrim.com>; Suarez Toledo, Lisel <LiselSuarezToledo@miamibeachfl.gov>

**Subject:** Miami Beach P&H ERP Permit 13-06125-P: No permit mod action required

[Please remember, this is an external email]

Good afternoon, Dustin.

In a follow-up to our conversation, it is my understanding that the work described herein is considered 'de minimus' and no permit mod is required for the subject permit (attached for convenience). Briefly, as part of the project the City has asked the design-build team of Lanzo and Wade Trim to provide for drains within select private properties to assist in localized drainage at those properties. The ERP project description is right-of-way based. So we did want to inform the District of our encroachment into the private side at an average of 10' into each property.

We further submit the following points.

- The base collection, pumping, and discharge system all remain unchanged
- Drainage basins are unchanged
- Permitted acreage is 25.53 which constitutes all public ROW on Palm and Hibiscus Islands
- A conservative estimate based on a 10' wide construction activity into each of the 39 private properties equates to a cumulative 0.16 acres or 0.63% of the permitted acreage (at most)
- DERM permitting for each property is almost complete and property owner agreements are all in place for the work

We further understand that all requirements of the permit remain in effect including final SFWMD inspections and as-built/certification forms to be submitted.

Please let me know if you have any further questions or you can provide concurrence of this understanding. Thank you again for your guidance in the matter.

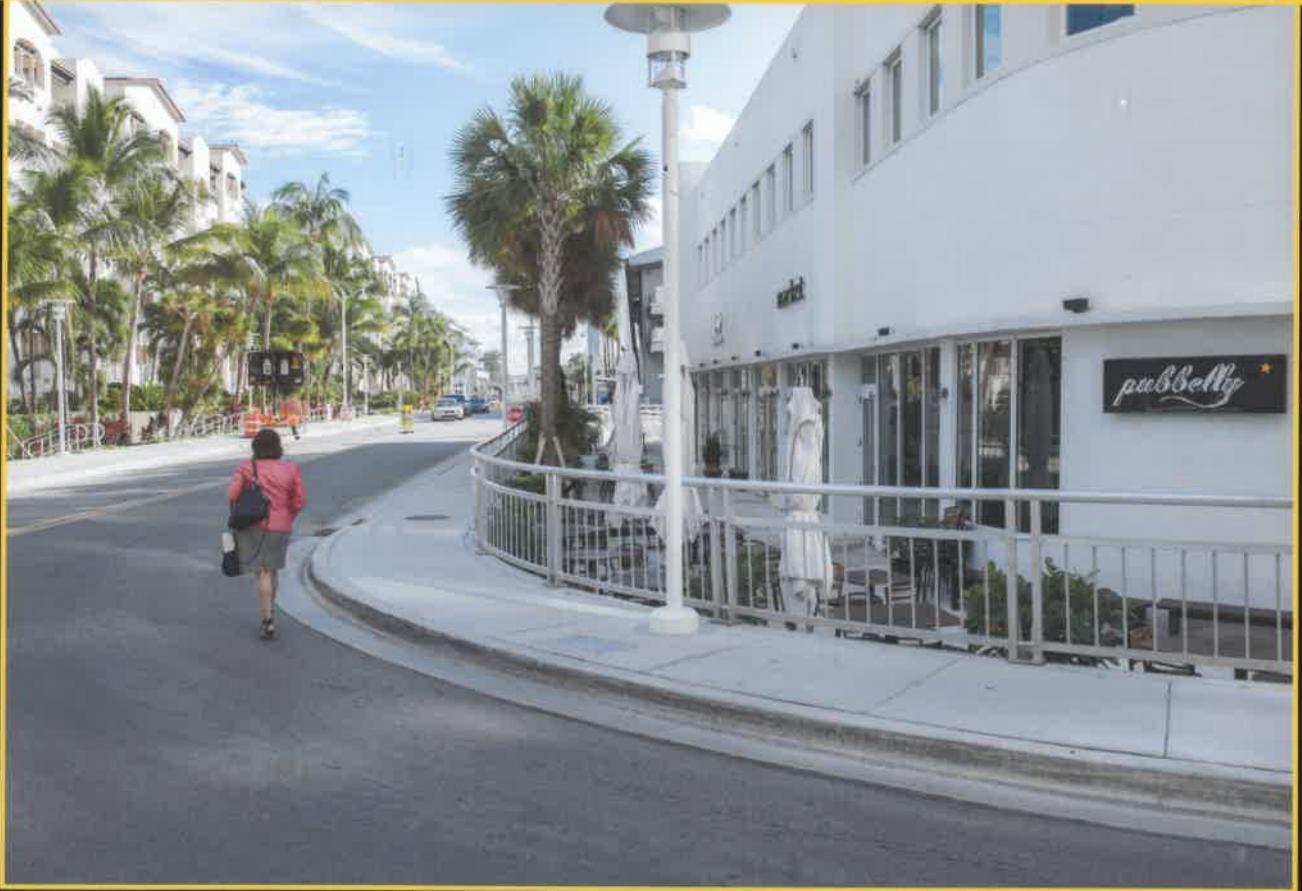
Best Regards...Jim

[COVID-19 Planning and Response at Wade Trim](#)



**Jim Penkosky, PE**, Senior Project Manager  
2100 Ponce de Leon Blvd, Suite 940, Coral Gables, FL 33134  
786.361.1645 office

# ENR | REGIONAL <sup>2017</sup> Southeast | BEST PROJECTS



**BEST WATER/ENVIRONMENT PROJECT**

## SUNSET HARBOUR NEIGHBORHOOD IMPROVEMENTS

GOLD SPONSORS:

aconex  
CONSTRUCTION SOFTWARE

BERGERON



McGraw-Hill Construction

SKANSKA



## McGee, James

---

**From:** Bruce Mowry <bmowry@att.net>  
**Sent:** Tuesday, January 5, 2021 1:31 PM  
**To:** Alonso, Elisa; McGee, James  
**Cc:** Centorino, Joseph  
**Subject:** Re: Cover Letter and Draft Report: OIG No. 20-07, Office of Inspector General Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project

[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]

Jim,  
I have thought a lot about the report over the past several weeks. My position is still the same that when this draft report references policy that were given by me, it reflected the direction given by the City Commission and City Management. As I had stated that the City Engineer position within the City of Miami Beach is at a level below a Director or the City's Executive Management Team.

The City Commission gave direction by actions such as approving a sea level projection curve showing the expected levels that needed to be followed for all actions of the City. The Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project was to be completed to meet these actions.

The City Commission approved to allow for connections to nonpublic properties within the city. This first official action by the Commission for these types of connection occurred when they approve the connection for the new hotel that was built at the intersection of 17th Street and West Avenue. This action allowed for the City to charge for this use in the future, when a policy was to be developed to establish the value of this connection. Later action by the City Commission established that there would not be a charge for these connections within the city. This is the why you will see references in Palm and Hibiscus Project that connection points were to be made available to the private land owners with a potential fee charged in the future.

The Regulators were aware of these policies because they had to approve the connection for the new hotel at 17th Street and West Avenue. A significant amount of the storm waters within the city actually originates on private land and either drains on the surface into the public right of way or directly piped into the City's storm water systems.

The Regulators are aware that during high tide events, a significant amount of groundwater actually either rises up about ground level or reverse flows up out of the permitted stormwater disposal wells and into the City's stormwater system. With the porous soils under the city, this groundwater flow cannot be stopped. The City had a study with INVEST that looked at other locations and this study showed that 200 feet deep walls may have to be constructed below ground to prevent this ground water flow from the ocean and it was not feasible. We considered a method to plug the soil formation just below the surface of the city and the Regulators objected and the City Manager and City Attorney instructed that we not further develop this type or solution.

The only solution that was supported by the City Commission and City Management was to elevate to above the accepted sea level projection curves to prevent this type of flooding. This would mean that private homes and building below these elevations would be subject to flooding.

In summary with sea level rising, the City can look at Resist (building walls and pump systems and accept flooding), Resiliency (build all infrastructure to meet the sea levels) or Retreat (this policy to retreat was not acceptable to anyone).

I enjoyed my time with the City of Miami Beach as their City Engineer and this is why I was willing to work the long hours for the residents of the City.

Thanks,  
Bruce

Bruce A. Mowry

40 Foxcroft Run

Ormond Beach, FL 32174

email: [bmowry@att.net](mailto:bmowry@att.net)

cell: (386) 262-4943

On Tuesday, December 8, 2020, 02:49:17 PM EST, McGee, James <jamesmcgee@miamibeachfl.gov> wrote:

Mr. Mowry,

Good afternoon sir.

Thank you for these comments, and for your willingness to provide a more detailed response over the next several weeks.

Best regards,

Jim McGee

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---

**From:** Bruce Mowry <bmowry@att.net>

**Sent:** Tuesday, December 8, 2020 1:39:48 PM

**To:** Alonso, Elisa <ElisaAlonso@miamibeachfl.gov>

**Cc:** Centorino, Joseph <JosephCentorino@miamibeachfl.gov>; McGee, James <JamesMcGee@miamibeachfl.gov>

**Subject:** Re: Cover Letter and Draft Report: OIG No. 20-07, Office of Inspector General Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project

**[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]**

Good Morning Ms. Alonso,

I did a brief review of the document and it appears to be well written. I will complete a more detailed review of the document over the next several weeks.

A minor comment is that when you reference a change in elevation from 2.2 feet NAVD to 2.7 feet NAVD, this is not 5 inches because it is referenced as tenths of a foot. This make the change actually 6 inches in elevation change.

It should also be noted that the City Engineer is actually sub servant to the Director of Public Works and all direction of standards had to have the Director of Public Works approval. You can verify this by looking at the organization chart for the Department and also see that the City Engineer's pay grade was below that of even the Assistant Public Works Director. I had discussed this with the City Manager to see if the City Engineer should be upgraded to a higher level to review all standards of the City and he did not agree with this change.

When the elevation changes were established for Palm Island, the City Engineer had to discuss these changes with the Director of Public Works for his approval. The Director of Public Works and I did have these discussions, before I gave direction for the design of Palm Island to CIP. I did concur with the direction and we made these decisions due to increases in sea level. We had observed high tide elevations of greater than 2.2 feet beginning to occur during the years of the project design.

In the Director of Public Works discussions, we looked at the existing home elevations that were below 2.2 feet NAVD. These homes were experiencing flooding prior to construction of the project and due to the soil formations under

the City of Miami Beach, flooding of these homes would continue with or without the streets being raised. The water actually flowed up from under these homes during high tides and this was documented by the contractors with videos with water flowing out from under one to these house. The only solution to stop this flooding of the homes would be to elevate the finished floor to above the high tides. You can look at the planning curves adopted by the City Commission and you will see that these low elevation homes will all be flooded out within the next 10 to 20 years. (If a home owner asked me about the future of their home and I would tell them to either look at elevating their home or build a new home at the new required standards of the City.) The new homes being built in this area are being elevated as much as 6 to 8 feet higher.

The City Engineer did not direct any work or manage any aspect of the work or contracts being performed by CIP. The capacity of the City Engineer was to support CIP in the appropriate standards of the City that should be followed. CIP actually directed the design of their projects as was confirmed by this report. As was noted, I cautioned CIP in one of their meetings with the contractor that they build what was on the design drawings and stop changing the design.

Thank you,  
Bruce

Bruce A. Mowry

40 Foxcroft Run

Ormond Beach, FL 32174

email: [bmowry@att.net](mailto:bmowry@att.net)

cell: (386) 262-4943

On Friday, December 4, 2020, 07:14:47 PM EST, Alonso, Elisa <[elisaalonso@miamibeachfl.gov](mailto:elisaalonso@miamibeachfl.gov)> wrote:

Good afternoon Mr. Mowry,

Please find attached the cover letter and draft report OIG No. 20-07, Office of Inspector General Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project for your review and comments.

Thank you! Have a nice weekend!



Elisa Alonso, *Executive Assistant*

City of Miami Beach

OFFICE OF INSPECTOR GENERAL

1130 Washington Avenue, 6<sup>th</sup> Floor

Miami Beach, FL 33139

Tel: 305-673-7000 ext. 26725 | Fax: 305-587-2401

**Hotline: 786-897-1111**

[elisaalonso@miamibeachfl.gov](mailto:elisaalonso@miamibeachfl.gov)

[www.miamibeachfl.gov](http://www.miamibeachfl.gov)

This message contains information which may be an **AUDIT or INVESTIGATION WORKING PAPER** and/or may be confidential, privileged, or otherwise exempt from open records per State of Florida Statutes - Section 119.0713(2)(b). Unless you are the addressee (or authorized to receive for the addressee), you may not use, copy, or disclose to anyone the message or any information contained in the message. **PLEASE CHECK WITH THE OFFICE OF THE INSPECTOR GENERAL BEFORE RELEASING THIS E-MAIL IN RESPONSE TO A PUBLIC RECORDS REQUEST.** If you have received the message *in* error, please advise the sender by reply e-mail and delete the message.

MICHAEL R. BAND, P.A.  
1224 ALFRED I. DUPONT BUILDING  
169 EAST FLAGLER STREET  
MIAMI, FLORIDA 33131

MICHAEL R. BAND

TELEPHONE: 305 372 8500  
FACSIMILE: 305 372 8504  
MICHAEL@BANDLAWFIRM.COM

February 2, 2021

Joseph Centorino  
Office of the Inspector General  
1130 Washington Avenue, 6<sup>th</sup> floor  
Miami Beach, Florida 33139

Re: Eric Carpenter – Confidential Draft Report (Palm and Hibiscus Islands Infrastructure Project)

Dear Mr. Centorino:

I write, initially, to thank you for the opportunity to meet with you on Friday, January 22, 2021, and to supplement our earlier submissions.

While we respond to your additional questions (in our latest attached submission) I again must address our misgivings about the OIG inferences and conclusions and your lack of response to our queries:

1. Rush to judgment: The OIG's pursuit of answers without the project's completion is confounding and premature. Allowing for the completion of the project – approximately three to four months from today – would allow a more honest, accurate and complete assessment of the project. My earlier analogy to a post-mortem being conducted before the death of the patient remains true. The inability of the OIG to explain why it must be completed now should be explained. One can only conclude that the OIG is facing political pressure to get something before the Commission. The use of an OIG report to further an agenda is a dubious exercise at best and a very dangerous course at worse. Political considerations should have no place in the work of the OIG.

2. Motivation of the City administration to run afoul of the permitting requirements: At our meeting, you acknowledged no personal agenda for Mr. Carpenter or other members of the City's administration in their efforts to allegedly violate regulations in an effort to advance the project. If I understand the OIG's position it was the former mayor's "pressure" to "get it done" which propelled the process forward and allegedly caused corners to be cut and permitting regulations to be ignored. Does this theory hold water? What evidence exists which suggests that the former mayor demanded the city administration to move forward without regard to regulations? What proof supports the suggestion of untoward pressure on the administrators? It is at best conjecture which lacks any supporting pillar.
3. Use of incendiary language: In our conversation you seemed to retreat when challenged on its use. While we do not know what the final report will look like the assertions of deceit and intent to mislead particularly the language: "not truthfully", "false or misleading", "deceived/deception" in the executive summary and the references to "violation of the law" should be removed.

In Mr. Carpenter's latest submission, he answers the OIG's investigator's questions in clear and unambiguous language which challenges the underpinnings of the draft report. While the OIG might suggest that this reflects a difference of opinion I would strongly disagree and offer again to meet with the OIG to engage in a candid discussion once the project is completed. Rather than engage in finger pointing a serious attempt at reconciling our competing positions should be made. We have attempted to provide an honest recitation of the facts without any spin. Candidly, as explained in all of our submissions, the conclusions reached by the OIG seemed colored by hindsight. Looking at the "facts" through the trick binoculars of hindsight, which

Letter to Joseph Centorino  
February 2, 2021  
Page 3

makes all things easy and all men wise makes little good sense and casts aspirations on the honest efforts of good people.

The Palm and Hibiscus project represents an innovative solution to the caustic effects of sea rise and climate change. The project epitomizes a successful collaborative effort which offers the residents a life altering positive step forward. It was not a “perfect” project. But rarely is anything perfect. The end result will manifest a positive change for the residents. The OIG Report diminishes the best efforts of the City’s administration to innovate and move forward. An effort that should be applauded.

Sincerely,

*/s/ Michael R. Band*

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January 22, 2021

Joseph Centorino

Office of the Inspector General – City of Miami Beach

1130 Washington Avenue, 6<sup>th</sup> floor

Miami Beach, Florida 33139

Re: Eric Carpenter – Confidential Draft Report (Palm and Hibiscus Islands Infrastructure Project)

Dear Mr. Centorino:

Initially, allow me to thank you for the opportunity to address the Confidential Draft Report on the investigation your office has undertaken concerning the management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project (hereinafter the Report) and express on behalf of my client the misgivings we have as to the allegations contained therein. We welcome the opportunity to engage with you and your staff in an open and candid manner.

The first issue I must address is what can only be characterized as a rush to judgment. The Palm and Hibiscus project is approximately four months short of completion. Rarely does one participate in a post-mortem *before* the expiration of the patient. With the project so close to completion it ill behooves the OIG from weighing in before it is completed so that the success or failure of the project can be viewed with greater precision. At the conclusion of the project, one's perspective would be sharpened to determine: (1) has the project met its goals; (2) is it within budget; and (3) have the permitting issues been resolved. Your own mandate suggests

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that "...whether a particular project or program is necessary and if deemed necessary, whether the method used for implementing the project or program, is or was, efficient both financially and operationally." "Efficient", as defined by Merriam Webster, is capable of producing desired results with little or no waste (as of time and materials). There can be little doubt as to the necessity of the project. The cost of the project fell within the budgetary constraints set by the City Commission. And finally, the "permitting issues" are in the process of being resolved to the satisfaction of the regulatory agencies. Again, respectfully, we suggest the issuance of the Report is premature and a four-month delay after all the facts are gathered is not only prudent but the only responsible course to pursue.

Miami Beach is a community under siege by nature brought about by natural forces and climate change and exasperated by a failing infrastructure that predates by decades any thought envisioning an oncoming environmental cataclysm. The City in a valiant effort to turn back the tide created from scratch new solutions to combat the encroaching seas. While Miami Beach's situation is not unique there are no models which would aid the strategy to halt the advancing waters. Innovation is the key and the efforts of the City's personal should be applauded and not subject to "Monday morning quarterbacking." Long time dedicated career employees should not be pilloried, and their careers jeopardized by unsupported and erroneous allegations. Instead, their efforts should be celebrated and applauded.

Allow me to turn our attention to the Report itself. The Report reads like a prosecutive summary memorandum. Its words are incendiary, and its conclusions are overblown or lack a basis in fact. The Report is rife with allegations of deception: "the City did not truthfully describe..."; "applications as written were false or misleading..." The Report – if true – presents a damning

indictment of the actions of the City's employees. As evidenced in our responses to the Findings and the comments provided by Eric Carpenter, Roy Foley and David Martinez, we dispute the underpinnings of the Report. Messrs. Carpenter, Foley and Martinez offer detailed explanations coupled with exhibits which vindicate their position. In clear and unvarnished language, they lay ruin to the OIG's position. Curious in what the Report lacks is the suggestion of any ill motive on the part of the City employees. Given the alleged *intent* of the City's employees to deceive this failure to articulate a motive on the part of employees is striking. This "why" completely absent from the Report calls into question the Report's allegations. Were the City employees participating in a "deception" to benefit themselves or others? Were they going to receive some benefit or compensation for falsely presenting documents to the regulatory agencies? Would their careers be advanced? The failure to establish any motivation on the part of the City employees to engage in wrongful conduct is an omission which renders the Report's conclusions suspect and unfounded.

The unfair characterizations of actions taken by the City employees demean them and calls into question the bone fides of the City's devoted staff. A staff that was diligent in putting the needs of the City and its residents first.

As articulated in the response to the Findings the OIG misapprehends the overarching process and the actions that the staff engaged in. A position supported by Lanzo and Wade Trim in their January 15, 2021 letters to the OIG addressing the Report.

Finally, again, we return to the issue of the timing of the issuance of this Report. It is premature and once the project is concluded a more fulsome explanation and discussion of the project could and should be had. In a fashion you are boxing yourselves in by not waiting a relatively short

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period. The OIG will have to return to the completed project and draft a new report. The “interim” report offered is misleading, full of hyperbole and demonstrates a lack of understanding of the process and the roles of the City’s administrators in it. Rather than engaging in a piecemeal presentation the OIG should commit to a fair and balanced approach when all the outstanding issues are resolved, and the final costs of the project are known. Eric and the staff – and the residents of Miami Beach – deserve the opportunity for an intelligent discussion once *all* of the facts are in.

We hope that you review our responses to your Report and its Findings with honesty and vigor. The individual responses provided by Eric, Roy and Daniel provide an honest assessment of their understanding of the process and a candid answer as to their participation in same.

We look forward to meeting with you.

Sincerely,

*/s/ Michael R. Band*

Michael R. Band

# MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, FL 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

## MEMORANDUM

To: Joseph Centorino, Inspector General

From: Eric Carpenter, Assistant City Manager 

David Martinez, Capital Improvement Projects Director 

Roy Coley, Public Works Director 

Date: January 21, 2021

Subject: Response to Office of Inspector General (OIG) Draft Report 20-07

In addition to this collective report, each of the individuals above prepared their own response, which is also attached to this report for a complete response. In order to respond to this report, which looks back nearly eight years, the Administration of the City of Miami Beach (City), represented by those signatures above, believes that it is important to begin by providing some context.

The City is a low elevation barrier island surrounded by tidal waters; in most cases within a few feet of the existing ground elevation. As such, we find ourselves at the forefront of the battle against climate change and sea level rise. Through many years of study it has been determined that not only do the waters surrounding the island respond to the tides, but also the groundwater elevations mirror the surrounding tidal elevations. As a result the City is not only susceptible to the heavy rainfall and flash flood events that plague all of South Florida but also vulnerable to the problem of "sunny day" or tidal flooding.

Historically the City has relied upon gravity based drainage systems that only function when the coastal waters are lower in elevation than the water in the stormwater collection system. Unfortunately as tidal elevations have increased over the years, the existing gravity based systems became less and less effective at times of high tides; to the point that they experience reverse flow where groundwater or baywater flow backwards through the system and flood the streets and low lying yards. This situation has gotten progressively worse over time, as evidenced by not only the scientific data, but also resident surveys (such as the 2016 Citywide Resident survey by ETC Institute, where 76% of the residents have observed coastal water level increases).

The frequency of flooding events and the existential concerns surrounding them began to draw the attention of national media as well as the insurance industry. While media outlets like Rolling Stone were screaming out "Goodbye Miami" discussions were taking place in Washington DC surrounding the National Flood Insurance Program (NFIP) and the legislation (Biggert/Waters Act) that required a more risk based approach to rate setting, and which may significantly impact the ability of property owners to obtain flood insurance and, consequently,

federally backed mortgages. It became very clear that ignoring the issues and concerns was not a reasonable option.

The City began to take into account the clear changes in the stormwater/tide water dynamics by studying sea level rise in conjunction with the Southeast Florida Climate Compact, South Florida Water Management District, several universities, and our expert consultants. The findings were incorporated into all of our planning efforts, including adoption of the unified sea level rise projections (Attached as Exhibit 1).

Despite significant efforts to learn from other hydraulically challenged areas (sending a team to the Netherlands to find out how the Dutch have learned to live with water; studying the impacts of hurricane Katrina on the New Orleans area), it became clear that the speed with which water can move within the porous limestone subsurface in Miami Beach created a need to find a new approach. As a result, we began to look at other solutions beyond dykes and levees.

The City is an interesting situation as much of what is known today as Miami Beach was filled in with dredge spoils from the bay bottom or sand/limerock that was imported from areas of inland Miami. The island was literally elevated out of the sea in the early 1900s. As Miami Beach approached its 100<sup>th</sup> birthday, it was becoming increasingly evident that the only way it would still be around in another 100 years, was if it continued to elevate ahead of the sea levels through new, alternative, and soundly engineered solutions.

As a result of many discussions with outside experts, community stakeholders and City officials the legislative direction began to evolve with a sense of urgency, commensurate with a world class City; one that is home to \$40 Billion worth of real estate that was at risk of losing significant value due to the advancing seas. The City took bold and necessary steps that changed the approach of many communities in how they planned and implemented the inevitable adaptation to sea level rise. The significant changes in approach created many challenges, including but not limited to, the areas of engineering, public perception and regulatory compliance. This is to be expected with the development and evolution of any transformational change.

The City took great effort to bring the many different stakeholders along on the journey of creating a new playbook for vulnerable communities. As with all change, this was difficult and created situations where those that did not share the same level of concern, or were uncertain that the changes might not be worth the difficult transition, became frustrated and responded negatively. Please see an example of the level of public engagement, as described in the presentation for the Joint Workshop of the Neighborhood and Community Affairs Committee and Mayor's Blue Ribbon Panel on Sea Level Rise and Flooding (Exhibit 2).

The City enlisted the best available science and outside expertise, utilizing two of the top three global design firms (as ranked by Engineering News Record for the past seven years), AECOM and Jacobs Engineering, as the lead consultants during the evolution and reevaluation of this program. The City also solicited the services of a diversity of volunteer experts through the Urban Land Institute to evaluate the City's actions and provide critical feedback on what could be done better. The collective of these nationally and internationally renowned experts all concluded that the approach of the City was prudent and necessary (See attached AECOM, ULI and Jacobs study results attached as Exhibits 3, 4, and 5 respectively).

Potentially the greatest challenge of breaking out of the status quo was demonstrating to the regulatory agencies that the same approach that had continued to become less and less

effective due to changing conditions was not sufficient to overcome the evolving threat of sea level rise. This was further exacerbated by a prior employee of the City that significantly undervalued the role of the regulatory community and ultimately was removed from his position due to his cavalier approach to the need of following the requirements of those agencies. This difficult evolution created situations that allowed for individuals with political motivations to plant seeds of distrust in the minds of the regulatory agencies toward the City. Despite efforts at all levels of the City Administration (including monthly meetings beginning in October of 2016, to open the lines of communication with the regulatory agencies), the City was still unable to overcome the distrust that had been growing as a result of the efforts of those that intended to undermine the program.

The evolution of the stormwater program included the gradual increase in understanding of the impacts to those properties that had historically relied on the flow of water from private to public property. The building code of Florida is clear that private properties are responsible for managing all water that falls upon their property. That perspective did not address the moral obligation to leave all properties in a better position after completion of the work than before. The City underwent this evolution of thought that contemplated the entire City, both public and private. The understanding that both must raise to keep pace with the rising tides is a challenge, particularly during the transition period where one or the other of these processes may get ahead. As a result, and with the full transparency and direction of the City's Blue Ribbon Panel on Flooding and Sea Level Rise and City Commission, the scope of these projects included additional requirements, concepts such as maximum flood stages below the finished floor elevations of homes and the inclusion of private property drainage connections to facilitate the transition period.

The incorporation of the secondary drainage system on Palm and Hibiscus evolved as well. The initial modification was only the inclusion of stub out pipes from the existing primary drainage system that remained unchanged. Since these stub outs were not connected to anything there was no additional water entering the system. Subsequently the Design/Build team used some of these stub outs as temporary construction drains within the right of way during the construction activities (see attached photos Exhibit 6) and more recently properties went through a separate permitting process and received private property drains that will remain until these low lying properties redevelop and are required to elevate out of the floodplain. The impacts of this real time development of solutions created modifications to the Palm and Hibiscus Island Neighborhood Improvement project that could have been handled better, had there been unlimited time to evaluate. The City Administration acknowledged these shortcomings in its presentation in the Commission Workshop on Resilience held January 27, 2020. A copy of the presentation is attached for clarity (Exhibit 7).

Interestingly, although the City acknowledged many of the findings of this report in a Commission workshop on January 27, 2020, it took nearly another 12 months for the Office of the Inspector General (OIG) to prepare a draft report which echoes the same thoughts. Notwithstanding, the OIG's report includes, in our opinion, a significant amount of innuendo and editorializing which, in our opinion, serves no purpose other than insinuate wrongdoing where none has occurred. Furthermore, after over a year spent on generating this report, despite several requests from the Administration for extensions beyond the 30 business day response time, which happened to fall during the holidays and a global pandemic, those requests were rejected by the OIG. Why are the facts from staff that were involved from the beginning less

important than the conjecture of those who are trying to decipher a very complex issue after the fact?

Finally, the real truth is that there were many decisions made that created an evolution of the Palm and Hibiscus Neighborhood Improvement project. All of those decisions were made with the best interest of the City, and with the clear direction and approval of the appropriate authorities within the City. There were decisions made by the contracted Design/Build firm that are now being questioned by the regulatory authorities, that are open to debate. However, there was no ill intent, nor any intentional omissions, as can be demonstrated by the lack of clear evidence to the contrary; despite a year of investigation.

Furthermore, there was a level of communication at both the macro and micro levels with the regulators, including documentation via letter from Wade Trim on May 10, 2018 (attached as Exhibit 8), clearly identifying the modifications of the project over time. Even though the importance of this letter was brought up in an email from City Manager Jimmy Morales (attached as Exhibit 9) it was limited to an excerpt from the letter buried on page 99 of the OIG's report and glossed over preferring to continue to use words like deception and misrepresentation. This letter, along with the signed application submitted by the City via email on May 15, 2018 was before the response from DERM, stating that it needed a certification from the Engineer of Record stating there were no changes, and well before the September 19, 2018 email from the alleged whistleblower.

- There was no information hidden from the regulators, it was provided to them in writing prior to permit renewal being applied for in May 2018 including the reference to the secondary drainage system connections. Furthermore, it has recently been confirmed by the South Florida Water Management District that the introduction of the secondary drainage system will not require any additional documentation or a permit modification.

It appears that individuals from the Design/Build firm, after being intimidated by the approach and the actions of the OIG, (which were extremely aggressive and led to an overall feeling of persecution and degradation of morale for all involved) may have made statements that they thought would insulate them from any responsibility but they are not based in fact, merely opinion.

The reality is the project is nearly complete, the systems in place function as intended, as can be seen by the attached before and after photos of the Coconut Lanes (Exhibit 10), and the regulatory agencies have at this point agreed and permitted almost all of the proposed connections. Those that do not receive permits will not be connected as was originally contemplated.

This entire exercise felt from the start that it was determined to find some issue where none exists, other than what was acknowledged already a year ago. This begs the question of what is the real motivation and intent here? In the end, the OIG's draft report has clearly omitted or manipulated facts to substantiate some objective that we are not privy to, but which, in our opinion, is intended to be punitive and not instructive.

Below please see the responses to the individual findings. The City Administration hopes that the information included herein can help to clarify some if not all of the misguided conclusions in the report.

***Response to Finding # 1.*** *The City and Lanzo, having failed to disclose to DERM and SFWMD the plans they intended to use to build the drainage system, obtained two permits from the regulatory agencies based on false and misleading information.*

This finding speculates, and erroneously concludes, that the City and Lanzo conspired to obtain a permit from DERM and SFWMD utilizing false and misleading information. This finding demonstrates a fundamental misunderstanding of the standard procedures and practices surrounding drainage permits. Unlike a typical building permit process, which requires progressive inspections by State certified inspectors, drainage permits issued by DERM do not follow that procedure. DERM reviews engineered drawings and calculations, and issues permits based on those documents. Once the project is completed, the engineer of record submits signed and sealed as-built drawings, certifies the installation, and requests closure of the permit. At the time of permit closure, changes to the plans, whether resulting from unforeseen field conditions, design changes or owner directed changes, are recorded and documented. It is common and customary for close-out documents to “clean-up” those discrepancies between the permit drawings and the as-built conditions.

When comparing the two plans referenced in this finding, it is evident that the primary differences equate to the proposed roadway elevations and the addition of underground stub outs. The stub-outs, implemented in a proactive response to the evolving strategies to mitigate sea level rise, were included to provide the opportunity for future private projects to have a connection point. As a result, future private projects, which would be required to obtain their own permits, would be able to complete their installation without having to interfere with the main trunk lines or damage above ground installations.

The documents prepared by Wade Trim did not add inlets. This is not a material change, nor does it make the permit documents false or misleading. The DCP and early meetings with DERM clearly established the tributary area of the stormwater collection system for this project to include the entire right-of-way, the entire private, non-waterfront lots, and ½ the private waterfront lots. This did not change between the two sets of documents; is not a material change to the permit; and does not make the permit documents “false or misleading.” Simply stated, the Wade Trim drawings did not alter the functionality, effectiveness, or ability of the project to protect the Bay, and comply with Code. This finding attempts to equate normal and common project evolution to the nefarious presentation of false or misleading permit plans.

In the management of a majority of City projects, the City relies heavily on the experience and expertise of its professional consultants and State certified general contractors, to meet and comply with all regulatory requirements. Under the design-build delivery model for this contract, the design-builder, Lanzo, is responsible for the project development and permit management. This includes, through their sub-consultant(s), not only the preparation of permit drawings, but the management of permit revisions, renewals and closures. This is not limited to the pursuit of a drainage permit from DERM, but includes the design and permitting of water main replacement, sanitary sewer rehabilitation/lining, replacement of street lighting, landscape improvements, paving, signage and striping, and utility undergrounding. In short, this project is much more than a drainage project; it is a neighborhood enhancement project.

Given the above (and the importance of this project), the City, through its procurement processes, endeavored to obtain the services of the most qualified, experienced and capable professionals. Those efforts resulted in the engagement of Stantec, as the City’s design criteria

professional and resident project representative, and Lanzo, as the design-builder. Stantec, formerly known as Corzo, Costello, Carballo, Thompson and Salman (C3TS), was selected through the procurement process to serve as the City's design criteria professional and resident project representative. At the time of selection, as indicated in their response to the Request for Qualifications, C3TS was a local firm that had provided a broad array of services throughout South Florida for more than 24 years. The procurement process for design-builders endeavors to evaluate proposers and select the most qualified team. As evidenced in the response to the Request for Qualifications, Lanzo and Wade Trim, at that time, had more than 20 years of experience working together. In addition, both firms provided proof of meeting all of the Miami-Dade County pre-qualification requirements in the RFQ and accompanying addenda. Wade Trim, founded in 1926, demonstrated experience with design-build projects, and touted the benefits of a regional firm with local offices. In combination, the qualifications, experience, professionalism and contractual requirements for these firms establishes a balance and creates redundant measures to ensure proper project development and compliance with the contract.

In addition to the contractual oversight measures established for the project, the City also relies on State regulations which detail the responsibilities of professional engineers and general contractors. In addition to licensing and statutory requirements, the City's contracts explicitly also require compliance with regulatory agencies.

***Response to Finding #2.*** *The City awarded Lanzo a contract for the project's pre-construction design phase without a finished DCP.*

As defined in Florida Statutes 287.055 "Acquisition of professional architectural, engineering, landscape architectural or mapping services", the purpose of a design criteria package is to furnish sufficient information to permit design-build firms to prepare a bid or an agency's request for proposal or to permit an agency to enter into a negotiated design-build contract. The scope of services for the development of the Palm & Hibiscus Project DCP included landscaping /irrigation, street lighting, replacement of existing watermain infrastructure, improved storm water drainage collection and disposal infrastructure, including swale restoration, curb and gutter, lining of the existing sewer system and other facilities; street resurfacing /pavement markings, repair and/or extension of existing sidewalks to comply with ADA requirements; incorporation of traffic calming features, consistent with community preferences; and the incorporation and coordination of the undergrounding of franchise utilities on Hibiscus Island.

The Design-Builder was selected using the progressive design-build methodology, where the Design-Builder was to initiate the design period, encompassing the completion of the design to the level needed to define the actual construction costs and begin construction activities in the field. This included collaboration with the City during the design process to ensure that design solutions reflected the most efficient construction means and methods, and that the project was to meet the schedule, quality, permitting, and safety requirements; and procurement of long-lead items, conduct field investigations, and early release construction packages. Once the Design-Builder advanced the design to a sufficient level of detail necessary to produce a reliable estimate with well-understood risks and contingencies, the process would culminate in the submittal of a cost of construction (Guaranteed Maximum Price Proposal), to be approved by the City Commission, and fully executed GMP amendment.

Design Build Contracts transfer certain risks from the City to the Design-Builder. The D-B is responsible for data collection, utility coordination, regulatory permitting and compliance, development of construction documents which meet the requirements of the DCP, responsible for design errors and omissions, and ultimately responsible for the full coordination during the design and construction of the project.

The Design Criteria Package and the design completed by the D-B, which was the basis of the GMP included all the components in the scope of work; which, as stated, included more than just the drainage system. The project also included, but was not limited to, water main replacement, sanitary sewer rehabilitation/lining, replacement of street lighting, landscape improvement, paving, signage and striping, and utility undergrounding.

The DCP was completed and provided to the D-B with the best information available at that time and a GMP contract was awarded to Lanzo for all the scope of work included in the project. Concurrently, the City's Storm Water Master Plan was being reviewed and updated to ensure a greater level of service for the residents. The City is steward to community desires and Commission direction. Subsequently, at the beginning of 2014, the City embarked to address sea level rise in order to reduce flooding associated with storms and seasonal king tides and to counter the effects of climate change. It is not uncommon for City projects to introduce changes in direction and policy during the entire development of a project.

***Response to Finding #3.*** *The City overrode the role of the project's Design Criteria Professional and adopted a DCP that did not provide Lanzo with clear guidance for raising road elevations on west Palm Island.*

The original Design Criteria Package (DCP) for the Palm and Hibiscus Islands Neighborhood Improvement project did not take into account the rapidly advancing science surrounding climate change and sea level rise. The original DCP for this project was actually created contemporaneously with the completion in 2012 of the very first Stormwater Master Plan that even took into account the existence of sea level rise. As the King Tide events unfolded during the early stages of the project, it became abundantly clear that the construction activities proposed would not solve even the flooding concerns at the time, not to mention the 30 year planning horizon worth of sea level rise that this project was to mitigate.

The legislative decision to change the tailwater elevation criteria to 2.7 feet NAVD, in February of 2014, would have meant that the roadway elevation of 2.2 feet NAVD, originally proposed for Palm and Hibiscus, would be regularly flooded within the useful life of the improvements. Additionally, the legislative direction to raise streets in February of 2015, gave direction to the Administration to update the goals of the project. Furthermore, the King Tides of September and October of 2015 resulted in significant flooding of the project area and the elevation of the tides (approximately 2.1 feet NAVD) made it clear that the project was being under designed on the sea level rise mitigation component.

It is worth noting that the DCP has many other elements including water, sewer, lighting, landscaping, striping, signage and overhead to underground utility conversion. The stormwater component is just a portion of the overall DCP. In addition, the OIG report clearly identifies that the Final DCP was issued by Stantec on November 5, 2014, with requirements regarding inlet elevations and maximum flood stages, which are clearly measurable criteria for success of the stormwater system consistent with statutory requirements of a Design/Build contractual

mechanism. Any future modifications of the scope once the final DCP is issued can be accomplished by change order as was utilized in this project.

***Response to Finding #4.*** *After deciding to change the project's elevation criteria, the City failed to provide sufficient time and resources for Wade Trim to prepare construction plans for a drainage system designed to connect to private-side yard drains and verify its expected performance.*

It is important to understand the basic premise and genesis of the direction to raise roads. Numerous examples of sunny day flooding throughout the City demonstrated the urgency to address both the short term and long-term effects of climate change and sea-level rise. This was not a matter of nuisance ponding, but a matter of life safety and protection of property. The City needed to take action and the Commission, rightly so, tasked the Administration with developing a solution. This direction put the City on the front line of the battle against climate change and sea-level rise, and garnered world-wide acclaim. Unfortunately, there is no simple solution to this challenge, and in the early stages of the project there were no precedents to follow or case studies to review. The approach to mitigating sea level rise was an evolving process, and resulted in the Palm and Hibiscus project's evolution. Every decision and strategy required innovative, "outside the box," thinking, including changes to policies and ordinances. Everything was on the table. Arguably the single most important and impactful strategy to adapt to sea level rise was raising the roads, and eventually private properties, above the level where tidal changes cause flooding. Raising private properties is a long-term strategy and is being addressed through City legislation requiring new developments to build at higher elevations.

Roadways were/are a different matter that required a more immediate solution. In order to ensure that roads remained accessible to residents, and even more importantly, to emergency vehicles, they needed to be raised. The longer the City delayed the implementation of these mitigation strategies, the greater the risk to life and property. Delays, at a minimum, would impact basic City services and the quality of life of our residents. Recognizing the challenges and urgency, the City Commission took steps to implement the mitigation strategies. Between January of 2013 and July of 2020, the City Commission has heard/discussed more than 200 items related to storm drainage and sea-level rise. It is not insignificant to consider that the Commission's decision to change policy and allow private properties to connect to the public drainage system contradicts countless years of standard practice throughout the County, requiring all projects to manage drainage within their property limits. This was groundbreaking and recognized, as early as June of 2015, that the City would have to make some accommodations for those low-lying properties that had historically shed their rainfall onto the right-of-way. It is worth noting, that this policy establishes the parameters under which a private property is allowed to connect. Over time, as properties develop or re-develop at higher elevations, they will no longer meet those conditions, and the connections will be removed, returning to the long-established policy that each property will be responsible for their own storm water management.

The City approaches all changes to projects in the same manner: determine and verify the validity of the claim for additional compensation and time, and only then evaluate the fairness and equity to the City. It is not uncommon to receive requests for change orders, only to determine that the scope of the requested change falls within the contract requirements,

resulting in a rejection of the request. In this particular case, it is apparent that the project team did not support additional design fees. The rejection was not refuted by the design builder.

While the direction to raise roads represented a change to the design-build contract, it was not a material change to the design and construction of the stormwater collection, treatment and pumping systems. The original DCP established the tributary area of the stormwater collection system and included the entire right-of-way, the entire private, non-waterfront lots, and ½ the private waterfront lots. This criteria did not change with the elevation of the roadway. The system was still required to collect and process the same exact volume of rainfall.

***Response to Finding #5.*** *The City awarded Lanzo a \$38.5 million contract for the build or construction phase of the project without finished construction plans for the stormwater and hardscape sections of the project and no reliable basis for estimating costs.*

In order to understand how a contract could be awarded “without finished construction plans,” the OIG must first understand the project delivery model. As stated previously, the Palm and Hibiscus Islands Project is a **design-build** project, where the awarded firm is responsible for the design of the project, among other things. In the design-build delivery model, construction plans are usually incomplete and, with no known exception, never fully completed prior to execution of the contract for construction (GMP). In fact, there are many examples where design-build contracts are awarded for “turn-key” delivery, including all phases of project development and construction, utilizing only a design criteria and concept. Despite the complexity of this project, Design-Build contractors are well versed in this delivery method, and adept at preparing cost estimates and project schedules with limited information.

Again, it is important to emphasize that this project is not a stormwater project, but a multi-faceted neighborhood enhancement project. In addition to stormwater collection, treatment and pumping systems, the project drawings and scope included, watermain replacement, sanitary sewer rehabilitation, streetlight upgrades and replacement, undergrounding of overhead utilities, new roadway curbs, paving, signage and striping. One of the key advantages of the design-build delivery model is the compressed project delivery and acceleration of the timing of the project, with some construction activities taking place prior to the construction plans being completed. For example, in this case the contractor was able to commence water and sanitary sewer scope while the stormwater drawings and permitting were being completed. This is a significant timesaving strategy employed by most design-build firms, reducing overall project duration. The OIG’s assumption that construction plans must first be completed prior to award completely negates this benefit and demonstrates the office’s unfamiliarity with the delivery model.

In contrast to a conventional design-bid-build contract, where the owner is responsible for the design and engineering documents, design-build transfers a great deal of risk from the owner to the design build firm. The transferred risk includes constructability, design development, and permitting, among other items. The design builder knowingly and willingly accepts these risks, based on their level of comfort, experience and ability to estimate the construction costs. In this case, the design-builder obviously felt it had enough information to provide a cost estimate and schedule, or it would not have assumed those risks by providing a GMP proposal. The OIG’s report, again, fails to understand the nuances of this project delivery model.

It is also apparent that the OIG does not fully understand the processes or efforts employed by the City in the pursuit of fulfilling the fiduciary responsibility entrusted by the residents and City Commission. Again, the City establishes redundant measures to inform and guide the project. In the case of this project, the City relied on two different sources to verify the fairness and equity of the design builder's GMP proposal. Concurrent to the contractor's preparation of the GMP, the City contracted US Cost, Inc., a third-party cost estimating consultant, to prepare an estimate using the exact same documents available to the design builder. US Cost was engaged through the City's RFQ 30-10/11, Constructability, Cost and Value Engineering Review Services contract. US Cost, in their response to the RFQ, demonstrated 28 years of worldwide experience providing estimating and construction management services. At no time did the design builder or US Cost indicate that the information available was insufficient to provide a reliable cost proposal.

As a second source of verification, the City's design criteria professional, after reviewing both cost estimates, prepared its professional recommendation. Following the receipt of the GMP, the estimate from US Cost and the DCP's recommendation, the City presented the GMP to the City Commission, which authorized the City to negotiate with the design builder. As with all projects, the City endeavors to ensure the best possible negotiations including contractual terms for the City and its residents. The same is true here, as the design-builder's initial GMP proposal exceeded \$43M. Utilizing the estimate from US Cost and the professional recommendation of the DCP, \$34.9M and \$34.5M respectively, the City negotiated a \$38.5M construction cost, inclusive of owner's project contingency.

As a result of following the proper protocols, the City was able to ensure that negotiations were conducted in the best interest of the City and its residents. The GMP was a negotiated proposal, under the authorization of the City Commission, based on best information available.

***Response to Finding #6.*** *The City used CAS Engineer of Record Rubio and his 100% Final Design plans to obtain permits from SFWMD and DERM after deciding to discard those plans; after the permits were issued, the City used a distinctly different set of construction plans prepared by former Wade Trim Vice President Holly Kremers to build the stormwater drainage system on west Palm Island.*

Through the award of a design-build contract, the City transfers certain responsibilities and risk from the City and its consultants to the design-builder. Among those are design development and permit management. Through the City's procurement process, the City entered into a design-build contract with Lanzo Construction. Articles of the Agreement read as follows:

*Article 1.9- The design builder will be responsible for the professional services, design, supply, provision, construction, installation and performance of all equipment, materials and systems offered, and shall in no way be relieved of the responsibility for the performance of the project*

*Article 2.1- The Design-Builder shall perform the design and construction of the Project, as defined in the City's Request for Qualifications No. 251-2013TC including, without limitation, the Design Criteria Package...In summary, the Services include, but are not limited to, providing all resources and professional services to perform the design and construction of the Project such as planning,*

*technical investigations, engineering, design, permitting...testing and commissioning..."*

*Article 2.3- The Project includes furnishing all planning, engineering, design and permitting services... It will be the sole responsibility of the Design-Builder to secure all permits not provided by the City, and to provide signed and sealed design documents for construction and installation which comply with all regulatory requirements, Applicable Laws, and the Contract Documents.*

As a result of the Agreement, Lanzo entered into a contract with Wade Trim. The City has no contractual relationship with Wade Trim or any of Lanzo's sub-consultants or sub-contractors. How Lanzo proceeded to get this project designed, permitted and completed is entirely a means and methods concern. As long as they meet the requirements of the RFP and the DCP, they are in compliance with the contract. This includes the preparation and pursuit of permits.

Given that the City is not in contractual privity with Lanzo's subconsultants or subcontractors, it is erroneous to conclude that the City had the ability to dictate permit strategy or manage Lanzo's consultants, nor was it the City's responsibility to do so. The undeniable truth is that design-builders and engineers alike are in business to earn a living and make a profit. At the end of the day, their ability to cover their overhead and sustain their operation is a management concern, and how they do that is not a condition of the contract. In this case, it appears that Lanzo's prime consultant, Wade Trim, felt that it was necessary to reduce the overhead of an evolving and developing project by employing their own internal forces rather than continuing to pay additional fees to their sub-consultant. The City did not, at any point, **decide** to discard the Rubio plans. This was simply a change of sub-consultant by Lanzo and Wade Trim. For this project, in their capacity as the Prime Professional exercised and managed their option to sub-consult portions of their work to a Delegated Engineer. Under the Florida Administrative Code, 61G15-30, it is the Prime Professional's responsibility to retain and coordinate the services of such other professionals as needed to complete the services contracted for the project.

Further, this finding assumes that construction projects of this nature occur in a vacuum, where changes in an evolving sea-rise mitigation strategy do not impact ongoing project activities. If that were the case, all project activities would stop while strategies and policies are developed and finalized. The reality of construction projects, for a variety of reasons, is that projects are often fluid, changing and evolving. The project owner's priorities and parameters, as occurred in the Palm and Hibiscus project, often change during the design development phase. The City's contract clearly places the responsibility of design development, permit management, and code compliance on the design-builder.

To that end, the City relies heavily on the experience and expertise of the professional consultants involved in the project. The City, through its procurement processes, endeavored to obtain the services of the most qualified, experienced and capable professionals. Those efforts resulted in the engagement of Stantec, as the City's design criteria professional and resident project representative, and Lanzo, as the design-builder. In combination, with a combined experience of more than 150 years, the qualifications, experience, professionalism and contractual requirements for these firms establishes a balance and creates redundant measures to ensure proper project development and compliance with the contract.

**Response to Finding #7.** *The April 2017 resolution authorizing the City staff to develop an “engineering solution” and policy allowing the connection of private-side yard drains to the public drainage system was developed by the responsible City officials to provide after-the-fact legal justification for construction of a drainage system with unpermitted right-of-way drainpipes that were intended to provide future connections for privately owned drains.*

City Resolution R-2017-29840, approved on April 26, 2017 was not the first legislative direction that addresses a private stormwater connection. The first direction was at the June 10, 2015 City Commission meeting (Agenda Item R7Q) allowing the connection of the private stormwater system for the Marriott Residence Inn at 17<sup>th</sup> Street and West Ave, to the City stormwater system along 17<sup>th</sup> Street. The direction during this meeting was to provide a private stormwater connection for a single property and, as quoted from the City Commission Meeting “After Action Report”; “Until The City Approves Code Modifications To A Citywide Storm Water Connection Fee Program”. This, combined with the direction to size the stormwater systems to account for all of the inland lots and half of the waterfront lots, clearly demonstrates the direction if not the intent of the City Commission to include private properties in the adaptation plans, and not as an after the fact approval of modifications to the program. This is also refuted by the language in Resolution R-2017-29840 that it was intended to be a reaffirmation of the direction previously provided by the Commission.

**Response to Finding #8.** *The City began the large scale installation of private-side yard drains on west Palm Island and decided not to disclose the new phase of construction to the SFWMD and DERM, turn over an updated version of the Kremers plans, or obtain modification of the existing Class II permit to install private-side yard drains.*

First and foremost, this finding is demonstrably prejudice, stretching facts to achieve the needed confirmation bias for this report. There was no “large scale installation of private-side yard drains”. In fact, there were only eight building permits authorized for drainage connections from private properties. To provide perspective, this was eight connections out of approximately 300 properties in the Palm and Hibiscus project – less than 3% of the properties received private-side yard drains.

Assuming that the report was referring to all temporary construction drains, the finding essentially makes one fundamental claim – that the construction of the drains was purposely concealed from regulators. Setting aside, for a moment, all other issues, this finding exemplifies the most fundamental flaw in the OIG report – the finding is patently speculative.

**The OIG cannot substantiate a claim that any error in judgment was deliberate, or to use the OIG’s own words: “knowing, considered, and intentional”.** Not only can this claim not be substantiated, but it is unfounded.

The report fails to mention that immaterial project changes are ordinarily reconciled through permit modifications at project close out. While the significance of the yard drains may be arguable, the professionals working on the project clearly arrived at the consensus that these drains were immaterial.

The total project cost is \$40,956,000. The permanent right of way drains and private side inlets, including associated harmonization, were \$1,615,000 or less than 5% of the total project cost. Any large public infrastructure project as complex as Palm and Hibiscus incurs a 5% change in scope.

Moreover, Palm and Hibiscus was a design build project, where, by definition, the plans were not fully developed. It is not only reasonable, but expected, that a professional would deem a 5% change immaterial.

The temporary construction inlets were part of the contractors means and methods. Contractor means or methods are within the discretion of the contractor to implement in order to achieve a contract objective. Using the Palm and Hibiscus project as an example, the contractor could not adversely impact the level of service of the stormwater system while working on the system. The contractor decided that the best way to ensure that properties did not flood during construction was to construct temporary construction inlets. Means and methods are not dictated by the owner of a project and doing so could expose the owner to undue liability. In fact, as noted in the summary judgment of *Juno Indus. v. Heery Int'l*, 646 So. 2d 818, 822 (Fla. 5th DCA 1994), "The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for all safety precautions and programs, in connection with the Work as well as for coordinating all portions of the Work."

From a technical perspective, the original permit application, and the plans enclosed therein, defined the tributary area. An example of the tributary area is shown in Exhibit 11. The addition of the yard drains did not change the tributary area. Thus, not only was the change immaterial it was nonexistent from a runoff perspective. **The same amount of water was being captured by the system – if the original plans collected a drop of water, so would the revised set.**

It therefore stands to reason that the lack of permit revisions are not indicative of willful deception, but rather representative of ordinary project management decisions.

Perhaps more important is the myriad testimony from City Staff, the Engineer of Record, and the Licensed Contractor that the drains were considered a temporary condition.

In Mr. Carpenter's own words:

"As we were going through the process, we realized that raising the roads up could potentially put some of these properties in a little bit different situation during construction activity. So we installed approximately 88 temporary construction drains while we were out there."

In the OIG's own words:

Referring to Mr. Carpenter – "On August 5, 2019, he signed a letter to Spadafina that said the 85 unpermitted right-of-way drain connections were temporary construction drains that were never intended to be part of the drainage system"

In the Engineer of Records (Kremer's) own words:

"88 drains that you've been hearing about, these are temporary construction drains, there was one installed in the right-of-way in front of each property on North and South Coconut."

These are just a few of numerous examples provided by OIG

Whether these drains should have been permitted or not is another issue. However, it is evident that all parties believed these drains to immaterial or temporary and therefore not need a permit.

In addition to the above, should this finding be discussing the eight yard drains that were placed on private property, these drains did not receive a City permit for the construction of stormwater drainage systems. Instead, building permits were issued for the construction occurring on private property.

Over the course of normal business, Public Works reviews building permits that affect its infrastructure. Approval was granted to construct piping on private property, which falls under the purview of the Building Department, and to connect to the City's stormwater system in a manner acceptable by the systems owner – in this case, a system that is wholly owned by the City of Miami Beach.

This in no way eliminated the need for the owners to meet other regulatory requirements. In fact it is common practice for a utility to issue permits prior to obtaining DERM permits. For example Sanitary Sewer Permits are approved by the Owner prior to DERM issuing the Sanitary Sewer Extension Permit. The City and County regularly approve sanitary sewer plans ahead of DERM for private developers.

Therefore, independent of DERM's approval to construct a drainage system it is the City's sole right to allow connections to its public stormwater system. Without DERM's approval a drainage system cannot be constructed and without the City's approval, a connection cannot be established.

Statements that insinuate the contrary, such as the one below, are misleading and, if not intentionally malicious, exemplify the fundamental lack of understanding by the authors of the OIG report.

"No municipality in Miami-Dade County has the legal authority to issue permits for the construction of stormwater drainage systems, temporary or otherwise, that empty into a body of water such as Biscayne Bay.

Finally, to paraphrase the OIG, Lanzo neglected its contractual duty to obtain permits, Stantec neglected its contractual responsibility to monitor permits, Wade Trim neglected its responsibilities under Florida law and rules that apply to licensed professional engineers, former City Engineer Mowry exhibited a poor attitude toward permitting agencies, and engineers in DERM's Water Control Section failed to notice discrepancies in information they received from the City. These are all professional and licensed staff; no direction would supersede their requirement under State or County Code to properly permit their work. To imply that there was a coordinated conspiracy to the contrary is outlandish, lazy, and unbecoming of a professional tasked with improving the City of Miami Beach.

***Response to Finding #9.*** *In applying for a renewal of the Class II permit, the City again decided not to give DERM recently updated As-Built plans and new drainage studies. Instead, the City obtained a permit based on the serious misrepresentation that the City and Lanzo had used Rubio's plans to build the drainage system and that no significant changes had been made since 2016.*

This finding misrepresents the contractual relationships and responsibilities of the project team and does not appear to consider the ordinary drainage permitting and installation protocols.

The City did not *decide*, as the finding indicates, “not to give DERM recently updated As-Built plans and new drainage studies.” The truth is that the permit management activities and regulatory compliance lie with the design-builder and their engineer of record. Both of which have considerable experience in designing, permitting and constructing drainage systems. In its capacity as the engineer of record, and given their extensive experience, Wade Trim served as the project’s “code and regulatory expert.”

The Class II permit renewal application package was prepared and submitted by the project’s engineer of record, Wade Trim. The OIG’s report cites that submittal as a “serious misrepresentation,” or, as speculated in other sections, a “knowing, considered and intentional” attempt to conceal project information from regulators. The glaring omission in this finding, and indeed the report, is that it fails to consider that immaterial changes are ordinarily reconciled through permit modifications at project close-out. Most notably, this finding relies on the Wade Trim letter, dated May 17, 2018, indicating that no significant changes had taken place. However, it fails to provide even a cursory examination of the second paragraph of that same letter, which reads:

*The City of Miami Beach has recently revised the project’s stormwater design criteria, which we are currently evaluating. Should the new criteria result in any significant changes, as they relate to the original signed and sealed plans and drainage calculations, they will be reflected in the project permit certification documents.*

This paragraph clearly indicates an evolving project, in response to the City’s efforts to combat sea-level rise. More importantly, this letter openly indicates the engineer of record’s estimation that changes incurred to date were immaterial to the permit, as well as their intention to reconcile any changes as part of the project close out. DERM took no exception with the stated intent and issued the permit because, as indicated previously, this approach is part of the ordinary protocol for drainage system design, permitting, and close-out.

Irresponsibly, the author of the Report decided to omit additional communication between the engineer of record and DERM, related to the issuance of this permit, and in fact uses the term “misconduct,” to describe the application for this permit as an act of “commission and omission.” The reality, omitted by this report for unknown reasons, is that the permit application to DERM included a letter dated May 10, 2018, from the engineer of record, providing a narrative whose purpose was to assist DERM in their review of the permit. The EOR’s third paragraph reads:

*City provided a change in directive requiring installation of private-side yard drains for properties that have finished floor elevations below the adjacent crown of road. The original stormwater design criteria required that the drainage area be sized to account for and reflect the actual contributory area at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots. Thusly there is enough capacity in the system to account for this additional stormwater load, particularly in light of the fact that few of the properties fall within this new City criteria.*

*Additional City-directed changes will be submitted via revised plans for Palm Island and Hibiscus Islands during permit certification submittals; these mainly relate to change of pipe alignments to reduce impact to existing vegetation, addition of a secondary drainage system to reduce potential flooding in isolated*

*areas, and lowering of proposed elevation of roads to reduce harmonization impacts to private properties.*

Changes to the plans were disclosed, documented to be immaterial to the parameters of the permit, and proposed to be fully captured during permit certification submittals.

The OIG's report erroneously concludes that the installation of drainage inlets not reflected in the permit documents, is a significant and material change to the design. Further review and understanding of the project's evolution refute that conclusion. Former Wade Trim vice president Holly Kremers explained to the City Commission on October 30, 2019, that "88 drains...are temporary construction drains...installed in the right-of-way in front of each property on North and South Coconut Lane." Lanzo installed these additional inlets as a temporary and interim condition to manage water during construction activities, and before the system was placed into service. Given the complexity of the project, implementing these temporary measures was reasonable.

In an executive summary dated October 22, 2019, the Lanzo/Wade Trim team further explain:

*One construction challenge was ensuring that properties were not made susceptible to increased flooding during construction of the elevated streets before the new drainage system was complete and placed into service. The design-build team's solution for this was to place a temporary construction drain within the ROW in front of each property on North and South Coconut Lane to convey stormwater away from the property as needed during construction. The drainage system was not connected to the pump station and in service during the period of intended use of these temporary construction drains, and each drain was intended to be abandoned in place prior to project completion. Though these temporary construction drains were not shown on the design drawings, it was not the intent of the City or the design-build team to deliberately violate any Class II permit agreements or policies, as the drains would have been removed prior to start-up of the pump station and conveyance of stormwater to the Bay*

Again, it is apparent that the project's code expert did not consider these inlets to be a significant, material change to the design. The reason for that estimation is simple: these additional inlets did not alter the tributary area nor the volume of water to be collected and treated. From a technical perspective, there was no change. It should be noted that the report erroneously refers to additional inlets as "**private side yard drains.**" **Additional inlets were installed within the right-of-way, and not on private property.**

As has been stated previously, City officials and the Commission were aware that as the City developed its policies to combat sea-level rise, some accommodations would have to be made to protect low-lying properties. What was not certain, and remains under discussion even to this day, is the exact manner in which those accommodations would take form. An examination of the project's evolution shows the progressive responses to the developing stormwater drainage criteria; from proactive installation of underground connection points, to additional inlets within the right-of-way, to the eventual design and permitting of inlets within private property.

As was always intended, following ordinary and customary protocols, the project has commenced the process of closing the drainage permit. As of the date of this writing, January 8, 2021, the Engineer of Record has submitted the permit closure for Hibiscus Island, which has

been reviewed, inspected and accepted by DERM. Permit modification for Palm Island has also been submitted and is currently under review by DERM. Once the permit modification is accepted, the permit closure will follow, and the City's public stormwater drainage system will be complete.

Following the direction received from the City Commission, the project team has evaluated 112 properties and determined that 85 properties qualify for connection to the City's drainage system, 23 of which have declined the installation of an inlet. The engineer of record has completed the design for 62 additional inlets; 11 within the right-of-way and 51 on private property. Of these, DERM has issued permits for 59. Following the receipt of permits, Lanzo commenced the installation of those inlets, and as of this date, has completed the installation of 45 inlets, and has abandoned/removed 24 of the temporary inlets.

Attachments to this response can be downloaded from the website of the City of Miami Beach or from the OIG webpage

[www.miamibeachfl.gov/city-hall/city-clerk/boards-and-committees/neighborhood-and-quality-of-life](http://www.miamibeachfl.gov/city-hall/city-clerk/boards-and-committees/neighborhood-and-quality-of-life). The minutes from this meeting refer to the presentation.

Jacob's Report can be found at: [www.mbrisingabove.com/climate-science/innovative-studies/](http://www.mbrisingabove.com/climate-science/innovative-studies/)

Urban Land Institute Report can be found at: [www.mbrisingabove.com/climate-science/innovative-studies/](http://www.mbrisingabove.com/climate-science/innovative-studies/)



City of Miami Beach, 1700 Convention Center Drive, Miami Beach, FL 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

## MEMORANDUM

To: Joseph Centorino, Inspector General

From: Eric Carpenter, Assistant City Manager 

Date: January 21, 2021

Subject: Response to Office of Inspector General (OIG) Draft Report 20-07

This letter is meant to serve as an individual portion of the overall City Administration response to the above referenced report and should be reviewed in conjunction with the more comprehensive response.

Please let me begin by stating that in my personal opinion, the report prepared by the Office of the Inspector General to look back at the Palm and Hibiscus Neighborhood Improvement project is clearly written from the perspective of an individual or group of individuals that have only a cursory understanding of the contractual mechanism utilized, the permitting process as required by the South Florida Water Management District and Miami-Dade County Department of Regulatory and Environmental Resources (DERM), and the challenges associated with developing a program that was expected to deliver results outside of the status quo.

I hope that the attempt of the OIG report, in my opinion, to sensationalize and manipulate the information provided by a few individuals based upon their opinion of the situation is not allowed to cloud the facts associated with this project. The facts are as follows and they are indisputable

- 1) The City entered into a progressive design/build contract with Lanzo Construction that resulted in a Guaranteed Maximum Price authorization by the City Commission for \$38.5 Million. The addition of several scope changes directed by the Commission has resulted in a final construction cost of \$40.9 Million.
- 2) The contract required the Design/Builder to comply with all applicable laws and regulations.
- 3) The nearly completed project functions as it was intended.
- 4) The regulatory agencies have permitted the vast majority of the private property connections without any additional water treatment requirements.

Despite the tremendous effort and, in my opinion, weaving of conjecture, unsupported allegations and innuendo in the OIG report, there are no facts to dispute any of these pillars of this project. That is not to say that the project if it was to be done over could not have been improved. There are multiple lessons learned, including the need to design and agree to the harmonization of the public and private properties in advance of permitting and construction.

In order to correct the record, first and foremost, I must reiterate the contractual relationship between the City and the Design/Builder is abundantly clear that permitting of the project falls

completely within the responsibility of the Design/Build firm. Understandably there are different perspectives of the regulatory agencies for what field activities require permit modifications at different levels in the agency and across agencies.

For example, it has recently been confirmed by the South Florida Water Management District that the introduction of the secondary drainage system for the Palm and Hibiscus Neighborhood Improvement project will not require any additional documentation or a permit modification. As a direct correlation from the below excerpt from the OIG report, it is clear that the SFWMD did not feel these modifications were major.

The SFWMD's policy says, "Major changes, including changes to permit authorization or special or limiting conditions would require a permit modification before implementation."

In addition, documentation was provided to DERM via letter from Wade Trim on May 10, 2018 (attached as Exhibit A), clearly identifying the modifications of the project over time. This letter was provided prior to the application signed by me and submitted by the City via email on May 15, 2018. The subsequent response from DERM stated that it needed a certification from the Engineer of Record that there were no changes to the drainage system. The reissuance of the Class II permit for the project on May 27, 2018 appears to signify that either DERM was sure the "private side yard drains" were not a significant modification or they were comfortable with the information provided that these changes will be addressed as part of the permit close out documentation, otherwise, certainly they would have asked for additional clarity on this matter.

Furthermore, there is much fanfare around the statements of one of the Wade Trim team members and his concerns surrounding the permitting. Interestingly, the only reference prior to March of 2018 in all of the documentation that was reviewed by the OIG is the excerpt below where this individual makes reference to the issue of modifying drainage to protect the mature trees. If the tree issue was important enough to reduce to writing, why in 2017, a year after the start of the drainage, was the issue of permitting temporary construction drains not documented similarly.

In 2017 Garcia prepared a spreadsheet of issues with CIP, including one labeled "Disregard for approved permits." It said:  
MDRER/SFWMD: Significant changes have been directed by CIP to stormwater design (as a result of changes in tree removal directives); it has only been recently that CIP has expressed concern with project certification; it is unclear whether CIP weighed risk of permit certification against universal directive to save ALL trees, including not removing trees in swale areas that reduce conveyance efficiency and integrity of the proposed stormwater system (the removal of trees in the swale area was an explicit directive in DCP).

As was shown above, within two months of the first discussions of the permit modification in March 2018 there was a letter submitted to DERM making them aware of the changes. If the City was truly trying to conceal information or keep these potential private connections quiet, why were they repeatedly discussed in public meetings, submitted in writing to DERM and extended 6" to 18" above the ground so that they stick out like a sore thumb. Which is more likely, that there was some elaborate deception or there was a reasonable evolution of an emerging solution to sea level rise that was new and uncharted territory for all three entities, the City, the Design/Builder, and the regulatory agencies.

The incorporation of the secondary drainage system on west Palm Island evolved over time. The initial modification was only the inclusion of stub out pipes from the existing primary drainage system that remained unchanged. Despite the reference in the OIG report that the original stub out pipes included tee connections with inlets, the plans by Wade Trim, as included in the report, only differ from the CAS plans in roadway elevation and the inclusion of pipes with no tee connection or inlet. Since these stub outs were not connected to anything there was no additional water entering the system and no change to the resulting operation of the system. Subsequently the Design/Build team used some of these stub outs as temporary construction drains within the right of way during the construction activities (see attached photos from October 2019 Exhibit B). It is clear when you look at these temporary drainage inlets that under no circumstances could they remain in current condition as it sticks up out of the ground anywhere from 6" to 18". Despite the multiple attempts in the report to claim that the characterization of these as temporary construction drains is a misrepresentation, the pictures clearly illustrate that there is a significant difference between temporary and permanent drainage inlets. Each and every one of these temporary inlets will be either removed or converted to a permanent inlet under a separate permit by the completion of the project.

The impacts of this real time development of solutions created modifications to the Palm and Hibiscus Island Neighborhood Improvement project that could have been handled better, had there been unlimited time to evaluate. The City Administration and I personally acknowledged these shortcomings of making changes mid-project in our presentation in the Commission Workshop on Resilience held January 27, 2020.

There were many decisions made that created an evolution of the Palm and Hibiscus Neighborhood Improvement project. All of those decisions were made with the best interest of the City, and with the clear direction and approval of the appropriate authorities within the City. There were decisions made by the contracted Design/Build firm, which are now being questioned by the regulatory authorities, that are open to debate. However, there was no ill intent, nor any intentional omissions, as can be demonstrated by the lack of clear evidence to the contrary, despite a year of investigation.



Exhibit A





Wade Trim, Inc.

2100 Ponce de Leon Boulevard, Suite 940 • Coral Gables, FL 33134  
786.361.1645 • www.wadetrim.com

May 10, 2018

Department of Regulatory and Economic Resources  
701 NW 1st Court, 5th Floor Miami, FL 33136-3912

Attention: Mayra de Torres, Engineer

Re: City of Miami Beach Neighborhood 13A Infrastructure Improvements  
Palm and Hibiscus Islands  
Class II Permit Renewal

Dear Ms. De Torres:

We are submitting the attached application for the above-referenced project, in lieu of a Time Extension Request. In order to assist in your review of this, as it relates to the original Class II Permit Application for this project (Permit No. 20150058), we are providing the following narrative:

1. Has the above-referenced permit previously extended? If so, list the permit extension date(s).

*No.*

2. Describe the work, as authorized by the above-referenced permit that has not been completed up to date.

*Swale area grading, pump stations, private-side yard drains, lighting, final lift of asphalt, pavement and marking.*

3. Has the work performed to date as authorized by the above-referenced permit, been conducted in accordance with the permit description, approved plans and restrictions, limitations or conditions of the permit? If not, describe in detail work that has been conducted that is not in accordance with the permit.

*City provided a change in directive requiring installation of private-side yard drains for properties that have finished floor elevations below the adjacent crown of road. The original stormwater design criteria required that the drainage area be sized to account for and reflect the actual contributory area at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots. Thusly there is enough capacity in the system to account for this additional stormwater load, particularly in light of the fact that few of the properties fall within this new City criteria.*

*Additional City-directed changes will be submitted via revised plans for Palm Island and Hibiscus Islands during permit certification submittals; these mainly relate to change of pipe alignments to reduce impact to existing vegetation, addition of a secondary drainage system to reduce potential flooding in isolated areas, and lowering of proposed elevation of roads to reduce harmonization impacts to private properties.*

4. Describe any substantial changes in the environment that have occurred at or adjacent to the subject location since the date of issuance of the above-referenced permit or prior extension time.

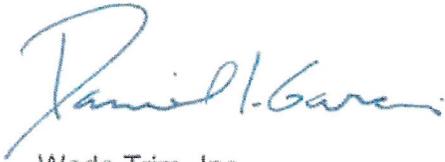
*None.*

5. Describe any adverse environmental impact(s) or cumulative environmental impact(s) that may occur if a permit extension is granted.

*None.*

For all required documentation as outlined in Section 2 and Attachment B, please refer to original permit application for Permit No. 20150058, as a reference. Please do not hesitate in contacting me should require additional information or have any additional questions.

Very truly yours,



Wade Trim, Inc.

Daniel Garcia, PE  
Project Manager

LNZ2003.02S

cc: Olga Sanchez (City of Miami Beach)  
Pablo Riano (Lanzo Construction)  
Holly Kremers, PE (Wade Trim)

Exhibit B







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## MEMORANDUM

To: Joseph Centorino, Inspector General

From: Eric Carpenter, Assistant City Manager *EC*

Date: February 1, 2021

Subject: Response to Office of Inspector General Draft Report 20-07 Supplemental Questions

This letter is meant to serve as the direct responses to the additional questions posed by the Office of Inspector General (OIG) following our in person meeting on January 22, 2021. This is meant to be a supplement to the overall City Administration response and my individual response to the draft report 20-07 and should be reviewed in conjunction with the more comprehensive responses submitted previously. This is not an exhaustive list, as I was only provided a week to identify all of the myriad of misrepresented items in a 167 page report.

The responses to the specific questions are provided below in order:

- 1) Question: Please identify each sentence in the report regarding you personally or your actions as Public Works Director and/or Assistant City Manager that you believe contain "innuendo and editorializing".

Answer:

- a. Page 83 The quote from the City's FAQ document is "Currently this [private-tie in] is not an option for private property owners, but we are exploring options to provide our residents with additional water management options in the future." Somehow the OIG gleaned from that statement the following opinion: "While expressed in nuanced language, the answers indicated that the City recognized the risk that raising roads would cause new flooding on private lots; was unwilling to assume a city-wide duty to prevent such flooding; and intended to shift the legal responsibility for any flood damage caused by elevating roads to individual property owners." This is a significant inference, from a relatively simple statement by the City and it appears that this opinion is at best unfounded.
- b. Page 85 how is responding to a media inquiry proof that the "City officials used the news media to generate support for the new policy"
- c. Page 86 "Lanzo's design team was concerned about regulatory implications of converting temporary drains to permanent fixtures" what is the basis for this statement since they were not contractually obligated to perform this work until the change order was approved in October 2018, well after they had communicated the changes to DERM in the May 10, 2018 letter.
- d. Page 89 "During the panel, Carpenter and Mowry did not mention their ongoing and unprecedented plan to build a public drainage system that was designed to connect private-side yard drains to the public drainage system." What does this insinuate,

because one of the many initiatives that were being directed by Commission was not mentioned, it is somehow a conspiracy, even though two months earlier in the public City Commission meeting direction was given to make connections.

- 2) Question: Please identify each sentence in the report about you personally or your actions as Assistant City Manager and/or Public Works Director that “insinuate wrongdoing where none has occurred”.

Answer:

- a. Page 86 “Subsequent events and records examined during the investigation, support a conclusion that the primary purpose of the resolution was to provide after-the-fact authorization and legal justification for the private-side drains the City had already allowed”. No proof to support this position and furthermore, there were no private drains in April 2017. Report fails to acknowledge the evolution of the policy direction from June 2015 to April 2017 was primarily for the City to bear the cost.
- b. Page 97 “The City and Lanzo failed to submit a notarized request for the extension with responses to the five questions”. Even though the extension of the permit was the responsibility of Lanzo, if the intent was to not inform DERM the extension would have been a better path than to reapply for the permit, however, this is drafted to make it seem it was part of some scheme. Interestingly the same five questions with detailed answers were provided in the letter dated May 10, 2018.
- c. Page 116 “One gets the impression that the motivation behind the retention of so many consultants could have more to do with insulating the decision-makers from responsibility, than it does with marshalling the professional expertise with the necessary brainpower to ensure the project’s success.” The City uses best practices for management of complex construction projects. In this particular case we only have one consultant and a design/builder. This is clearly a misguided statement as it is contradicted by Recommendation #4 of the OIG report which suggests adding another consultant.

- 3) Question: Please identify each statement in the draft report about you or your actions that you believe is false or in error; any instance in which you believe a material fact is “clearly omitted”; and each statement that you believe contains a fact that is “manipulated” with punitive intent.

Answer:

- a. Page 5 General Observations Item 10. No reference to May 10, 2018 letter notifying DERM of the changes to the project.
- b. Page 9 “City and Lanzo directed two engineering firms and engineers...to develop distinctly different construction plans for different purposes.” City gave a revised drainage directive to the Design/Builder, no facts to conclude the City dictated who was to do the work or that there was a different purpose.
- c. Page 11 “At no time did the City and Lanzo advise the SFWMD and DERM of the significant changes in design” changes were provided to DERM in writing on May 10, 2018. SFWMD has determined that no permit modifications are required.
- d. Page 11 “The City and Lanzo proceeded with this work during the Spring and Summer of 2018, after rejecting a recommendation from Wade Trim that the City and Lanzo notify the SFWMD and DERM of the new phase of construction”. There was no rejection of any recommendation from Wade Trim regarding the regulatory

requirements, in fact DERM was notified, via the May 10, 2018 letter from Wade Trim, within two months of first discussions regarding the need for modifications on west Palm Island permit.

- e. Page 12 "The deception of the SFWMD and DERM lasted 31 months" this is clearly untrue from the timelines unless you disregard the May 10, 2018 letter.
- f. Page 12,14 several allusions to "cost overruns", "soaring costs" and "cost escalation" that did not occur. (Please refer to December 9, 2015 contract amendment setting the price at \$38.5 million).
- g. Page 13 "In January 2016, the City Commission awarded Lanzo a \$36.5 million contract, plus 10% contingency." The contract was actually awarded in July 2013 and was amended in December of 2015 to include a construction cost of \$38.5 million including a 10% contingency.
- h. Page 13 "At the time of the award, the City did not have finished construction plans for building the stormwater drainage system, drainage studies verifying the system's expected performance, or a reliable basis for determining how much the non-standard system would cost or how long it would take to build." Almost all Design/Build projects agree on a final cost prior to completion of plans, there was a cost estimate provided by an independent 3<sup>rd</sup> party cost estimator as well as the Design Criteria professional and we had a schedule that the Design/Builder was contractually bound to meet.
- i. Page 15 assertions of a "whistleblower" must accompany facts that they uncovered something that was not already provided in writing to the agency, which is not the case here.
- j. Page 45 "...set a precedent of making significant changes to the plans after construction had begun." Construction had not begun at the point in time referenced in this statement.
- k. Page 60 there is no mention of the fact that the Commission Memorandum included documents that clearly identified "City Directive of October 12, 2015 (2.7 NAVD-minimum)" as well as the reference to "RFI-035 (Private Drainage Accomodation)".
- l. Page 78 "Coley said lateral pipes and right-of-way drainpipes on the plans approved by Public Works were not intended to be temporary construction drains." I believe Mr. Coley has clarified the difference between permanent private-side drains and temporary construction drains and this particular assertion is taken out of context.
- m. Page 83 "The FAQ statement that "water will not flow from the elevated City street into private property" was, at this point, an aspiration and design objective of the construction plans, but was not true." The water can be contained within the right-of-way of an elevated road. The difference between water not flowing off of private property; and water flowing from the elevated roadway is being confused.
- n. Page 84 please provide any proof that private-side yard drains were in place by March 31, 2017 as stated.
- o. Page 95 "...did not approve \$17,500 for engineering services associated with notifying SFWMD and DERM about the City's plans to install private-side yard drains and obtain permit modifications" These design services were part of the Design/Build teams existing scope this was a cost discussion regarding the change order.
- p. Page 97 Sanchez emailed the application on May 15, 2018 not May 10, 2018. This is important because DERM had already seen the letter that described all of the changes.

- q. Page 99 “The statement did not describe the unpermitted construction in detail and minimized as “few” the number of properties that would have one or more drains installed.” There is significant detail on what work was performed and more than enough information to clearly show there have been changes that will need to be either done through a permit modification or reflected in the as-built close out package. The issuance of the permit clearly signaled the intention by DERM to use the latter.
- 4) Question: Please identify each statement in the draft report that you believe states or implies that you personally are part of a “coordinated conspiracy” or that you believe defames or libels your professional reputation.

Answer:

- a. Page 20 “The permanent right-of-way drainpipes were available during construction to mitigate flooding. But the evidence, and sworn statements of multiple witnesses, established that their description as “temporary construction drains” was a legal fiction.” I have addressed extensively the difference between the stub out pipes that do not have any drain connected; temporary construction drains; and permanent private-side yard drains. This statement clearly confuses the different situations in order to make it seem nefarious.
- b. Page 86 “Subsequent events and records examined during the investigation, support a conclusion that the primary purpose of the resolution was to provide after-the-fact authorization and legal justification for the private-side drains the City had already allowed” this April 2017 Resolution was a reaffirmation of the Commission directives prior and please provide any proof of private-side yard drains installed by this date.
- c. Page 87 Garcia states “I can say that on many occasions, I raised red flags and I tried to push back, but it felt like just the support wasn’t there, you know, going up the chain, so to speak...” Garcia never made any attempt to speak to me on this matter and it is my understanding that he never spoke to the CIP Director about his concerns either.
- d. Page 152 “In my professional opinion, Ms Kremers and Mr. Carpenter misstated the disclosure obligations of a permittee and mischaracterized the Rubio plans.” It is and will remain my professional opinion that if you do not change the contributory area or the amount of water flowing into a drainage system that the location of the pipes or the inclusion of stub outs are immaterial.
- e. Page 152 “In my opinion, Carpenter also mischaracterized the practices of DERM and other regulatory agencies regarding the use of As-Built plans.” I believe that the definition of “substantial” in substantial modification is based upon the judgment of the specific agencies and even the individual regulators. As a result, I ask how can stating that it is a “judgment call” be a mischaracterization.
- 5) Question: Did Mr. Mowry consult with you in on or before Oct. 9, 2015 about his recommendation to require the minimum grate elevation of 2.7 NAVD for all areas of Palm Island and did you approve this change in the modified criteria for West Palm Island? If yes, when did you approve this change for the Palm and Hibiscus project?

Answer: To my knowledge I was not involved in discussions regarding the inlet elevations on west Palm Island during this time period, and I am not surprised as there was clear

direction from Commission regarding the inlet grate elevation. The minimum grate elevation was set at 2.7 NAVD by Resolution 2014-28499 (February 12, 2014) which set the tailwater elevation at 2.7 NAVD and consequently the lowest inlet elevation. Furthermore, this was buttressed by Resolution 2015-28921 (February 11, 2015) which reconfirmed the 2.7 NAVD tailwater condition as well as setting the crown of road at 3.7 NAVD. I do recall later in the project, once the road was constructed, being surprised the elevation of the road was below 3.7 NAVD for west Palm Island, as that was not discussed with me.

- 6) Question: Did Mr. Mowry consult with you before approving on Oct. 30, 2015 the Wade Trim conceptual plans to build a drainage system that accommodated the future connection of yard drains on private lots and did you approve of this plan and engineering solution for west Palm Island?

Answer: More than four years after the fact, I am not sure of when the initial discussions took place in relation to the October 30, 2015 date but I was consulted on the need to provide stub outs to allow for the possibility of future connections without disturbing the work that needed to be done on the roadway. I believed then as I do now, the flexibility to consider future modifications is a good thing and can save significant cost after the fact. I feel the need to reiterate, until brought to my attention by the OIG, I was not aware that there were two sets of plans. Although, I still contend that the introduction of stub out pipes does not change the functionality or water treatment requirements as set forth by Chapter 24 of the Miami-Dade County code.

- 7) Question: Did Mr. Mowry consult with you on or before November 2015 about a plan to seek a change in City policy to allow the connection of private-side yard drains and did you approve that plan in 2015?

Answer: The City Commission gave direction to the Administration on June 10, 2015 to prepare a framework to allow private connections to the public stormwater system. So yes there were many conversations regarding this matter. However, there was no definitive plan for me to approve, the concepts continued to evolve over the next four years. One important milestone in that evolution is when on April 26, 2017 the Commission refined the direction to the Administration on how to implement private-side yard drains and further codified the criteria on September 12, 2018.

- 8) When and by what means did you communicate any of the decisions or actions referenced in Questions #6 through #8 (sic) above to former City Manager Jimmy Morales and the City Commission. When did Mr. Morales approve each decision?

Answer: Information was provided in agenda memos drafted by the Public Works and CIP Departments and submitted to Mr. Morales for inclusion in the Commission Agendas. It was the Commission that, as identified above and below, gave the direction to the City Manager, in duly noticed public hearings what to do on this project consistent with staff recommendations.

- 9) Question: When and by what means do you believe the City Commission was first notified of the above-referenced decision by the City Administration and notified of the potential costs and consequences of those decisions, specifically including (a) the decision to require

the minimum grate elevation criteria of 2.7 NAVD in all areas of Palm and Hibiscus Island and (b) the City Administration's decision to have Lanzo Construction Co. Florida and Wade Trim design and build a public drainage system that was designed to connect to private-side yard drains in the future.

Answer: The City Commission provided the Administration with the Direction on February 2, 2014 to change the tailwater boundary condition to 2.7 NAVD which in fact sets the inlet grate elevations at 2.7 NAVD. Resolution 2015-28921 (February 11, 2015) which reconfirmed the 2.7 NAVD tailwater condition as well as setting the crown of road at 3.7 NAVD. They also provided direction on June 10, 2015 to create a framework to allow private property connections to the City drainage system. Finally the City Commission reviewed and approved the scope of work for Palm and Hibiscus Islands on December 9, 2015 which included within the backup documentation both a reference of the "City Directive of October 12, 2015 (2.7 NAVD-minimum)" as well as the reference to "RFI-035 (Private Drainage Accomodation)". As a result it is clear that the Administration was moving forward with the full authorization and approval of the City Commission under Resolution 2015-29243.

There were many decisions made that created an evolution of the Palm and Hibiscus Neighborhood Improvement project. All of my decisions were made with the best interest of the residents, and with the clear concurrence and approval of the City Commission. There were decisions made by all involved, which are now being questioned by those looking backwards. With the benefit of hindsight, any project could have been executed better, and I accept the criticism for the project delays as that impacted the residents. When you peel back all of the posturing, for a first of its kind solution, to the existential threat of sea level rise in Miami Beach, the outcome for the neighborhood should be allowed to be judged on the merits of the completed project.

# MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

## MEMORANDUM

TO: Joseph M. Centorino, Inspector General

FROM: David Martinez, PE, Director, Office of Capital Improvement Projects 

DATE: January 21, 2021

SUBJECT: Response to Office of Inspector General Draft Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project OIG No. 20-07

The purpose of this memorandum is to provide a brief response to the report referenced above received on December 4, 2020. I will only be able to address "some" of the baseless allegations due to the extremely short timeframe available. After all, responding to this document is not my full-time job. The OIG has provided an insufficient thirty (30) working days to respond to this extensive document, given the fact that it took over one year and enumerable resources for the OIG to produce and deliver this document. The OIG rejected Administration's request to extend the response timeframe.

I have worked and been an active participant in the engineering and construction industry for over 34 years. I have held positions in both the public and private sectors. I am well regarded by my peers and have established an impeccable reputation centered on integrity, honesty, and fairness. The OIG's findings, as presented in this document, are slanderous, flawed, biased and unfounded.

The Office of Capital Improvement Projects (CIP) is tasked with managing and developing many of the City's large capital projects. Projects in our program include unparalleled investments in quality of life infrastructure including prioritization of sea level rise with storm water and neighborhood improvement projects, parking facilities, park improvements and sustainability & resiliency projects, to name a few. These projects are necessary to improve, enhance, and maintain facilities and infrastructure to meet the exceptional service demands of our residents and visitors. The CIP staff is composed of senior management, project managers, financial managers, field inspectors and other support staff. At any given time, CIP manages 50-60 projects all in the planning, design, construction, or close-out phases. The expectation on the delivery of these projects by the City Commission and its constituents is extraordinarily high.

### **Delivery of Large Capital Projects**

Anyone who has any knowledge of the construction industry understands the complexities and challenges of delivering any project within the proverbial "on time, and on budget." The delivery of large capital improvement projects involves a myriad of processes and requires a high level of coordination among stakeholders which include residents, business owners, community organizations, activists, media outlets, franchise utilities, city committees, elected officials, internal city departments, regulatory

agencies, and city administration, to name a few. These stakeholders play a significant role in the definition of these projects. Most of the time, this definition fluctuates and changes during the lifecycle of these projects, even during construction. This is ultimately detrimental to the success of any project.

Public sector agencies and private sector businesses rely on the expertise of consultants and contractors for the delivery of projects. Entities such as FDOT, Miami-Dade County, any municipality and the Federal Government hire thousands of consultants and contractors to carry out the multitude of tasks associated with project development.

The Palm & Hibiscus Islands (P & H) Neighborhood Improvement project, like any of our projects, includes an extensive list of improvements in its scope of work. It was not just a storm water improvement project. It included replacement of the water distribution system and water services; rehabilitation of the sanitary sewer system; replacement of all streetlights; reconstruction of all roads and sidewalks; roadway striping/signage; new landscaping; and undergrounding of franchise utilities. All these elements were to be coordinated with all the stakeholders previously listed throughout the life cycle of the project. That is a daunting task for anyone who knows this business. It is doubtful that the OIG could have contemplated this perspective. And this is only one project of dozens that CIP manages.

To efficiently deliver the P & H project, the City engaged several entities. These included a Design Criteria Professional consultant, a Construction Engineering and Inspection consultant, and a Design-Build Firm (Design-Builder). All these entities were vetted through the city's qualifications and selection processes, and ultimately approved by City Commission. All these entities have contractual, fiduciary, and legal responsibilities and obligations to deliver these projects, including regulatory compliance and to protect the City in all respects.

For example, the Design-Build Firm's agreement with the City includes the following terms:

Page 1 – *Collaborate with the City during the design process to ensure that design solutions reflect the most efficient construction means and methods and that the Project will meet the schedule, quality, **permitting**, and safety requirements.*

Page 3 – Article 1.9, *The Design-Builder will be responsible for the professional services, design, supply, provision, construction, installation, and performance of all equipment, materials and systems offered, and shall in no way be relieved of the responsibility for the performance of the Project.*

Page 6 – Article 1.27, *“Services” means the professional services to be provided by Design-Builder that include, but are not limited to, full architectural and engineering design and construction services necessary to prepare the design, **including the approved and permitted Plans and Specifications**, of the Project.*

Page 7 – Article 1.35.1, *The City (or Owner) shall mean the City of Miami Beach..., which is a party hereto and/or for which this Agreement is to be performed. In all respects hereunder, **City's performance is pursuant to City's position as the owner of a construction project.***

Page 8 – Article 1.35.11, *Project Manager: The authorized individual or firm who/which is the representative of Design-Builder who/which will administer/manage the design and construction effort...*

Page 10 – Article 2.1, *The Design-Builder shall perform the design and construction of the Project..., including, without limitation, the Design Criteria Package. In summary, the Services include, but are not limited to, **providing all resources and professional services to perform the design and***

construction of the Project such as planning, technical investigations, engineering, design, **permitting**...

Page 10-11 – Article 2.3, The Project includes **furnishing all** planning, engineering, **design and permitting services**, as well as all construction labor, materials and equipment, services and incidentals necessary to design and build the Project...**Work and Services shall be in compliance with design and construction standards required by the RFQ, the Florida Accessibility Code, the Florida Building Code, all environmental and fire codes, and any other Applicable Laws. It will be the sole responsibility of the Design-Builder to secure all permits** not provided by the City, and to provide signed and sealed design documents for construction and installation which comply with all regulatory requirements, Applicable Laws, and the Contract Documents.

Page 13 – Article 3.6.2, The Design-Builder **shall be** responsible for obtaining all necessary licenses and permits not being provided by the City, and for complying with Applicable Laws in connection with the prosecution of the Work...**The Design-Builder shall protect, indemnify and hold harmless the federal, State, County and municipal governments, and their members, officers, agents and employees against claims and liabilities arising from or based on the violation of requirements of laws or permits**...

Page 14 – Article 3.6.5, Neither the City's inspection, review, approval or acceptance of, nor payment for, any of the Services of Work required... shall be construed to relieve Design-Builder (or any sub-consultant or subcontractor) of its obligations...

Page 34 – Article 7.3.2, The City shall not be responsible for discovering deficiencies in the technical accuracy of Design-Builder's Services or Work.

Page 35 – Article 7.4.1, Design-Builder agrees to indemnify and save harmless City against any Federal, State, County or City laws...

Page 36 – Article 7.5.2.1, Design-Builder shall supervise the (design) Services undertaken...Design consultants shall exercise a standard of care used by members of the architecture and/or engineering profession... practicing under similar conditions...

Page 40 – Article 7.5.11, **Design-Builder shall secure and pay for the building permit and other permits**... for the proper execution and completion of the Work...

### **City's Efforts to Address Climate Change and Combat Sea Level Rise**

Since 2014, the City embarked on an unprecedented and aggressive path to protect itself from the effects of climate change, specifically, rising sea levels and king tides. As part of this endeavor, the City created a Blue Ribbon Panel whose purpose was to monitor the progress of the City's Stormwater Management Program and Comprehensive Flood management Plan and ultimately provide solutions, options and suggest policies to the City Commission on how to adapt to the impending seal level rise.

It is no secret that CIP participated and sat at the table during the panel's deliberations. Our role as executor of many of these projects was to stay informed, and provide feedback and expertise to the group. For nearly four years the panel deliberated on many elements associated with protecting the City from sea level rise. The topic of raising elevations on public and private properties was a recurring theme. The challenges and opportunities of raising city streets was often discussed. There was no play book on how to address the challenges. There were no instructions, or codes, or standards specifying how to address elevation changes or harmonization of private properties. Ideas, solutions, policies and ultimately directives from the City Commission, evolved through this period. During this evolution, CIP was responsible for moving this project, and all other projects forward. Yes, there was abundant

pressure from all stakeholders, but doing nothing was not an option. That is what makes this city so great.

### **Project Budget and Status**

The design and construction cost was established initially and approved by the City Commission at \$38,500,000. After all is said and done, our total cost is \$40,965,000 despite the evolution that made a complex, multi-faceted project increasingly more difficult, including multiple scope changes and other challenges. The increase of \$2,465,000 represents just over 6% of the original project cost. Of this increased cost, \$1,615,000 represents the portion attributed to addressing the private property additional inlets and related harmonization. This translates to just over 4% of the original cost, an inconsequential amount given the magnitude and complexity of this project.

Today, the project is nearly complete. The Design-Builder has less than a dozen private property inlets left to complete and is gearing up to begin final paving of the roads. The stormwater system has been completed and has been functioning for quite some time and has provided the expected protection against rain events. The City has continued working with Miami-Dade County Department of Regulatory and Economic Resources, Division of Environmental Resources Management (DERM) to obtain all new Class II permits for the added inlets and in closing out the original Class II permits. In my opinion, this ultimately transpired into a successful project despite all the challenges. The P & H Homeowners Association voiced their opinions to the City Manager in a January 2020 email (Exhibit 1). The email, from two of their board members, states the following:

*From Ian Kaplan – “Overall, given sea level rise and the uncertainties of the escalation of higher tides in the future, we believe raising our roads on Palm and Hibiscus Islands where needed and adding pump stations (with backup generators) for our Islands was a prudent and good decision. As we live on Island communities it is critical for the future that our roadway infrastructure remains above sea level and storm water has a well-planned and environmentally safe method to be removed from our Islands without being trapped. Once our project is finally completed, we remain confident that our Islands will be significantly more resilient for the future while protecting our property values and our waterfront environment.”*

*From Neil Fairman – “I concur with our Chairman Ian Kaplan and would like to emphasize the resident’s sacrifice during the extended work timeline was well worth the security afforded by creating a sustainable infrastructure for our islands for the future. We must consider the future threats of unimpeded flooding in comparison to an extended inconvenience. Being the pioneer in raising our roads only the uninformed would believe that this would be a perfect process, hopefully our sacrifice will help other communities have a more efficient schedule.*

*“I would like to thank your CIP staff for the professional work ethic and facing a a staged project with constantly changing scope. It was a learning exercise for all, which should now allow more complete planning and engineering giving staff the documents which will allow staff the tools to keep contractors on time and save funds on change orders.”*

*“The raised roads will bring security to our neighborhood during high water events for years to come and the beautiful landscape plan the City is implementing will bring gratification and pride to all of our residents.”*

### **Private Yard Drains – Clarification**

The OIG's makes reference throughout the document of the, so called, "private yard drains." I believe this term might have been originally coined by the Design-Builder's consultant. The term, as applied, implies that these drains, or inlets, are installed within private properties. All of these, with few exceptions, were (and are) installed within the City's public right-of-way. This terminology is very misleading to the reader and should be corrected or addressed accordingly. As a matter of fact, DERM asked that this terminology be amended.

### **Design-Builder's Consultant Allegations**

The Design-Builder's Prime Design Consultant was the firm Wade Trim. The OIG's documents make several mentions of attempts by their representative, Daniel Garcia, a project manager with the firm, that DERM should be advised of the project changes. The OIG places great emphasis on these alleged claims. Barring the Design-Builder's obligations discussed earlier in this memorandum, if Wade Trim (and the OIG) thought that this was such a big deal, why wouldn't an executive or principal of the firm make this known to me or the City Manager's office? In addition, no evidence is provided in the OIG document to substantiate these claims. It is strictly hearsay.

### **Re-Issue of Class II DERM Permits**

The OIG alleges that DERM was not advised or notified of any stormwater system modifications. In fact, in a letter prepared by Wade Trim dated May 10, 2018 (Exhibit 2), and submitted to DERM at that time, reads as follows:

Question 2 – *Describe the work, as authorized by the above-referenced permit that has not been completed up to date. ANSWER – Swale area grading, pump stations, **private-side yards drains**, lighting, final lift of asphalt, pavement and marking.*

Question 3 – *Has the work performed to date as authorized by the above-referenced permit, been conducted in accordance with the permit description, approved plans and restrictions, limitations or conditions of the permit? If not, describe in detail work that has been conducted that is not in accordance with the permit. ANSWER – **City provided a change in directive requiring installation of private-side yard drains for properties that have finished floor elevations below the adjacent crown of road.** The original stormwater design criteria required that the drainage area be sized to account for and reflect the actual contributory area at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots. Thusly there is enough capacity in the system to account for this additional stormwater load, particularly in light of the fact that few of the properties fall within this new Criteria.*

Question 3 (continued) - *Additionally City-directed changes will be submitted via revised plans for Palm Island and Hibiscus Islands during permit certification submittals; these mainly relate to change in pipe alignments to reduce impact to existing vegetation, **addition of a secondary drainage system to reduce potential flooding in isolated areas**, and lowering of proposed elevation of roads to reduce harmonization impacts to private properties.*

Clearly, DERM was advised by the consultant of the minor changes in the project as described in the May 10, 2018 letter.

## **Explanation of Additional Inlets as explained by Wade Trim**

The installation of temporary inlets, that could be converted to permanent inlets, or points of connection, were always considered by the Design-Builder and Wade Trim as minor modifications to the original plans and as permitted by DERM. At a City Commission meeting on October 30, 2019, Holly Kremers, Vice-President for Wade Trim (representing the Design-Builder), explained to the City Commission the process of permitting and the purpose of the additional inlets that were a point of contention. See attached after action report from the City Clerk's office (Exhibit 3).

During the meeting, Ms. Kremers explained the following:

*"As construction projects go through there are some field adjustments that take place in any infrastructure system; many times, those are addressed as as-built and permits are closed out...The 88 drains are temporary construction drains, one of which was installed in the right-of-way in front of each property...and they were put there because they (Wade Trim) knew that with a smaller right-of-way in that area, during construction and before they had a chance to do the final harmonization drainage, they would have a way to transmit that water away. The intent was that when the project was complete and before the stormwater system was placed in service, those drains would be abandoned, and the permitted drainage system would be in place at that time. And for that reason, they did not include those 88 temporary construction drains on the permit documents."*

This explanation is consistent with Wade Trim's, May 10, 2018, letter that was submitted to DERM.

## **October 17, 2018 Commission Meeting**

The OIG alleges that the presentation to the City Commission on October 17, 2018 of the Design-Builder's Amendment No. 5 was a reaction to a DERM warning issued to the City one week prior. The OIG claims that the warning was a result of an email sent to DERM by a whistle blower with photographs of the installation of a private-side yard drain on a residential lot on Palm Island that was connected to an unpermitted drainpipe in the right-of-way. Records show that the whistle blower email was also sent to the City on September 19, 2018 (Exhibit 4).

The evidence shows that on that day, Item C4E, which was part of the consent agenda, requested a referral to the Finance and Citywide Projects Committee meeting later that month to discuss Amendment No. 5 between the City and Lanzo construction for Design-Build Services for the Palm and Hibiscus project. The amendment included additional design services and construction associated with the new drainage policy; and for installation of additional drains and associated harmonization in private properties in the amount of \$775,000 plus contingency.

The item was separated from the consent agenda for discussion. After much discussion, it was determined that time was of the essence and it was clear that the item should be taken up for consideration at this time, with the full commission, and not referred to a committee. The City Commission voted unanimously in favor of adopting a resolution approving amendment No. 5.

It should be noted that CIP had been working on putting together that item, Amendment No. 5, for several months prior to the October 17, 2018 commission meeting. Please refer to the following exhibits.

Exhibit 5 – April 4, 2018 email exchange between Design-Builder and Senior Capital Projects Coordinator, Mina Samadi. Ms. Samadi requested that the Design-Builder start implementing the new drainage policy. The Design-Builder informs that this could have an impact to the project's time and cost.

Exhibit 6 – June 22, 2018 email exchange between Design-Builder and Senior Capital Projects Coordinator, Mina Samadi. Design-Builder provides preliminary pricing to implement the new drainage policy that would become Amendment No. 5.

Exhibit 7 – August 14, 2018 email from Senior Capital Projects Coordinator, Mina Samadi, to Design-Builder asking the Design-Builder to provide a request for change order for the new drainage directive by August 20, 2018 with the intent of presenting it (Amendment No. 5) to the City Commission at its September 2018 meeting.

Exhibit 8 – September 18, 2018 email from CIP's Administrative Support Manager, Christina Baguer, to CIP staff asking to review Commission item titles to be included in the October 17, 2018 Commission meeting agenda. Included is P & H Amendment No. 5.

Clearly, the evidence shows that CIP staff had been working and preparing on bringing Amendment No. 5 to the City Commission for consideration well in advance of the September 19, 2018 date when the alleged whistleblower sent emails to DERM and the City. The whistleblower's emails and DERM's alleged discoveries did not change the project's trajectory as suggested by the OIG.

## **Conclusion**

Insufficient time has been provided in order to properly respond to the unfounded and baseless allegations represented in the OIG's report. However, it is clear to me that these allegations are based on misinformation, opinions, hearsay, and conjecture. Evidence has been ignored or avoided to establish their findings. All exhibits attached hereto, and referenced above, were available to the OIG for review. The OIG was clearly focused on finding a "smoking gun" that did not exist. Even after spending more than a year conducting "deposition" style, "hostile" interrogations, there is nothing material or of substance represented in their document.

Neither the City Administration, Office of Capital Improvement Projects, nor I, have violated the laws of Miami-Dade County regarding the construction of stormwater drainage systems. There has been no miss-management, deception, negligence, or serious misrepresentations. All decisions by City officials were made with full transparency and with the support of the City Commission. There was no serious override of internal controls. The OIG simply does not understand the complexity and processes involved in managing large capital improvement projects. At the end of the day, where is the damage? This has not been shown or proven.

Exhibits 1-8 attached

## EXHIBIT 1

**From:** Morales, Jimmy <[JimmyMorales@miamibeachfl.gov](mailto:JimmyMorales@miamibeachfl.gov)>  
**Sent:** Tuesday, January 21, 2020 7:45 PM  
**To:** Carpenter, Eric <[EricCarpenter@miamibeachfl.gov](mailto:EricCarpenter@miamibeachfl.gov)>; Coley, Roy <[RoyColey@miamibeachfl.gov](mailto:RoyColey@miamibeachfl.gov)>; Knowles, Amy <[AmyKnowles@miamibeachfl.gov](mailto:AmyKnowles@miamibeachfl.gov)>; Martinez, David - CIP <[DavidMartinez@miamibeachfl.gov](mailto:DavidMartinez@miamibeachfl.gov)>  
**Subject:** FW: Palm Hibiscus Star Islands HOA input in reference to the City of Miami Beach Road Elevation Policy

FYI A very nice message.

**From:** Neil Fairman <[nfairman@plazaequity.com](mailto:nfairman@plazaequity.com)>  
**Sent:** Tuesday, January 21, 2020 7:15 PM  
**To:** Ian Kaplan <[ik@kaplangroup.com](mailto:ik@kaplangroup.com)>  
**Cc:** Morales, Jimmy <[JimmyMorales@miamibeachfl.gov](mailto:JimmyMorales@miamibeachfl.gov)>; Pierre De Agostini <[deagostini@aol.com](mailto:deagostini@aol.com)>; Gelber, Dan <[DanGelber@miamibeachfl.gov](mailto:DanGelber@miamibeachfl.gov)>; Steinberg, Micky <[MickySteinberg@miamibeachfl.gov](mailto:MickySteinberg@miamibeachfl.gov)>; Samuelian, Mark <[Mark@miamibeachfl.gov](mailto:Mark@miamibeachfl.gov)>; Gongora, Michael <[Michael@miamibeachfl.gov](mailto:Michael@miamibeachfl.gov)>; Meiner, Steven <[StevenMeiner@miamibeachfl.gov](mailto:StevenMeiner@miamibeachfl.gov)>; Arriola, Ricky <[RickyArriola@miamibeachfl.gov](mailto:RickyArriola@miamibeachfl.gov)>; Richardson, David <[DavidRichardson@miamibeachfl.gov](mailto:DavidRichardson@miamibeachfl.gov)>; [rosenstep@gmail.com](mailto:rosenstep@gmail.com); [k@claramonte.com](mailto:k@claramonte.com); [sk4inc@gmail.com](mailto:sk4inc@gmail.com); [pierre@palmhibiscusstarislands.org](mailto:pierre@palmhibiscusstarislands.org)  
**Subject:** Re: Palm Hibiscus Star Islands HOA input in reference to the City of Miami Beach Road Elevation Policy

[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]

Jimmy,

I concur with our Chairman Ian Kaplan and would like to emphasize the resident's sacrifice during the extended work timeline was well worth the security afforded by creating a sustainable infrastructure for our islands for the future. We must consider the future threats of unimpeded flooding in comparison to an extended inconvenience. Being the pioneer in raising our roads only the uninformed would believe that this would be a perfect process, hopefully our sacrifice will help other communities have a more efficient schedule.

I would like to thank your CIP staff for the professional work ethic and facing a staged project with constantly changing scope. It was a learning exercise for all, which should now allow more complete planning and engineering giving staff the documents which will allow staff the tools to keep contractors on time and save funds on change orders. The raised roads will bring security to our neighborhood during high water events for years to come and the beautiful landscape plan the City is implementing will bring gratification and pride to all of our residents.

Any help you could provide expediting our electrical under grounding would be greatly appreciated.

Thanks

**Neil Fairman**

**Board Member**

**Palm Hibiscus Star Island Homeowners Association**

On Jan 21, 2020, at 11:52 AM, Ian Kaplan <[ik@kaplangroup.com](mailto:ik@kaplangroup.com)> wrote:

Jimmy,

Good morning.

Overall, given sea level rise and the uncertainties of the escalation of higher tides in the future, we believe raising our roads on Palm and Hibiscus Islands where needed and adding pump stations (with back up generators) for our Islands was a prudent and good decision. As we live on Island communities

it is critical for the future that our roadway infrastructure remains above sea level and storm water has a well planned and environmentally safe method to be removed from our Islands without being trapped. Once our project is finally completed we remain confident that our Islands will be significantly more resilient for the future while protecting our property values and our waterfront environment.

However and unfortunately, for the homes/properties that are now below the new roadway elevation there was lack of foresight, planned policy, good communication and execution for these homeowners to properly understand their options and how to best interconnect their properties into the new storm water system. No doubt several properties are currently faced with hardships and we are counting on the City to collaborate with these homeowners for the optimum and timely result for all involved.

2

Please feel free to reach out if you have any further questions or require any clarifications.

We are counting on you to assist in finally completing our overall infrastructure projects including the undergrounding of our utilities, which we have literally been working on for over 20 years!

All the best, Ian

Kaplan  
Palm Hibiscus Star Islands Assoc. Board Chair

On Jan 21, 2020, at 10:34 AM, Morales, Jimmy <[JimmyMorales@miamibeachfl.gov](mailto:JimmyMorales@miamibeachfl.gov)> wrote:

Pierre,

Thank you for the input. I am curious if the Board of Directors had an opinion as to the merits of road raising on Palm and Hibiscus. Many other single family neighborhoods will look to the experience of Palm and Hibiscus since this was the first single family home area where road raising was significantly implemented. We obviously did that due to the very low lying nature of the islands. Clearly, we can do a better job of implementation. But the more fundamental question is whether you and your neighbors feel that the raising of the roads has made a positive long term impact on the neighborhood or not. I have seen before and after pictures that lead me to believe that significant flooding has been prevented, but I would welcome the firsthand experience of those who live there. Thanks

Jimmy

**From:** Pierre De Agostini <[deagostini@aol.com](mailto:deagostini@aol.com)>

**Sent:** Monday, January 20, 2020 10:10 PM

**To:** Gelber, Dan <[DanGelber@miamibeachfl.gov](mailto:DanGelber@miamibeachfl.gov)>; Steinberg, Micky <[MickySteinberg@miamibeachfl.gov](mailto:MickySteinberg@miamibeachfl.gov)>; Samuelian, Mark <[Mark@miamibeachfl.gov](mailto:Mark@miamibeachfl.gov)>; Gongora, Michael <[Michael@miamibeachfl.gov](mailto:Michael@miamibeachfl.gov)>; Meiner, Steven <[StevenMeiner@miamibeachfl.gov](mailto:StevenMeiner@miamibeachfl.gov)>; Arriola, Ricky <[RickyArriola@miamibeachfl.gov](mailto:RickyArriola@miamibeachfl.gov)>; Richardson, David <[DavidRichardson@miamibeachfl.gov](mailto:DavidRichardson@miamibeachfl.gov)>; Morales, Jimmy <[JimmyMorales@miamibeachfl.gov](mailto:JimmyMorales@miamibeachfl.gov)>

**Cc:** [ik@kaplangroup.com](mailto:ik@kaplangroup.com); [rosenstep@gmail.com](mailto:rosenstep@gmail.com); [k@claramonte.com](mailto:k@claramonte.com); [nfairman@plaza-group.com](mailto:nfairman@plaza-group.com); [sk4inc@gmail.com](mailto:sk4inc@gmail.com); [pierre@palmhibiscusstarislands.org](mailto:pierre@palmhibiscusstarislands.org)

**Subject:** Palm Hibiscus Star Islands HOA input in reference to the City of Miami Beach Road Elevation Policy

[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]

Dear Mayor , Commissioners , City Manager ,

It is our understanding that the City of Miami Beach and Jacobs Engineering are asking for public input in reference to the City of Miami Beach Road Elevation Policy .

3  
4

Please find below a statement from the Board of Directors of our Palm , Hibiscus and Star Island Homeowners Association :

"

The Roadway Project for Palm and Hibiscus Islands started back in 2016, over 4 years ago.

After many adjustments, change orders and numerous delays it seems that the project should be completed either this year or maybe even next year.

The Board is delighted that the end is in sight and would like to seize this opportunity to thank all parties who are helping achieve this result.

That said, we strongly believe that a more global vision to the project, a better analysis of all the relevant parameters and significantly better execution and communication would have avoided all the grievances with which the homeowners are still trying to resolve and complete. Better foresight and management would have led to a faster, smoother and less expensive execution.

We look forward to our project's completion as expediently as possible

"

Pierre De Agostini . PHS HOA  
Executive Director  
Managed by Florida Estate Inv nts .



Wade Trim, Inc.  
2100 Ponce de Leon Boulevard, Suite 940 • Coral Gables, FL 33134  
786.361.1645 • www.wadetrim.com

May 10, 2018

Department of Regulatory and Economic Resources  
701 NW 1st Court, 5th Floor Miami, FL 33136-3912

Attention: Mayra de Torres, Engineer

Re: City of Miami Beach Neighborhood 13A Infrastructure Improvements  
Palm and Hibiscus Islands  
Class II Permit Renewal

Dear Ms. De Torres:

We are submitting the attached application for the above-referenced project, in lieu of a Time Extension Request. In order to assist in your review of this, as it relates to the original Class II Permit Application for this project (Permit No. 20150058), we are providing the following narrative:

1. Has the above-referenced permit previously extended? If so, list the permit extension date(s).

*No.*

2. Describe the work, as authorized by the above-referenced permit that has not been completed up to date.

*Swale area grading, pump stations, private-side yard drains, lighting, final lift of asphalt, pavement and marking.*

3. Has the work performed to date as authorized by the above-referenced permit, been conducted in accordance with the permit description, approved plans and restrictions, limitations or conditions of the permit? If not, describe in detail work that has been conducted that is not in accordance with the permit.

*City provided a change in directive requiring installation of private-side yard drains for properties that have finished floor elevations below the adjacent crown of road. The original stormwater design criteria required that the drainage area be sized to account for and reflect the actual contributory area at a minimum all road rights-of-way, 100% of interior (landlocked) lots and 50% of waterfront lots. Thusly there is enough capacity in the system to account for this additional stormwater load, particularly in light of the fact that few of the properties fall within this new City criteria.*

*Additional City-directed changes will be submitted via revised plans for Palm Island and Hibiscus Islands during permit certification submittals; these mainly relate to change of pipe alignments to reduce impact to existing vegetation, addition of a secondary drainage system to reduce potential flooding in isolated areas, and lowering of proposed elevation of roads to reduce harmonization impacts to private properties.*

City of Miami Beach Public Works  
May 3, 2018  
Page 2

4. Describe any substantial changes in the environment that have occurred at or adjacent to the subject location since the date of issuance of the above-referenced permit or prior extension time.

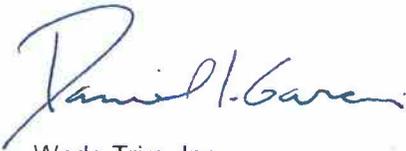
*None.*

5. Describe any adverse environmental impact(s) or cumulative environmental impact(s) that may occur if a permit extension is granted.

*None.*

For all required documentation as outlined in Section 2 and Attachment B, please refer to original permit application for Permit No. 20150058, as a reference. Please do not hesitate in contacting me should require additional information or have any additional questions.

Very truly yours,



Wade Trim, Inc.

Daniel Garcia, PE  
Project Manager

LNZ2003.02S

cc: Olga Sanchez (City of Miami Beach)  
Pablo Riano (Lanzo Construction)  
Holly Kremers, PE (Wade Trim)



Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources  
 Environmental Resources Management  
 701 NW 1st Court, 6th Floor  
 Miami, Florida 33136-3912  
 T 305-372-6567 F 305-372-6407

**CLASS II, III, VI  
 PERMIT APPLICATION FORM**

miamidade.gov

**For Departmental Use Only**

Date Received: \_\_\_\_\_ Application #: \_\_\_\_\_ Reviewer: \_\_\_\_\_

Fee Received: \_\_\_\_\_ Tracking #: \_\_\_\_\_

**1. Type of Water Control Permit Application:**

- Class II Permit (Construction of drainage system with overflow or outfall in, on or upon any water body).
- Class III Permit (Construction within county owned or controlled canal right-of-way, reservation, or easement).
- Class VI Permit (Construction of a drainage system for any project that has known soil or groundwater contamination or that uses, generates, handles, disposes of, discharges, or stores hazardous materials).

**2. Checklist: INCOMPLETE APPLICATION PACKAGE WILL NOT BE PROCESSED**

- Application Fee:
  - Construction costs less than \$2,499.00 - fee is **\$215.00**
  - Construction costs more than \$2,500.00 - fee is **\$490.00**
 Note: After-the-Fact permit applications will be twice of the original fee, plus Departmental administrative enforcement costs
- 3 sets of construction plans\*
- 1 set of drainage calculations\*
- 1 copy of topographic or boundary survey
- A vertical aerial photograph or project location map
- Engineer letter of certification (See **ATTACHMENT A**)

Other items may be required depending on the nature of the work (See **ATTACHMENT B**)

\* **Must be signed and sealed by an engineer licensed in the state of Florida.**

**3. Project Information:**

This application is for a(n):  New Permit  After the Fact Permit

Project Name: City of Miami Beach Infrastructure Improvements for Palm & Hibiscus Islands Folio: \_\_\_\_\_

Location: All rights-of-way on Palm Island & Hibiscus Island

Section: 32,4,5 Township: 53/54 Range: 42 Municipality: Miami Beach

Is the proposed work in a contaminated site?  Yes  No  Unknown If yes, refer to **ATTACHMENT C**

Description of proposed work:

Proposed are the infrastructure improvements to serve the City of Miami Beach (CMB) Palm and Hibiscus Islands otherwise known as "Neighborhood No.13: Palm and Hibiscus Islands Right-of-Way Infrastructure Improvement Project" consisting of elevated roadways where possible, installation of new potable water main systems, installation of stormwater collection systems with 3 stormwater pumping stations equipped with water quality treatment units and gravity bypass stormwater outfalls with dissipation structures discharging into Biscayne Bay. Backflow prevention devices will be installed at the outfalls to prevent extreme high tides from backing up into the system.

**3. Project Information (Continuation):**

Date activity is proposed to commence 01/20/2016  
 Cost of project construction\*: \$ 11,028,969.64

Date activity is proposed to be completed: 12/31/2018

Proposed Use

- Residential       Commercial       Recreational       Industrial       Highway or road  
 Agricultural       Institutional       Landfill       Other, Specify: \_\_\_\_\_

**\*Cost of project construction is as follows: Class II & VI – total cost of drainage work ONLY, Class III – total cost of construction work within the canal right-of-way, reservation or easement ONLY.**

**4. Applicant Information:**

This should be the applicant's information for contact purposes.

Name: Eric Carpenter, PE  
 Company: City of Miami Beach  
 Address: 1700 Convention Center Drive  
Miami Beach      Zip Code: 33139  
 Phone: 305.673.7080      Fax: 305.673.7028  
 Email: luissoto@miamibeachfl.gov

**5. Applicant's Authorized Permit Agent:**

Agent is authorized to process the application, furnish supplemental information relating to the application and bind the applicant to all requirements of the application.

Name: Daniel Garcia, PE  
 Company: Wade Trim  
 Address: 2100 Ponce de Leon Blvd  
Coral Gables, FL      Zip Code: 33134  
 Phone: 786-361-1645      Fax: \_\_\_\_\_  
 Email: dgarcia@wadetrim.com

**6. Contractor Information:**

Name: Bob Bealy, PE      License No. (County/State): CGC1519540 Broward/FL  
 Company: Lanzo Construction Companies  
 Address: 125 SE 5th Court      Zip Code: 33441-4749  
 Phone: 954.979.0802      Fax: 954.979.9897      Email: BobB@Lanzo.org

**7. Professional Engineer Information:**

Name: Holly Kremers, PE      P.E. License No.: 68130  
 Company: Wade Trim  
 Address: One Tampa City Center, 201 North Franklin Street, Suite 1350, Tampa, FL      Zip Code: 33602  
 Phone: 813-882-4373      Fax: \_\_\_\_\_      Email: hkremers@wadetrim.com

**8. List all permits or certifications that have been applied for or obtained for the above referenced work:**

- Issuing Agency FWMD      Permit Type ERP      ID # 13-06125-P  
 Application Date 10/12/2015      Approval Date 05/05/2016
- Issuing Agency \_\_\_\_\_      Permit Type \_\_\_\_\_      ID # \_\_\_\_\_  
 Application Date \_\_\_\_\_      Approval Date \_\_\_\_\_
- Issuing Agency \_\_\_\_\_      Permit Type \_\_\_\_\_      ID # \_\_\_\_\_  
 Application Date \_\_\_\_\_      Approval Date \_\_\_\_\_





**ATTACHMENT B**

- Substantiating letter from zoning authority of municipality or county stating that proposed work does not violate applicable zoning law
- Stormwater pollution prevention plan
- Percolation test (signed and sealed by an engineer, licensed in the state of Florida - for Class II & Class VI)
- Manatee grates for outfalls (if applicable)
- Covenant for the requirements of cut and fill or special basin criteria.
- 7-A Covenant for lake excavation in well field protection areas.
- Performance Bond and/or Mitigation Fee: (to be assessed by Water Control Section).

Note that based on new information or future submittals, this Department may require additional items prior to the issuance of the permit.



Carlos A. Gimenez, Mayor

**ATTACHMENT C**

Department of Regulatory and Economic Resources

Environmental Resources Management

701 NW 1st Court, 4th Floor

Miami, Florida 33136-3912

T 305-372-6700 F 305-372-6982

miamidade.gov

**RER/ERM  
POLLUTION REMEDIATION SECTION  
TECHNICAL GUIDANCE**

**DRAINAGE PLANS FOR CONTAMINATED SITES**

**MINIMUM REQUIREMENTS**

The appropriate location of drainage structures is essential in preventing the movement of contaminant plumes into previously uncontaminated areas. All drainage installations at contaminated sites shall be reviewed and approved by the RER/ERM's Pollution Remediation Section prior to construction. The scope of work provided by the PRS review is limited to evaluate the location of the proposed drainage system in reference to the contaminated areas. Approval from other departments, and/or sections and other governmental agencies having jurisdiction over the scope of work must be obtained prior to the implementation of the project. The following information is required:

- 1) The location of the contaminant plume(s) in reference to the area of the proposed drainage structures must be included on the site plan. The plume(s) must be delineated both horizontally and vertically to applicable target cleanup levels in the drainage area. Monitoring wells, including identification numbers, must be shown on the plan.
- 2) Groundwater analytical results must be submitted with the plan including copies of laboratory analyses sheets. An updated groundwater sampling event may be required if sample results are greater than nine (9) months old. The sampling event must include all applicable parameters associated with the site's type of contamination.
- 3) The groundwater flow direction must be shown on the plan.
- 4) The location and detailed construction drawings of the proposed drainage structure must be included on the plan (e.g., piping depth, drainage well depth, etc.). Plans must specify the locations of solid and perforated sections of piping. Details of the existing system must be provided if the proposed drainage system ties into the existing drainage system.
- 5) A minimum of two (2) plan sets that include all of the information requested are to be submitted for the review (1 set will be placed in the PRS RER/ERM file). All applicable pages of the drainage plan must be signed and sealed by a Professional Engineer registered in the State of Florida. The appropriate review fee (see below), made out to Miami-Dade County, must be included with the plans.

**PRS REVIEW FEES**

(See Fee Schedule at <http://www.miamidade.gov/development/library/fees/schedule-environmental.pdf>)

- Site under one acre in size - \$300.00
- Sites over one acre in size or projects that encompassed multiple contaminated sites - \$300.00 plus \$100.00 per additional acre or site encompassed by the project.

# MIAMI BEACH

**Commission Meeting/Presentations & Awards  
City Hall, Commission Chamber, 3rd Floor, 1700 Convention Center Drive  
October 30, 2019 – 5:00 PM**

Mayor Dan Gelber  
Commissioner John Elizabeth Alemán  
Commissioner Ricky Arriola  
Commissioner Michael Góngora  
Commissioner Joy Malakoff  
Commissioner Mark Samuelian  
Commissioner Micky Steinberg

City Manager Jimmy L. Morales  
City Attorney Raul J. Aguila  
City Clerk Rafael E. Granado

**Visit us at [www.miamibeachfl.gov](http://www.miamibeachfl.gov) for agendas and video streaming of City Commission Meetings.**

## **ATTENTION ALL LOBBYISTS**

**Chapter 2, Article VII, Division 3 of the City Code of Miami Beach, entitled "Lobbyists," requires the registration of all lobbyists with the Office of the City Clerk prior to engaging in any lobbying activity with the City Commission, any City Board or Committee, or any personnel as defined in the subject Code sections. Copies of the City Code sections on lobbyists laws are available in the Office of the City Clerk. Questions regarding the provisions of the Ordinance should be directed to the Office of the City Attorney.**

*To request this material in alternate format, sign language interpreter (five-day notice required), information on access for persons with disabilities, and/or any accommodation to review any document or participate in any city-sponsored proceedings, call 305.604.2489 and select 1 for English or 2 for Spanish, then option 6; TTY users may call via 711 (Florida Relay Service). To ensure adequate public consideration, if necessary, the Mayor and City Commission may move any agenda item to an alternate meeting. In addition, the Mayor and City Commission may, at their discretion, adjourn the Commission Meeting without reaching all agenda items.*

## **AFTER ACTION**

Meeting called to order by Mayor Dan Gelber at 5:08:51 p.m.

Pledge of Allegiance led by Miami Beach Senior Citizens present in the audience.

Mayor Gelber announced that tomorrow is Vice-Mayor Ricky Arriola's birthday and everyone sang Happy Birthday. A birthday cake was presented by his Aide Erick Chiroles.

**6:28:14 p.m.**

### **ANNOUNCEMENT:**

Mayor Gelber announced that this was an Awards and Presentation Commission Meeting, that also included many regular business items. He feels that they should not do business during Presentation and Awards meetings, as this is the time to honor residents, and that is the purpose for it. In the future, these Awards and Presentations meetings will be limited to that only.

**R9 D DISCUSSION ON THE PALM AND HIBISCUS RESILIENCY PROJECT WITH A FOCUS ON PRIVATE PROPERTY HARMONIZATION.**

Commissioner Mark Samuelian

**ACTION:** Discussion held. Lilia Cardillo to place on the Commission Agenda, if received. **Eric Carpenter and David Martinez to handle.**

**DIRECTION:**

- Add this item as a recurring update item each Commission Meeting. Lilia Cardillo to place on the agenda. **Eric Carpenter and David Martinez to handle.**
- Inspector General Centorino to investigate Palm and Hibiscus Islands and Indian Creek and identify what the permitting problem is, why did it cost so much money, and why has it taken so long? Inspector General Joseph M. Centorino to report back to the City Commission with more information. **Joseph M. Centorino to handle.**
- Include a drop-dead date set for the harmonization agreements to be signed. **Eric Carpenter and David Martinez to handle.**

Holly Kremers, Vice-President, Wade Trim, explained the process they have gone through as far as permitting, and clarified that when the project started construction, they did have both systems, Palm and Hibiscus Islands, fully permitted. As construction projects go through there are some field adjustments that take place in any infrastructure system; many times, those are addressed as as-built and permits are closed out. To be clear, the permit modifications are unique to the west end of Palm Island. On the east end of Palm Island, the stormwater system was constructed and installed for the permitted documents without modifications. On Hibiscus Island there was a net difference of one, an 18-inch inland drain in the right of way, and there is an area where they had obstruction and was shifted around so they added one. This is normally something they would take care of during permit closeout. The west end of Palm Avenue has been more challenging during construction, and there are two separate issues that they have been discussing with DERM about how to handle. 1) There are 17 drains that are in the right of way around the west end of Palm Avenue. When they initially designed the project, they planned to clear out more vegetation in the right-of-way by taking out some trees and they would have a grassy swale for the stormwater to collect in the right-of-way and traverse on the swale and be collected on a larger catch basin. During construction they realized there were issues with removing those trees and they decided, to preserve the trees, instead of having the water meander down the swale and going to one basin, they would have to put an intermediate secondary drainage basins through the right-of-way to capture that same water in transit to the larger drain basin. In retrospect, at that point they should have gone to DERM and ask about permit modification process, and certainly at their next project they will do that, but they thought it was something that could be handled during the as built in and they went forward with construction of capturing the same stormwater in the right of way that was already permitted through additional inlets. The 88 drains are temporary construction drains, one of which was installed in the right of way in front of each property on north and south Coconut Lane; and they put them there because they knew that with a smaller right of way in that area, during construction and before they had a chance to do the final harmonization drainage, they wanted to make sure they had that in place; in case of flooding issues were to occur during construction they would have a way to transmit that water away. The intent was that when the project was complete and before the stormwater system was placed in the service, those drains would be abandoned, and the permitting drainage system would be in place at that time. And for that reason, they did not include those 88 temporary constructions drains on the permit documents. They have resolution on how DERM wants to see those and they are going to add them as temporary drains to the temporary modification. They are also adding the 17 drains as part of the permanent permit modification; that piece was already done. They have enough treatment capacity to handle those areas, and they think they have all the pieces in place to move towards a resolution with all parties.

**From:** Michael Alvarez <[malvarez@balharbourfl.gov](mailto:malvarez@balharbourfl.gov)>  
**Date:** September 19, 2018 at 3:03:00 PM EDT  
**To:** "Morales, Jimmy" <[JimmyMorales@miamibeachfl.gov](mailto:JimmyMorales@miamibeachfl.gov)>, "Wheaton, Elizabeth" <[ElizabethWheaton@miamibeachfl.gov](mailto:ElizabethWheaton@miamibeachfl.gov)>  
**Subject:** FW:

Good afternoon Jimmy,

A friend of mine that lives several houses from 253 North Coconut Lane, Palm Island sent me the pictures attached. Could not been a better time to raise my point of views as well as concerns, on the City allowing private properties to connect to the storm water system.

Look and zoom into the garage and see the pipe heading inside the garage. This resident can pour anything he wants without no one noticing and such liquids such as chemical pollutants ending / polluting Biscayne Bay.

I hope now you understand my point. The City SHOULD NOT implement or allowed private properties to connect to the City stormwater system.

2

Sincerely,

MIKE ALVAREZ -- CGC, PWLF  
Utility Compliance Officer  
Bal Harbour Village  
PARKS AND PUBLIC SPACES DEPARTMENT  
655 - 96th Street  
Bal Harbour , FL 33154 Office: 305-  
993-7361 Ext: 361  
Cell: 786-566-3462  
[malvarez@balharbourfl.gov](mailto:malvarez@balharbourfl.gov)

\*\*\*\*\* Please be advised that Bal Harbour Village has transitioned to a new .GOV e-mail domain. Please send all future correspondence to Village contacts using the new domain as specified above. Thank you. \*\*\*\*\*



**From:** Pablo Riano [<mailto:PabloR@Lanzo.org>]  
**Sent:** Wednesday, April 04, 2018 2:55 PM  
**To:** Samadi, Mina; Joe D'Alessandro Jr.; 'Garcia, Daniel'; Victor Serrano  
**Cc:** Sanchez, Olga; Soto, Luis; Rivas, Jose  
**Subject:** RE: P & H- New drainage directive

**NCC 005 - Revised**

Mina,

At this moment, we are in the process of assessing the impact(s) of these new changes. We will forward more specific documentation to you as soon as it is available. Please, note this new directive has the potential to impact the project's cost and duration, and requires a careful approach; not to mention the fact the potential additional work may impact work that has already been completed. It is necessary to agree on the impacts before we proceed.

Please, let us know if you have any questions, comments, and/or concerns.

Respectfully,

LANZO CONSTRUCTION CO., FL.

**Pablo C. Riaño**  
**Sr. Project Manager**

LANZO COMPANIES  
407 Lincoln Road, Suite 10R  
Miami Beach, FL 33139  
(305) 548-8765 Office  
(954) 931-0804 Mobile

[www.lanzo.net](http://www.lanzo.net)

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**From:** Samadi, Mina [<mailto:MinaSamadi@miamibeachfl.gov>]  
**Sent:** Wednesday, April 04, 2018 11:49 AM  
**To:** Samadi, Mina; Pablo Riano; Joe D'Alessandro Jr.; 'Garcia, Daniel'; Victor Serrano  
**Cc:** Sanchez, Olga; Soto, Luis; Rivas, Jose  
**Subject:** RE: P & H- New drainage directive  
**Importance:** High

Please start implementing the below directive immediately.

Thank you,

**Mina Samadi, P.E., LEED® AP,**  
*Senior Capital Project Coordinator*  
CAPITAL IMPROVEMENT PROJECTS OFFICE  
1700 Convention Center Drive, Miami Beach, FL 33139  
Tel: 305-673-7071 ext 2581 Fax:305-673-7073 [minasamadi@miamibeachfl.gov](mailto:minasamadi@miamibeachfl.gov)

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**From:** Samadi, Mina  
**Sent:** Wednesday, April 04, 2018 10:21 AM  
**To:** Pablo Riano; Joe D'Alessandro Jr.; 'Garcia, Daniel'; 'Victor Serrano'  
**Cc:** Sanchez, Olga; Soto, Luis; Rivas, Jose  
**Subject:** P & H- New drainage directive  
**Importance:** High

Hello Lanzo team,

Below is the directive for the drainage system modification as it relates to final Harmonization for Palm and Hibiscus project

1. Any Property that has signed the Harmonization Agreement and has FFE at or below the new crown of the road shall receive a yard drain/catch basin inside the private property, at the low point, referred to as the "connection point" with a plug that can be removed and connected to.
2. All properties that elect to construct additional drainage components and connect to the City's system must obtain a building permit to perform their work. *(please provide any property that would like to obtain a permit, a copy of the project design plan for their specific area, so that they may include with their package and identify in their package the City's project in their area)*
3. Properties that have not signed the Harmonization Agreements will be harmonized to the ROW line.
4. There are a couple of special location where we have met with the property owners, identified the harmonization method and will implement the discussed method.

Thank you,

<< OLE Object: Picture (Device Independent Bitmap) >>

**Mina Samadi, P.E., LEED® AP,**  
*Senior Capital Project Coordinator*

CAPITAL IMPROVEMENT PROJECTS OFFICE  
1700 Convention Center Drive, Miami Beach, FL 33139

Tel: 305-673-7071 ext 2581 Fax:305-673-7073 [minasamadi@miamibeachfl.gov](mailto:minasamadi@miamibeachfl.gov)

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**From:** Samadi, Mina  
**Sent:** Friday, June 22, 2018 5:29 PM  
**To:** 'Albert Dominguez' <[AlbertD@Lanzo.org](mailto:AlbertD@Lanzo.org)>; Victor Serrano <[VictorS@Lanzo.org](mailto:VictorS@Lanzo.org)>; Joe D'Alessandro Jr . <[JoeJr@Lanzo.org](mailto:JoeJr@Lanzo.org)>; Pablo Riano <[PabloR@Lanzo.org](mailto:PabloR@Lanzo.org)>  
**Cc:** Sanchez, Olga <[OlgaSanchez@miamibeachfl.gov](mailto:OlgaSanchez@miamibeachfl.gov)>; 'Compel, Sean([sean.compel@stantec.com](mailto:sean.compel@stantec.com))' <[sean.compel@stantec.com](mailto:sean.compel@stantec.com)>; 'Vargas, Fernando' <[fernando.vargas@stantec.com](mailto:fernando.vargas@stantec.com)>  
**Subject:** RE: Private Property Yard Drain Installation - North Coconut Lane

Hello Albert,  
Thank you for sending the list of location, work and prices.

As per our previous conversation, as you are scheduling and performing the work we will review the prices and tally them for the change order. Also that you will continue with scheduling these work till all the harmonization and the new drainage criteria are complete.

We will schedule a meeting next week to complete the walk through and review the cost proposals.

Thank you,

MIAMIBEACH

**Mina Samadi, P.E., LEED® AP,**

*Senior Capital Project Coordinator*

CAPITAL IMPROVEMENT PROJECTS OFFICE

1700 Convention Center Drive, Miami Beach, FL 33139

Tel: 305-673-7071 ext 2581 Fax:305-673-7073 [minasamadi@miamibeachfl.gov](mailto:minasamadi@miamibeachfl.gov)

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**From:** Albert Dominguez [<mailto:AlbertD@Lanzo.org>]  
**Sent:** Friday, June 22, 2018 4:41 PM  
**To:** Samadi, Mina  
**Cc:** Joe D'Alessandro Jr.; Pablo Riano; Victor Serrano; Sanchez, Olga  
**Subject:** RE: Private Property Yard Drain Installation - North Coconut Lane

Mina,

In continuing coordinated effort between Lanzo and the CMB CIP office, to expedite the implementation of the New Private Yard Drain Directive in certain priority locations, and after several mutual site visits, Lanzo is hereby providing you with the proposed work plan and proposal for the listed properties to begin work on June 25<sup>th</sup>, and estimated for completion by July 6<sup>th</sup>.

If you agree with this work plan and proposal, we will order materials immediately and initiate the work as proposed.

Please see that work on three (3) of the 11 properties are pending action by your staff, before we can provide a proposal and schedule the work.

Please advise us at your earliest convenience if you approve this work plan for scope and cost.

Thank you,  
Albert Dominguez, PE



1968-2018

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[www.lanzo.net](http://www.lanzo.net)

**From:** Albert Dominguez  
**Sent:** Friday, June 8, 2018 3:00 PM  
**To:** 'Samadi, Mina' <[MinaSamadi@miamibeachfl.gov](mailto:MinaSamadi@miamibeachfl.gov)>  
**Cc:** Joe D'Alessandro Jr. <[JoeJr@Lanzo.org](mailto:JoeJr@Lanzo.org)>  
**Subject:** Private Property Yard Drain Installation - 195 North Coconut Lane

Mina,

In a coordinated effort between Lanzo and the CMP CIP Office, to expedite the implementation of the New Private Yard Drain Directive in certain priority locations, Lanzo completed the installation of the private property yard Drain at the subject location.

We are now ready to complete the restoration for the private driveway area and are providing you with the cost proposal for your review and approval.

Please expedite this review and approval so that we can proceed with the work next week.

The proposed work is as follows:

Items	Cost
Furnish and Install new yard Drain in Private Property	\$ 3,780.00
Core and connect to existing inlet	\$ 750.00
Furnish and install check Valve	\$ 700.00
Demo and prepare Private area for Concrete Restoration	\$ 4,900.00
Furnish and install approx. 160 Sy of 6" Concrete Driveway	\$ 6,300.00
	\$ 16,430.00
Overhead and Profit	7.50% \$ 1,232.25
Bond and Insurance	2.50% \$ 441.56
Total Proposed Change Order	\$ 18,103.81

Thank you for your prompt attention.  
 Albert Dominguez, PE



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EXHIBIT 6

Proposed Work on North Coconut For the Weeks 6-25-18 through 7-7-18

House #	Street	Work	Issue	Resp. Party
195	N. Coconut	Work Completed	LC to revise Estimate	LC
199	N. Coconut	Grade/SOD/ Cap Edge Drain & Add Clean-out Box		LC
199	Palm	Grade/SOD		LC
201	N. Coconut	T. Drain across Dwey, yard drain, Check valve in 36x36 Str.		LC
201	Palm	Cap Edge Drain & Add Clean-out Box		LC
205	N. Coconut	New yard Drain, check valve in 36" Str., Grade/SOD	CIP to advise LC about Parking at this location since there is a conflict with Vaibility Triangle	CMB
205	Palm		City to Provide Direction with Owner	CMB
210	Palm		No Agreement	CMB
211	N. Coconut	New Yard drain/ Check valve in 36" Str.	City to provide new owner agreement	CMB
215	Palm	Install Check Valve in inlet, Eliminate ED		LC
215	N. Coconut	Cap Two Edge Drain & Two Add Clean-out Box		LC

check valve	yard drain	36" Str	T Drain (ft)	CO / Box	Core Inlet	Restoration	cost total	7.5 % GP	2.5% B&I	
\$ 3,700.00	\$ 3,780.00	\$ 3,800.00	\$ 375.00	\$ 1,500.00	\$ 750.00	\$ 5,600.00	\$ 13,830.00	\$ 1,037.25	\$ 371.68125	\$ 15,238.93
				\$ 1,500.00			\$ 1,500.00	\$ 112.50	\$ 40.31	\$ 1,652.81
\$ 3,700.00	\$ 3,780.00	\$ 3,800.00	\$ 3,000.00				\$ 14,280.00	\$ 1,071.00	\$ 383.78	\$ 15,734.78
				\$ 1,500.00			\$ 1,500.00	\$ 112.50	\$ 40.31	\$ 1,652.81
\$ 3,700.00	\$ 3,780.00	\$ 3,800.00					\$ 11,280.00	\$ 846.00	\$ 303.15	\$ 12,429.15
\$ 3,700.00					\$ 750.00		\$ 4,450.00	\$ 333.75	\$ 119.59	\$ 4,903.34
				\$ 3,000.00			\$ 3,000.00	\$ 225.00	\$ 80.63	\$ 3,305.63
							\$ 49,840.00	\$ 3,738.00	\$ 1,339.45	\$ 54,917.45

**From:** Samadi, Mina [mailto:MinaSamadi@miamibeachfl.gov]  
**Sent:** Tuesday, August 14, 2018 11:03 AM  
**To:** Albert Dominguez; Joe D'Alessandro Jr.; Pablo Riano; Victor Serrano  
**Cc:** Sanchez, Olga; 'Compel, Sean'; Crews, Jeff  
**Subject:** P & H - new drainage directive harmonization  
**Importance:** High

EXHIBIT 7

Hello Albert,

We had a walk through last Thursday to review the harmonization needed as a result of the new drainage directive (FFE< crow of road = yard drain in private properties). This was the last phase of coordination to determine the scope of work per joint understanding. Please provide a **comprehensive(design/build)** change order request for this work so that we can prepare a change order that will be presented at the September commission meeting. Please provide the request for change order with the spread sheet that explains the work and cost by Monday August 20, 2018.

Thank you,

**Mina Samadi, P.E., LEED® AP,**  
*Senior Capital Project Coordinator*  
Office of Capital Improvement Projects  
1700 Convention Center Drive, Miami Beach, FL 33139  
Tel. 305-673-7071 ext 2581 Fax:305-673-7073 [minasamadi@miamibeachfl.gov](mailto:minasamadi@miamibeachfl.gov)

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**From:** [ChristinaBaguer@miamibeachfl.gov](mailto:ChristinaBaguer@miamibeachfl.gov) <[ChristinaBaguer@miamibeachfl.gov](mailto:ChristinaBaguer@miamibeachfl.gov)>  
**Sent:** Tuesday, September 18, 2018 12:35 PM  
**To:** [CapitalProjectsSeniorCoordinator@miamibeachfl.gov](mailto:CapitalProjectsSeniorCoordinator@miamibeachfl.gov)  
**Cc:** [DavidMartinez@miamibeachfl.gov](mailto:DavidMartinez@miamibeachfl.gov); [MariaCerna@miamibeachfl.gov](mailto:MariaCerna@miamibeachfl.gov)  
**Subject:** Agenda Titles for October Commission Meeting

Seniors,

Please see attached, the agenda titles I have, as of today, for the October 17<sup>th</sup> Commission meeting.

These titles have not been approved yet. If you have any revisions or any additional titles, please send to me as soon as possible.

Thank you.  
Christina

MIAMIBEACH

**Christina Baguer**, *Administrative Support Manager*  
OFFICE of CAPITAL IMPROVEMENT PROJECTS (CIP)  
1700 Convention Center Drive, Miami Beach, FL 33139  
Tel: 305-673-7071 Ext 6767 / Fax: 305-673-7073  
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MIAMIBEACH

Office of Capital Improvement Projects  
October 17, 2018 Commission Agenda Items

**PALM AND HIBISCUS AMENDMENT NO. 5**

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE AMENDMENT NO. 5 TO THE DESIGN-BUILD AGREEMENT BETWEEN THE CITY OF MIAMI BEACH, FLORIDA, AND LANZO CONSTRUCTION CO., FLORIDA, FOR DESIGN-BUILD SERVICES FOR NEIGHBORHOOD NO. 13: PALM AND HIBISCUS ISLANDS RIGHT-OF-WAY INFRASTRUCTURE IMPROVEMENTS (THE PROJECT), DATED SEPTEMBER 18, 2014 (THE CONTRACT); THE AMENDMENT INCLUDES ADDITIONAL DESIGN SERVICES AND CONSTRUCTION ASSOCIATED WITH THE RECENTLY ADOPTED DRAINAGE DIRECTIVE AND NECESSARY WORK IN ORDER TO MAINTAIN EXISTING OUTFALLS OPERATIONAL IN THE NOT-TO-EXCEED AMOUNT OF \$800,000 WITH **XXXXXX FUNDING**.

# MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

Public Works Department

Tel: 305-673-7080

## MEMORANDUM

TO: Joseph M. Centorino, Inspector General

FROM: Roy Coley, Public Works Director



DATE: January 22, 2021

SUBJECT: OIG Palm & Hibiscus Islands Response

On December 4, 2020, the Office of Inspector General released a draft report titled: General Report of its investigation of the management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project. The findings within the report are demonstrably prejudice, stretching, or even creating, facts to affirm the apparent desired narrative.

The report generally posed two broad claims: 1) the City's administration knowingly omitted material changes in the Palm and Hibiscus Projects from the regulators; and 2) the elevation of roads within Palm and Hibiscus Islands caused private properties to flood. These claims are patently false. To illustrate this, I only offer the most pressing facts below.

### Claim 1

At no point did the city conspire to construct a drainage system that was not properly disclosed to DERM or other regulatory entities. In fact, the plans submitted for permitting established a tributary area that included the private properties. This tributary area did not change throughout the entirety of the project. The addition of the temporary construction inlets only facilitated drainage within the defined tributary area, as did the addition of private side inlets or permanent right-of-way inlets. Akin to adding a second drain to your bathtub. Does it drain faster? Yes, but it's the same water.

Not only did the tributary area not change, but neither did the design storm event or the percent of impervious area. Without harping on the technical, this is a momentous fact that is not acknowledged in the OIG report. The parameters that remained constant constitute the area, runoff coefficient, and the rainfall intensity. The product of these parameters is flow rate – the essence of a drainage design. It stands to reason that from a drainage perspective, and a drainage permitting perspective, if these factors remain constant, other changes would reasonably be considered immaterial.

A testament to immateriality of the change, is the fact that the temporary construction inlets were part of the contractors means and methods. Contractor means or methods are within the

discretion of the contractor to implement in order to achieve a contract objective. Using the Palm and Hibiscus project as an example, the contractor could not adversely impact the level of service of the stormwater system while working on the system. The contractor decided that the best way to ensure that properties did not flood during construction was to construct temporary construction inlets. Means and methods are not dictated by the owner of a project and doing so could expose the owner to undue liability. In fact, as noted in the summary judgment of *Juno Indus. v. Heery Int'l*, 646 So. 2d 818, 822 (Fla. 5th DCA 1994), “The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for all safety precautions and programs, in connection with the Work as well as for coordinating all portions of the Work.”

Moreover, the cost of the private side inlets and permanent right-of-way inlets and associated harmonization is minor compared to the overall contract. The change order amounted to \$1,615,000, or less than 5% of the total \$40,956,000 project cost.

Any large public infrastructure project as complex as Palm and Hibiscus incurs a 5% change in scope. Moreover, Palm and Hibiscus was a progressive design build project, where, by definition, the plans were not fully developed. It is not only reasonable, but expected, that a professional would deem a 5% change immaterial.

A key issue that is concerningly reiterated throughout the OIG report, although it is not representative of reality, is that there was “large scale installation of private-side yard drains”. In fact, there were only eight building permits authorized for drainage connections from private properties. The remaining drains were all in the right-of-way and reasonably considered temporary construction solutions.

To provide perspective, public works permitted eight private connections out of approximately 300 properties in the Palm and Hibiscus project – less than 3% of the properties received private-side yard drains.

The report fails to mention that immaterial project changes are ordinarily reconciled through permit modifications at project close out. This was stated by the Engineer of Record (see Exhibit A) at a public committee meeting; however, no mention of these statements is made in the OIG report. While the significance of the yard drains is arguable at best, the professionals working on the project clearly arrived at the consensus that these drains were immaterial.

Perhaps there are well vetted technical or administrative reasons that DERM considers the additional temporary drains material; this, however, does not change the fact that within normal engineering practices the volume of water and tributary area are what is of importance.

It therefore stands to reason that the lack of permit revisions is not indicative of willful deception, but rather representative of ordinary project management decisions.

## Claim 2

The elevation of roadways does not and did not flood properties. It is essential to understand that any water ponding on a property is only there because the water landed on that property. This is the purpose of harmonization – to ensure proper access and drainage.

The OIG report stated that an elevation of 2.2 NAVD would have been the proper elevation. However, this elevation is no different than 3.7 from a grading perspective - the adjacent property would remain lower.

In fact, the below table from the signed and sealed drainage report for Palm Island shows that the post development conditions on the south-southwest side of the island (the Coconut Lanes) exhibit a Max Stage of 1.06 or less.

**Table 2- 4: Maximum Flood Stage Elevations**

Location	Node	Warning Stage (ft)	Max Stage (ft)	
			5-Yr, 1-Day Storm at Low Tide	5-Yr, 1-Day Storm at High Tide
NW	CB-123	2.82	-0.75	-0.75
Before East PS	CB-131	2.95	-1.97	-1.97
Before West PS	MH-020	2.56	-2.32	-2.32
NE	CB-084	3.00	3.29	3.29
SE	CB-085	3.00	3.34	3.34
S	CB-133	2.90	1.06	1.06
S	CB-013	3.20	0.63	0.63
SW	CB-114	2.82	0.85	0.85

As seen in the last three rows of the above table, the elevation of water during the design storm event for these properties is well below, even the 2.2 NAVD recommended in the OIG report. Therefore, it stands to reason that if 2.2 NAVD would not adversely impact the properties, neither would 3.7 NAVD.

The OIG is encouraged to see Exhibit B – clearly showing the efficacy of the Palm and Hibiscus Project with before and after photographs.

If the intent was clearly to improve the quality of life of the residents and no conspiracy was at hand, the inevitable question becomes who, from an official perspective, would be responsible to obtain the necessary permits.

Contractually, the responsibility fell on the Design-Builder – Lanzo. However, from a statutory perspective, the Florida Board of Professional Engineers states that:

*The engineer needs to resolve the issue, whether by correcting the design, by obtaining a formal interpretation that clarifies the requirements, or through obtaining a documented waiver or variance through legal means.*

*It cites that if an engineer fails to do this, the engineer could be found to be negligent pursuant to 61G15-19.001(4), F.A.C or be found guilty of misconduct pursuant to 61G15-19.001(6), F.A.C*

This can be found in the following link titled: **“An Engineer’s Responsibility When Engineering Issues Are Discovered After Permitting”**

<https://fbpe.org/an-engineers-responsibility-when-engineering-issues-are-discovered-after-permitting/#:~:text=The%20engineer%20needs%20to%20resolve,or%20variance%20through%20legal%20means.>

Like hiring a roofing contractor to repair your home after a hurricane, the City hired professionals to fix the drainage system in Palm and Hibiscus Islands. It was the sole responsibility of these professionals to comply with regulatory requirements. The fact that if these licensed professionals did not properly conduct their business is not indicative of wrongdoing from City staff, but rather an oversight of the design-builder.

Beyond the broad comments stated above, it is integral to this response and to understanding of the City’s constituents that the statements quoted regarding the permanency of the yard drains be clarified.

I, Roy Coley, was installed as Director of Public Works in April of 2018. This position serves as the owner, operator, and regulator of the City’s Right of Way. Prior to this installment I held the position of Infrastructure Director, a divisional position that is charged with operating our City’s infrastructure. At no time to date has anyone from the progressive design build team, or the engineer of record notified me of any concerns related to design or permitting of this project.

As directed by commission (Resolution 2017-29840), I approved permits the connections of private property inlets to the stormwater system within the right of way. These permits were executed under my authority as the owner of the stormwater management system and the right of way and did not make any representations regarding environmental regulations. This is not only completely within our purview at public works but standard protocol for the owner of any asset. For example, when connecting to a Miami Dade Water and Sewer Department water main, one must obtain their approval. It is the same case when anchoring a pipe to an FDOT bridge, you first obtain an FDOT permit. In both cases although the owner’s consent is given, the permittee must also obtain all other regulatory approvals, including those from the environmental regulators.

I have no direct knowledge of, and therefore did not and cannot testify to, permits authorized prior to my installment in April on 2018. To be clear, the following discussions (below) cited in the report only applied to the limited permits issued by Public Works after April of 2018.

*On this subject, I credit the testimony of Public Works Director, Roy Coley, who stated that the laterals and yard drains were always intended to be permanent installations and were approved for permanent use by the Public Works Department.*

From a fundamental perspective, I am sure that all City staff is working to improve the conditions of the City's constituents. In fact, our own staff at Public Works have worked tirelessly to secure numerous new permits and close out old permits. The success of our close working relationship with regulators is best exemplified in the tables below, tallying results.

Approved Permits		
Permit Number	Name	Approved date
CLII-20200029	PUMP STATION NO. 3 PUMPS REPLACEMENT	5/11/2020
CLII-20200016	W. 59th Street Bioswale	5/15/2020
CLII-2020022	Cherokee Ave Outfall	5/19/2020
CLII-20200010	PALM ISLAND - NDD ROW INLETS (2 PROPERTIES)	6/11/2020
CLII-20200012	PALM ISLAND - NDD PRIVATE INLETS (25 PROPERTIES)	6/12/2020
CLII-20200038	NEIGHBORHOOD 5 LA GORCE 57 ST & N BAY RD	6/15/2020
CLII-20200010	PALM ISLAND - NDD ROW INLETS (2 PROPERTIES)	7/11/2020
CLII-20200020	Maurice Gibb Park	7/16/2020
CLII-20200053	PALM ISLAND - 14 NDD PRIVATE INLETS	9/29/2020
CLII-20200048	Hibiscus Pvt (4 properties) - BFP modification request	10/13/2020
CLII-20200051	Parking Lot P-14-RESURFACING & DRAINAGE	11/20/2020
CLII-20200064	Hibiscus Island NDD ROW inlets (3 properties)	12/21/2020
CLII-20200062	Palm Island NDD - Inlets (3) - 8 properties	12/23/2020

Closed Permits		
Permit Number	Name	Closed date
CLII-20200038	NEIGHBORHOOD 5 LA GORCE 57 ST & N BAY RD	9/1/2020
CLII-20160052	Venetian Islands Drainage Improvements	9/11/2020
CLII-20180043	19 Street PS (Partial)	9/11/2020
CLII-20180022	NAUTILUS ON STREET PARKING SHERIDAN AVENUE AND 42 STREET	9/21/2020
CLII-20200029	PUMP STATION NO. 3 PUMPS REPLACEMENT	9/21/2020
CLII-20180038	Palm and Hibiscus Island Drainage Improvements (Partial only Hibiscus)	9/22/2020
CLII-20140068	CENTER STREET SCAPE EUCLID AVENUE STREET	10/8/2020
CLII20150010	17X Parking lot - Collins and 13 Street	11/6/2020
CLII-20080015	Neigh No. 8 Bayshore.	12/7/2020
CLII-20150035	Normandy Isle Neighborhood Phase II	12/7/2020
CLII-20160023	Parking P-91 Renovation 501 72 Street	12/7/2020
CLII-20160022	Parking P-59 Renovation 4000 Royal Palm Avenue	12/7/2020

The OIG spent considerable time compiling the data in this report. He is fully aware that the Engineering Division is now charged with permitting. He did not discuss the new permitting process with the Engineering Division or endeavor properly ascertain the existing process. Instead, many assumptions were made on how the process could be improved moving forward. It is worth asking, with a track record like the one shown above, how can the OIG not have taken into consideration the demonstrably successful permitting process the City has established?

**EXHIBIT A**

October 23, 2019 Land Use title and video:

- VIDEO 15. DISCUSSION TO REVIEW THE PALM AND HIBISCUS ROAD ELEVATION EXPERIENCE  
Commissioner Samuelian  
Capital Improvement Projects  
**Item C4 Q - September 11, 2019 Commission Meeting**

October 30, 2019 title and video

- R9 D DISCUSSION ON THE PALM AND HIBISCUS RESILIENCY PROJECT WITH A FOCUS ON PRIVATE PROPERTY HARMONIZATION.

VIDEO

Commissioner Mark  
Samuelian

## AFTERACTION:

### October 23, 2019 Land Use Committee

15. DISCUSSION TO REVIEW THE PALM HIBISCUS ROAD ELEVATION EXPERIENCE ACTION:  
Item Deferred.

### October 30, 2019 COMMISSION DISCUSSION/AFTERACTION:

R9 D DISCUSSION ON THE PALM AND HIBISCUS RESILIENCY PROJECT WITH A FOCUS ON PRIVATE PROPERTY HARMONIZATION. Commissioner Mark Samuelian

**ACTION:** Discussion held. Lilia Cardillo to place on the Commission Agenda, if received. Eric Carpenter and David Martinez to handle.

**DIRECTION:** • Add this item as a recurring update item each Commission Meeting. Lilia Cardillo to place on the agenda. Eric Carpenter and David Martinez to handle.

• Inspector General Centorino to investigate Palm and Hibiscus Islands and Indian Creek and identify what the permitting problem is, why did it cost so much money, and why has it taken so long? Inspector General Joseph M. Centorino to report back to the City Commission with more information. Joseph M. Centorino to handle. • Include a drop-dead date set for the harmonization agreements to be signed. Eric Carpenter and David Martinez to handle. Commissioner Samuelian explained that at the last Commission meeting, they talked about the Palm and Hibiscus neighborhood project landscape, and they mentioned they should get an update on this project. The situation is urgent. The project is frozen, and this is the last City Commission meeting until December. In his

two years on the dais, this is one of the most concerning situations that he has become aware of, because it is such an important, complex, and challenging project.

The City team is working hard but they have some big problems. At Sustainability Committee, they are providing oversight to neighborhood projects and have learned with great concern that there are issues with the County. He reached out to Commissioner Higgins and invited her to come, who came along with the Director of Environmental Resource Management, DERM, and on Wednesday they gave the City information that he summarized. The project started in 2016, it is a \$40 million project, and like they had in Indian Creek, they now have unpermitted work, and the City is in violation with up to 200 drains on public and private property. This action needs to stop. The project was stopped by DERM on July 9, 2019, and now the residents are suffering, and they do not know what is happening. DERM is waiting for the updated permit application. Also looming is their need to get individual property by property resident harmonization agreements. Given the situation they have, he would not describe it as trivial. This raises three questions; 1) how this happened; 2) how they can fix it, and 3) what changes do they need to make to their approach in their program given the learnings they have. Tonight, they need to be more tactical, they need to listen to the residents and have them understand that the entire City Commission is aware of the situation, and they are all going to act in urgency. He requested an action plan; when will they get their engineering done; when will they submit to DERM; when is a reasonable expectation for DERM approval and After Action October 30, 2019 City of Miami Beach Commission Meeting/Presentations & Awards Page 28 of 48 completing the project, and most importantly, what can they do to help, whether it is policy or resources, what is it that this body can do, because right now they are not in a great position.

Mayor Gelber thanked Commissioner Samuelian for bringing this item before the City Commission. Although he does not like Presentation & Awards meetings becoming business meetings, he believes that this is an important topic that deserves to be discussed. This is not the time to wrestle over this item though. He will be meeting with Mr. Hefty, Director of DERM, tomorrow to discuss the situation. He would like to hear from the Administration today, but they will not be taking any action tonight about the project. He is not sure the item is fully "cooked" between the City and the County. Eric Carpenter, Assistant City Manager, stated that the most concerning of all items is the characterization of the permit discussion. The fact is that the City started construction in July 2016 on the stormwater system on Palm and Hibiscus Islands; they had a full permit issued from DERM in May 2016 before the City ever broke ground on the stormwater system. Throughout the project, the stormwater system has gone through an evolution. This is different from what happened in Indian Creek, where the City bypassed a Federal permitting process. In this case, the City is going through a permit modification process and it is a judgment call of DERM as to when is the most appropriate time to go through that permit modification process, because a vast majority of all Class 2 permits go through modifications at the closeout. Seldom does anyone install a stormwater project that is the same as what was designed and permitted originally. He would like to invite the representatives of the design/builder

to talk briefly about what their thought process was in not going for that permit modification at the time that they began to do that work, but he acknowledged it was a judgment call by DERM. He acknowledged that they are working through it with them and they are going to continue to work through it with them. He is happy to say that he has spent six hours at DERM over the last two days and they had positive discussions with their water control section, and thinks they are headed in an exceptionally good direction.

There have clear objectives that they set forward for the City and they will be able to deliver them. They are committed to delivering the permit closeout documents that were requested by DERM before Thanksgiving.

He introduced Holly Kremers to explain the permit modification process and what Lanzo and Wade Trim's thought process was. Holly Kremers, Vice-President, Wade Trim, explained the process they have gone through as far as permitting, and clarified that when the project started construction, they did have both systems, Palm and Hibiscus Islands, fully permitted. As construction projects go through there are some field adjustments that take place in any infrastructure system; many times, those are addressed as asbuilt and permits are closed out. To be clear, the permit modifications are unique to the west end of Palm Island. On the east end of Palm Island, the stormwater system was constructed and installed for the permitted documents without modifications. On Hibiscus Island there was a net difference of one, an 18-inch inland drain in the right of way, and there is an area where they had obstruction and was shifted around so they added one. This is normally something they would take care of during permit closeout.

The west end of Palm Avenue has been more challenging during construction, and there are two separate issues that they have been discussing with DERM about how to handle. 1) There are 17 drains that are in the right of way around the west end of Palm Avenue. When they initially designed the project, they planned to clear out more vegetation in the right-of-way by taking out some trees and they would have a grassy swale for the stormwater to collect in the right-of-way and traverse on the swale and be collected on a larger catch basin. During construction they realized there were issues with removing those trees and they decided, to preserve the trees, instead of having the water meander down the swale and going to one basin, they would have to put an intermediate secondary drainage basins through the right-of-way to capture that same water in transit to the larger drain basin. In retrospect, at that point they should have gone to DERM and ask about permit modification process, and certainly at their next project they will do that, but they thought it was something that could be handled during the as built in and they went forward with construction of capturing the same stormwater in the right of way that was After Action October 30, 2019 City of Miami Beach Commission Meeting/Presentations & Awards Page 29 of 48 already permitted through additional inlets. The 88 drains are temporary construction drains, one of which was installed in the right of way in front of each property on north and south Coconut Lane; and they put them there because they knew that with a smaller right of way in that area, during construction and before they had a chance to do the final

harmonization drainage, they wanted to make sure they had that in place; in case of flooding issues were to occur during construction they would have a way to transmit that water away. The intent was that when the project was complete and before the stormwater system was placed in the service, those drains would be abandoned, and the permitting drainage system would be in place at that time. And for that reason, they did not include those 88 temporary constructions drains on the permit documents. They have resolution on how DERM wants to see those and they are going to add them as temporary drains to the temporary modification. They are also adding the 17 drains as part of the permanent permit modification; that piece was already done. They have enough treatment capacity to handle those areas, and they think they have all the pieces in place to move towards a resolution with all parties. Mayor Gelber announced that he plans to call a Commission Workshop on resiliency and all similar projects soon into the next Commission term, but he does not want to do that today. It is important to realize that there will soon be at least two new Commissioners elected on November 5, 2019, and he would like to give them some time to get up to speed on all that is taking place in the City. He hopes to schedule this Commission Workshop sometime soon.

The Palm and Hibiscus Islands project has been an ongoing nightmare for residents, who are simply very frustrated. There are many lessons to be learned from this experience, unfortunately probably at the expense of a great deal of disruption. The City needs to learn to do this right, and the City is taking it seriously, which is why ULI, Columbia and Harvard were asked to investigate this. With the recent king tide, he noticed that in areas where they have done work, there is not the flooding that has been in the past, as compared to areas where they have not done any work. It is important that the marketplace understands the City is serious about it, but most importantly to do it right. Eric Carpenter, Assistant City Manager, added that the good news is that the City has received clear direction from DERM and will have the engineering portion done by Thanksgiving. He has met with most property owners that have the eligibility for harmonization and private property drains. He believes that all property owners will be met with by the first week in December, and there will be a full-time contact person at the Palm Island guardhouse to answer questions regarding the harmonization agreement to hopefully facilitate the process. A landscaping contractor will be mobilizing next week to start landscaping work on the islands. Their commitment is to finish this project and not move on to another project until this one is done, and they are trying to speed up the process as much as possible. City Manager Morales believes there is confusion on the number of drains that are deemed illegal. For the Hibiscus portion the original permit provided for 125 permanent drains on Hibiscus that were in fact installed, except for one unpermitted drain indicated. On Palm Island there were 138 permitted drains in the plan that were installed; the ones that were not permitted were 17 done to not remove trees and the 88 temporary drains; most of the drains were in fact originally permitted drains. In 2017, over a year after the project begun, the City Commission, in response to concerns raised by the public that raising the road would cause flooding on their properties, adopted a policy indicating that all properties could connect to the City's system. That policy was subsequently modified late last year and codified in January of this year, that it would not be all properties, but in fact

staff would work with individual properties, on a case by case basis and evaluate whether there were properties that could have a drain either on or in front of the property, but particularly on to help deal with the drainage. Therefore, through this project there were changes made, and issues such as generators were added. In the harmonization process, during the course of this year, City staff worked with property owners and ultimately identified 98 properties, almost all of them on Palm Island, that would qualify for having an on-site private property drain, and then began the process of designing, putting together the paperwork and sitting down with property owners to look through After Action October 30, 2019 City of Miami Beach Commission Meeting/Presentations & Awards Page 30 of 48 it. One of the issues that emerged that was resolved at the last City Commission meeting was what paperwork DERM require from the City or from the property owners. Last week DERM agreed that the harmonization agreements with the easement in them would suffice for them to rely in. He will submit the harmonization agreement once is finally signed. They met with 69 of the 98 property owners and the design work is done for those. DERM is committed to try to turn them around in two weeks.

The notion is that they can be in a position where they submit all that to DERM by December and get those permit issues. The harmonization work will take five months to do the 98 properties. Once that is done, they are a month away from doing the final lift of asphalt. Assistant City Manager Carpenter stated that if the City has an opportunity to do final lift in some areas, they may do that ahead of whatever needs to be done in other portions of the islands. City Manager Morales recommended having a drop-dead date set for the agreements to be signed, and if a property owner does not sign, they will not be getting a drain on their property. This is not a question of resources or funding, they will place more personnel out there to work with the neighbors and talk about the agreements, and they will work with Lanzo Construction to see if they can add additional crew in the area. The conversations with DERM have helped jump start the process. Mayor Gelber thanked Commissioner Samuelian and Assistant City Manager Carpenter for explaining the issues. He is meeting with Mr. Hefty tomorrow. There is a great deal of movement on this. Pierre De Agostini, Executive Director of Palm and Hibiscus Islands Homeowner Association, thanked the City Commission for letting him speak. They all learn from discussions and he learned that on a \$14 million project, the Administration had a "a-ha" moment as stated by one of the City Commissioners. The City Manager stated that in 2017, the City realized that if they raised the roads the homeowners are going to be facing inundation. It is totally mind boggling. How could this "a-ha" moment happen on a \$14 million project a year after it started. He is equally surprised that the City of Miami Beach was operating without proper permits. The true story is that since February of 2019, DERM has been asking the City to take care of a few things they need to operate, including getting the required permit. The City has still not acted on this. They all want this to move forward and be done with it. He suggested that first the City of Miami Beach acknowledges the nightmare of the situation and ask itself how it happened in the first place. This could be something that the Inspector General could do homework and investigate this, as it is a great deal of money. The City must do its work and conduct a proper draining calculation, as there is no proper drainage calculation, which is what the owners are

saying, how do they know it is going to work. The City needs to put proper resources, hire proper people, and do the drainage calculations. Additionally, the homeowners must sign the harmonization letter for this to move forward. But the homeowners are fearful that the harmonization letter draft has been challenged on several occasions. For each property there have been different layout provided one was in front of the property or the side. They are asking or suggesting to those 98+ homeowners to hire a law firm, as it is a legal document, and hire a civil engineer firm to help them establish a counterpoint to the City's actions. If the City could provide a guarantee that the project will be finished right, it would make it easier for homeowners not to hire expensive professionals. He urged everyone on the City Commission to continue working on this item. They need to have a seawall policy. Roadway project is what is called but the issue is resiliency and raising of the water. The reason is called Roadway project is because it was the City's approach to raise the roads. However, the true subject is what is the City doing with the rising water. Part of the equation is the necessity to have contiguous seawalls to provide incentive to the homeowners to renew the seawall. Seawalls cost about \$1,000 per square linear feet, and the City needs to provide that incentive. At the next king tide, the water is going to come in and if neighbors have not built the proper seawall; there will be flooding. The City needs to do it right and reset the clock. The City needs to have a timeline and resources. Homeowners want to make it happen; it is a fantastic opportunity in what is currently a nightmare situation for the City Commission and future City Commissions to rise up to the occasion to show, not only to the residents of Palm and Hibiscus and Star Islands, but all the residents that live in Miami Beach and in the State of Florida, what leadership, courage, determination, and vision can do with a very acute problem. Mayor Gelber thanked Pierre for his leadership in the community. Andres Asion owns two properties on Palm Avenue and both properties flood in the backyard when it rains six inches or more. Some houses on Palm Island do not allow access to their parking garages because the road raising floods their property so badly. His elderly parents' living room is under street level, which will get flooded for sure. This has been a nightmare situation for the past four to five years and still nothing gets done. He invited the City Commission to come to his house and he will show them what is happening. At the end of the day, this is a test for other neighborhoods, and they should see exactly what is happening there. Regarding the seawalls, the entrance to Palm Island, which on either side of the bridge belongs to the City, that seawall does not exist. Whenever there is a high tide, the water goes right into the grass and into the islands and there is no seawall from the City to stop it. Mr. De Agostini added that it is ironic that the City is willing to have someone posted at the guardhouse, because it shows the lack of communication between the City and the Post Master, that guardhouse is now a post office annex because they refuse to deliver for lack of communication. They need to resolve that. The residents that live around the west circle of Palm Avenue are looking at the generator, which is 20 to 30 feet in height, so they are at the ground level. He requested the plan from CIP on the landscape that is going around the generator and he was told it was not designed yet. Those are additional points for this City Commission that they trust to be able to fix it, take care, and be a shining example of what can be done. Commissioner Góngora thanked Commissioner Samuelian for putting this item on the Agenda because the residents of Palm and Hibiscus Islands have been frustrated since

they were running for office two years ago. Commissioner Góngora has not seen the movement that he anticipated. Both this project and Indian Creek have been troubling and upsetting to him, as they are both situations where the proper permits were not pulled. They modified and amended these projects for tens and millions of dollars over the past two years, given both projects more money to try to appease the resident complaints, but the work does not get done. He is just as frustrated as them, because they keep asking why this is happening and why this is going on, and they are not getting answers either, except when a Commissioner puts it on the Agenda. He likes Mr. Agostini's idea and publicly requested to send this item to the Inspector General to look into the Palm and Hibiscus Islands projects as well as the Indian Creek project, find out what went wrong with permitting, why they budgeted so much money and it has gone over budget, why the projects are not working correctly, and why residents are waiting for years with no result. He formally requested to refer an investigation and oversight into the money and permitting in these two projects to the Inspector General and report back to the City Commission. Joseph M. Centorino General to handle.

Commissioner Samuelian appreciates the response from the Administration and the residents who have shown incredible patience with this situation and he summarized as follows: 1) the City needs to act with urgency and get this done; 2) the City needs to do a much better job engaging with residents. These 90+ harmonization agreements are not a trivial task and he is curious as to how the Administration is going to approach that and what the timing is. 3) He appreciates Mayor Gelber having this body continue to engage. The Workshop idea is excellent, but he requested keeping this item on the Agenda for each meeting so they can monitor progress, and 4) the seawalls issue will be discussed at Sustainability and Resiliency Committee. Finally, he also agrees with his colleague that when they brought in the Inspector General, it was to address waste and inefficiency, After Action October 30, 2019 City of Miami Beach Commission Meeting/Presentations & Awards Page 32 of 48 and he thinks this is a classic example. He has communicated his interest in having the Inspector General investigate the issue. City Manager Morales reminded the City Commission that when they designed these projects, they did not include generators, because they would be huge pieces of equipment in the middle of residential neighborhoods. They did not originally recommend it in this project or others, as they knew the impact of them aesthetically in the neighborhoods, not to mention the cost. However, this neighborhood came forward and insisted on having permitted generators. It is not an "a ha" moment; they figured there would be an "a ha" moment in the neighborhood when they saw generators installed. Obviously, they will be designing the landscaping around the generators, but they did not think they would be popular, and he is not shocked to see that they are not. With respect to the drainage, they have met with 69 property owners of the 98 drains on private property; that drainage work is done as part of the package sent. After January, they were able to do the analysis work and they presented to them the harmonization agreements. Those are the ones that out of the 69, 10 had comments on them; the only ones they are now finishing design work on are the 29 that are left, and they believe that will be completed soon. Assistant City Manager Carpenter added that they will have that done and will meet with each property owner by the first week of December. Mayor Gelber thanked everyone for the discussion.

**EXHIBIT B**

# Flood Mitigation Results

Palm Island 316 South Coconut Ln



BEFORE

Tides: 1.40 ft NAVD 10/17/12

AFTER

Tides: 1.88 ft NAVD 10/15/19

# Flood Mitigation Results

Palm Island 303 North Coconut Ln



BEFORE

Tides: 1.42 ft NAVD 10/17/12



AFTER

Tides: 1.88 ft NAVD 10/15/19

## McGee, James

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**From:** Kendall Coffey <kcoffey@coffeyburlington.com>  
**Sent:** Friday, January 22, 2021 3:25 PM  
**To:** McGee, James; Centorino, Joseph  
**Subject:** OIG/ Stormwater Issues  
**Attachments:** Email from Morales.pdf; Email from Aguila.pdf

[ THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS ]

Dear Joe and Jim,

I am forwarding the most recent comments from then City Manager Jimmy Morales about the subject we have discussed.

We remain concerned about any language that could be misleading to most readers of the report. We submit that knowledgeable investigative authorities recognize the public impact of language choices and that the public is best served when language is consistent with prevailing understandings. As Mr. Morales confirms, while former Mayor Levine properly emphasized the stormwater issue as a priority, Mr. Morales, who served as City Manager throughout this period, was not aware of any allegation of “improper pressure or influence” being exercised by the Mayor or any Commissioner.

I have also attached an email from Interim City Manager Raul Aguila who served as City Attorney during the relevant time frame. Mr. Aguila further dispels any suggestion of exerting undue influence or pressuring City staff with respect to sea level rise issues or anything else during Mayor Levine’s tenure.

Former Mayor Levine properly communicated a sense of urgency that was entirely justified under the circumstances. Language that suggests otherwise might generate more clicks but would sacrifice accuracy.

Respectfully submitted ,

Kendall

COFFEY BURLINGTON  
[2601 South Bayshore Drive](#), PH1  
[Miami, FL 33133](#)  
Tel: [305.858.2900](#)  
Fax: [305.858.5261](#)

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**From:** Jimmy Morales <[jimbolmorales@gmail.com](mailto:jimbolmorales@gmail.com)>

**Date:** January 22, 2021 at 8:05:12 AM EST

**To:** Philip Levine <[philip@mayorphililevine.com](mailto:philip@mayorphililevine.com)>

**Subject: City Stormwater program**

Philip

In response to your inquiry, I am not aware of any complaint or allegation from any City employee during my tenure as City Manager that you or any Commissioner had exercised any improper pressure or influence with respect to the City's resilience and stormwater program. The City's resilience was certainly a top priority for you and several of your colleagues during your tenure in office and city staff certainly understood that and sought to implement the clear policy directions given by the City Commission. As I recall, many residents in the lowest lying regions of the City were also demanding relief from flooding. We were tasked to address those issues and took that responsibility seriously.

Have a great weekend.

Jimmy

Sent from my iPhone

**From:** "Aguila, Raul" <[RaulAguila@miamibeachfl.gov](mailto:RaulAguila@miamibeachfl.gov)>

**Date:** January 22, 2021 at 1:04:22 PM EST

**To:** Philip Levine <[philip@baron-corp.com](mailto:philip@baron-corp.com)>

**Subject: Undue influence**

Mayor:

It was great speaking with you last week to wish you and your family a belated Happy New Year.

Regarding what we spoke of , and to the best of my memory and recollection (which is good) and , further, having served as your City Attorney during your two terms as Mayor, I never received any complains from members of the City's administrative staff, or from outside agencies such as the Commission on Ethics, regarding your ever having used any undue influence or pressuring City staff with regard to the various projects that we worked on together in the City including, but not limited to, our resiliency and sea level rise projects.

Please let me know if I can be of further assistance. Again , great talking to you.

Best,

Raul Aguila  
City Attorney  
Interim City Manager

Sent from my iPhone

January 22, 2021

Mr. Joseph M. Centorino, Inspector General  
1130 Washington Avenue, 6<sup>th</sup> Floor  
Miami Beach, FL 33139

RE: Office of Inspector General Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project.  
OIG No. 20.07

Dear Mr. Joseph M. Centorino,

This letter is in response to the draft report, OIG No. 20-07 dated December 04, 2020.

Although my name has been mentioned in some of the events listed in this document, I would like to rebut and correct some of the information related to my role as Capital Project Coordinator for the above referenced project. Please see my findings below:

- Page 79, Second paragraph: *"During interviews with OIG staff, DERM engineers Molina and De Torres stated that they believe they were misled by the responsible City officials and Lanzo. During interviews with the OIG staff, the responsible current or former City officials, including Carpenter, Mowry, Martinez, Tomczyk, Samadi, and Sanchez, said they were not responsible for obtaining permits or ensuring the agencies were given the Kremers plans because the City's agreement with Lanzo made the general contractor responsible for obtaining all permits."*

**Response:** I am in agreement with this statement. I was not responsible for obtaining permits for this project.

- Page 100, fifth paragraph: *"The City, Lanzo, and Wade Trim knew, or had reason to know, that this statement was false and omitted facts that were material to the regulatory agency's permitting process. It was not true that no significant changes had been made to the "original signed and sealed plans dated...February 26, 2016 for Palm Island." The Rubio plans had been extensively revised in early 2016; after construction began, significant changes were made to the Kremers version of the stormwater and hardscape plans. The statement conveyed the false and misleading impression that the City and Lanzo had been using, and would continue to use, the Rubio plans and omitted the material fact that City was using different plans signed and that sealed by a different Engineer of Records (Kremers) to build the drainage system."*

**Response:** If any significant changes were made to the original design, it was the consultant's (Wade Trim Inc.) responsibility to advise on such changes, as they were hired to provide to the City of Miami Beach with a design that complies with all the local codes and regulations. DERM requested that in order for them to renew the Class II Permit, the engineer of records had to provide a letter affirming that no major changes were made to the plans; this letter was provided on May 17, 2018 by the consultant, stating that no major changes were made to the

plans. No changes were communicated by the Engineer of Record, which would have had knowledge of said changes.

Moreover, I do not possess the authority to make any changes in the design of a project nor on approving any changes.

- Page 102, first paragraph: *“Senior Project Manager Samadi said, “I want to emphasize this is the design builder’s responsibility. I don’t know why they didn’t apply for a permit. I don’t know. I don’t know. It is beyond me to understand why they didn’t do what they were supposed to have done.” She said she was unaware of the letters by Garcia, or that Sanchez, her subordinate, was involved in applying for the second permit. “She (Sanchez) was my project manager, but sometimes she did things that I didn’t know...example of it here. I would not have asked her to submit this package and application directly to DERM because this would be the contract design builder’s responsibility. I would have suggested against this move.”*

**Response:** I strongly disagree with the statement made by Ms. Samadi in reference to myself, “the Project Manager...sometimes doing things I didn’t know”. At the CIP Department, no documents that goes to an external agency, leaves the department without the approval of a Senior, Assistant Director, or Director. No documents that needs a signature from an Assistant City Manager leaves the CIP Department without the approval of a Senior, Assistant Director, or Director. That was the policy as a Capital Projects Coordinator, I did not have the authority to undertake this action on my own nor could I have bypassed three levels of supervision. Furthermore, we discussed all projects at regular weekly meetings and we always were required to obtain prior authorization to proceed with all projects related matters.

In addition, to the above responses, I would like to reiterate that, in my role as a Capital Projects Coordinator (CPC) for the CIP Department, I was not authorized to make any substantive project decisions or issue any approvals pursuant to project development. The CPCs simply acted as liaisons between the admin staff and the all other third parties, such as contractors and engineers.

If you should wish to do so, you may corroborate the rules and responsibilities of a Capital Projects Coordinator with my colleagues at the CIP Department.

Sincerely,



Olga Sanchez, Facility Projects Coordinator

591 SW 51<sup>st</sup> Ct  
Miami, FL 33134

January 20, 2021

Joseph M. Centorino  
Inspector General  
Office of the Inspector General  
City of Miami Beach  
1130 Washington Avenue, 6<sup>th</sup> Floor  
Miami Beach, FL 33139

Mr. Centorino,

This letter is in response to the draft report issued by the Office of the Inspector General (the “OIG”) dated December 4, 2020 entitled the Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project (the “OIG Report”).

Due to the substantial number of comments, I have organized the body of this letter into several sections. The first section (“COMMENTS SUMMARY”) provides an overall summary of the comments included in this letter. The second section (“ADDITIONAL FINDINGS BASED ON REPORT CONTENT”) recommends additional findings based on the evidence in the OIG Report or information that I shared with the audit team during my interviews. The third section (“ADDITIONAL FINDINGS BASED ON INFORMATION NOT PRESENTED IN REPORT”) presents findings that were all-together missed because of the OIG team’s limited investigation focus and line of questioning during interviews. The final section (“GENERAL COMMENTS ON OIG’S INVESTIGATION PROCESS”) catalogues my opinions on the audit process itself. In an effort to be concise, but comprehensive my comments in each section are presented in bulleted format.

The OIG report itself contains more than fifty comments on the specifics of the report. It is my hope that these comments supplement the hard work completed by the OIG team and further the ultimate goal of the investigation, which is to ensure all residents of Miami Beach receive the service they deserve from the City of Miami Beach’s (the “City”) offices and departments.

#### COMMENTS SUMMARY

While the OIG Report makes a distinction among the various personnel within the City of Miami Beach, when presenting evidence, findings and recommendations, the OIG does not place enough emphasis on the interrelationship between the different agencies to which personnel belonged. The lack of distinction in the report’s evidence between the Office of Capital Improvement Projects (“CIP”) and other City offices and departments reduces the report’s fidelity of findings and risks missing the causes that resulted in many of the Project’s problems. It is my opinion that CIP’s lack of constructive and cooperative interaction with the Lanzo team, other City departments, residents, and regulatory agencies made an already complicated and contentious project, even more chaotic and dysfunctional. The unfortunate consequence of this

was to drive the Project into deep delays resulting in skyrocketing costs and frustrate the residents of Palm and Hibiscus Islands.

## ADDITIONAL FINDINGS BASED ON REPORT CONTENT

The following is a description of findings the I recommend added to the OIG Report. These findings are based on the information presented in the report. One of the main issues that the Palm and Hibiscus Neighborhood Improvement Project (the “Project”) encountered was the lack of coordination and leadership in public outreach on the part of the City, particularly CIP. Below is a short summary of what I consider key points related to public outreach that were not raised by the OIG in the Report. It is unclear from the Report’s findings and recommendations if public outreach was explored as line of investigation, despite evidence that communication was a key shortcoming of the Project’s management.

### *Authority of Palm and Hibiscus Islands Homeowner’s Association to request changes on behalf of all Palm and Hibiscus residents*

- Did the OIG confirm that the president of the Palm and Hibiscus Homeowner’s Association (the “HOA”) was legally authorized to make decisions or present requests on behalf all Palm and Hibiscus residents?
- Proper protocol in Miami-Dade County when considering design changes, i.e., particularly when considering modifications to existing conditions like addition of speed bumps or parallel parking to public streets, is for mailers to be sent out to residents to take a vote on whether they agree with proposed changes; approval of changes typically requires a two-thirds majority.
- My personal experience from discussions with residents during onsite resident meetings was that residents were not aware of changes proposed by the HOA to the original construction plans, and in some cases were opposed to the proposed changes that had already been directed by CIP to Lanzo.

### *Confusion in City encroachment enforcement policy*

- CIP moved away from enforcement of encroachment policy when it clearly violated the DCP.
- Many manhours were spent on identifying encroachments only to have the policy discarded, leading to delays and cost overruns.
- Why did the DCP (“Stantec”) move forward with inclusion of strict encroachment removal policy and not anticipate resident pushback on this policy? Residents had been placing trees, statues, call boxes, etc. in the City right-of-way (ROW) for many years.
- The confusion caused by the initial, ostensible commitment to remove any encroachments from City ROW to allow for a proper contiguous stormwater swale construction, followed by a reversal of this commitment caused confusion among residents and ultimately a lack of trust among residents that the City had approved a proper design for construction and taken into account resident’s needs when developing the design criteria; this lack of trust and CIP’s inability to communicate the need for residents to cooperate, opened the door for further requests no matter how counterproductive they were to the ultimate objective of the Project.

### *Avoidance of CIP to provide official written communication*

- CIP developed a pattern of not providing directives via written communication; when they did provide written communication it was after intense lobbying by the Lanzo team; this led to significant confusion, delay and cost overruns.
- City had spent substantial financial resources on the project management platform e-Builder to not only store documents, but to manage communications among project stakeholders. CIP's ad hoc approach to including some communications on e-Builder and not others created a disjointed project communication environment where Lanzo had to come up with its "best guess" at what CIP was directing them to do. Rather than Stantec attempting to clarify communications they consistently deferred clarification back to the City. Lanzo essentially did much of the work that CIP or Stantec should have done in developing clear directives.
- After the 90% construction drawing phase, design progress came to a standstill with comments coming in bits and pieces; some comments were retracted or reversed, only to be resurrected again. In some cases, the comments were on the aesthetics of the drawings rather than technical aspects of design. Rarely were comments provided in clear and understandable format after the 90% submittal.

### ADDITIONAL FINDINGS BASED ON INFORMATION NOT PRESENTED IN REPORT

This section presents findings that I recommend be included in the Report but cannot reference evidence included in the OIG Report itself. This was likely due to the investigations limited line of questioning, lack of access to project documentation, or discretion exercised in not including relevant information that may have led to these findings. The key points in this section touch upon City review and approval protocols, public outreach management, CIP's project management approach, and support of City management towards CIP.

### *Violation of City technical review protocols*

- As per page 22 of the OIG Report, CIP's role is limited to "managing all aspects of the construction for Public Works." CIP's role did not include technical reviews or approving changes it directed on the technical aspects of the design.
- Stantec's role is to confirm design's adherence to the DCP, but any proposed changes or technical reviews need to be routed to Public Works for review and approval; this was not the case when it came to changes to the permitted plans, e.g., not removing obstructions from swales in the public ROW and FPL transformer bulb outs and parallel parking on North and South Coconut Lanes.

### *Lack of consistent public outreach messaging*

- Public outreach is a basic function of CIP as they are responsible for management of construction projects; its importance is underscored by the fact that CIP has in-house Public Information Officers (PIO) fully dedicated to this function.

- Frequent turnover of the public information staff assigned to the project from either change of consulting firm assisting with Project public outreach or change of staff assigned to the Project from within the same consulting firm. Frequent turnover of public outreach consultant staff resulted in inconsistent messaging and disjointed public outreach support to the PIO assigned to the Project; the inability of new, incoming staff to put into context many of the outreach challenges facing the Project weighed down on the core Project management team's performance.
- Lack of fluency on the project from CIP project management, CIP PIO and PIO consultant made it necessary for staff from Wade Trim and Lanzo team to participate in all resident meetings; this requirement imposed by CIP was out of scope, misallocated resources, and led to delays and cost overruns.
- CIP project management and City official's inability to communicate with residents the key benefits of the Project likely caused further distrust and confusion on part of the residents.
- CIP representative's frequent tardiness to resident meetings cannot have helped either in maintaining resident trust in the City.

*Failure of CIP to create a team-oriented, solution-driven atmosphere*

- I have already stated that it was CIP's custom to provide delayed and incoherent directives, many times not using written media.
- CIP on several occasions demonstrated a combative posture during meetings with Lanzo, Stantec and even other City departmental staff. CIP also took a confrontational posture with residents on a number of occasions.
- Request to revise aesthetics of construction plans even though same plans adhered to standards and requirement created frustration among the design-build team as the plans were understandable to everyone else except the CIP Senior Project Manager, resulting in significant delays, misallocation of resources and cost overruns.
- The chaos caused by the CIP Senior Project Manager was a significant factor in derailing the project, as proper communication both up and down the chain of the command was erratic, incoherent, and many times inflammatory.
- I am in agreement with OIG recommendation of independent consultant to oversee complex design-build projects; this should have been Stantec's role, but because they were under contract to CIP they were under CIP control and thus not a truly independent and objective entity tasked with ensuring the completion of the Project as prescribed by the design criteria and based on technical principles and City standards.
- CIP did not effectively manage resident expectations; they essentially acted as a pass-through for requests. CIP lacked basic understanding of the purpose of the Project and the technical details that were critical to the project's success; if CIP did understand the Project's core intent and the technical subtleties that came with it, was not evident from the internal meetings had with CIP nor with CIP communications with residents during field meetings. As mentioned before, CIP required representatives of Lanzo and Wade Trim to be present at every resident meeting.

### *Support of CIP by City Management*

- Intervention of other City officials in the decision-making process of the core CIP project management team created undue stress on the Project team.
- Access and influence of residents to key decision makers and officials resulted in changes to the project very late in the construction phase, slowly building up and stunting project progress. CIP management simply acquiesced to most resident requests creating added pressure downstream ultimately leaving Lanzo to figure out how to incorporate changes that were counter to the Project's ultimate intent; this created a negative feedback loop that severely impaired project performance.
- CIP's failure to stand their ground and back up design engineer and contractor decisions is a failure of the basic CIP function of properly managing projects through a collaborative atmosphere.

### GENERAL COMMENTS ON OIG'S INVESTIGATION PROCESS

This last section explores my comments on the OIG's investigation process. While I cannot opine on the experience of other interviewees on this investigation, I can offer lessons learned from investigations that I conducted as an internal auditor for a large, international engineering firm. I hope that these comments on OIG's investigation process will be found useful by the OIG as they embark on future audits.

While I believe the OIG was professional in their investigation and genuinely attempted to be clear in their explanation of the intent of the investigation, I found that some of their communications with me were either unclear or unprecise. Establishing and maintaining the trust of investigation subjects is key to ensuring a smooth and candid interview process. The vigorous questioning, interrogative feel to several of my interviews and determination of OIG to find responsible parties to the acts outlined in the OIG Report set the impression that this was more of a cross-examination exercise rather than a holistic and constructive effort to improve the City's operations. While the Report makes an excellent attempt at listing pertinent and useful findings and recommendations, it is my opinion that several other key findings were missed because of the OIG's focus on procedural shortcomings and administrative inconsistencies, albeit relevant and concerning.

### *Communication of OIG investigation objectives*

- During initial discussions OIG stated that intent of the investigation was to determine findings and develop lessons learned to be applied to later projects to improve project operations at the City; very little was mentioned about the permitting focus of the investigation which is the first focus the investigation, as stated in page 124 of the Report.
- Later interviews made it clear that the focus of the investigation was to uncover the details of what the OIG determined was an elaborate and deliberate effort to deceive regulatory agencies.
- A later discussion that I had with OIG Special Agent made it clear that the primary focus of the investigation was the RER permit (as stated on page 124), rather than a holistic investigation of the project's performance (stated as the second focus of the Report on page

124). It would have been appreciated if this had been clearly emphasized during my initial interview.

#### *Apparent ultimate intent of OIG report*

- Report's argues that the City and Lanzo were colluding in the charade regarding parallel designs, placing equal blame on both the City and Lanzo. The truth is that the CIP through its lack of proper communication between the design-build team, residents and supervising City officials and peer City agencies was the Project's undoing. Lanzo did what it could to maintain some semblance of order as the Project's directives unraveled, but CIP's contentious posture throughout the Project prevented efficient alignment of resources, necessary in a such a complex and high-profile effort.

#### *Data gathering for OIG Report*

- It is clear from the Report's evidence that multiple interviews were had with specific people; I participated in at least three separate, multi-hour interviews; in my opinion not enough interviews were conducted with a wider audience, capable of providing more facts and context regarding the Project. If there were, it is not evident from the Report contents.
- Questions that I have regarding the pool of interviewees for this Report include:
  - How many Palm and Hibiscus residents were interviewed?
  - What staff from other City departments were interviewed, e.g., Urban Forestry?
  - What staff from the Public Works Department were interviewed? I do not see any evidence that Luis Soto, nor Jose Rivas were interviewed, both of whom participated on the Project.
- It appears only interviews were conducted and quotes presented to further permitting administration findings rather than a holistic view of the Project; this is the impression I got from several of my interviews.
- Very few interview references from City CIP staff or CIP management in the Report.

#### *Availability of reference documents*

- Unclear or confusing guidance was given to me by the OIG on how to back up my statements via document references; lack of explanation as to what documents were available to me for use in defending my statements.
- OIG had very limited documentation to share with me, even though the ultimate product was going to be a public document; what I did not understand was why OIG selected certain documents to share with me and not others. This was even after I declared under oath that I would not discuss this investigation with anyone else.
- Furthermore, the documents shared with me were incomplete or corrupted files.

## CONCLUSION

My goal in providing the comments included in this letter on the OIG Report and the investigation process itself is to prevent this from being a missed opportunity in recommending substantial, necessary and sustainable change to the City's operations. While the OIG makes mention of the many versions of drawings and changes that occurred during the Project, it is not clear that OIG understands that "changes" are at the core of a design-build project. The changes

## McGee, James

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**From:** Firtel, Lauren  
**Sent:** Monday, January 18, 2021 8:50 PM  
**To:** Centorino, Joseph  
**Cc:** McGee, James; Singer, Jani; Alonso, Elisa  
**Subject:** Response to OIG draft report No. 20-07 on Palm and Hibiscus Island

Hello Mr. Joseph M. Centorino,

I wanted to submit a brief statement to acknowledge receipt and (mostly) understanding the 176-page Palm and Hibiscus Inspector General draft report. I read it thoroughly and in its entirety. I do not think it is my place to critique the wholistic subject matter, city leadership or project team players in a positive or negative light; nor am I in a position of authority to decide right or wrong throughout the scenario.

For the time span discussed in this report, I was a public information specialist in the Office of Capital Improvement Projects (CIP) – a significantly subordinate position in the bigger picture. It was my job to work with the project team and our PIO consultant to create messaging that explained project objectives to the stakeholders on the islands and respond to resident questions or general project inquiries. Often, the PIO team is tasked with making technical construction details into “plain language” descriptions that the general public will understand. As part of CIP procedure, project managers review all advisory drafts and messaging for content accuracy before they are distributed by the PIO team.

On page 90 where an email I sent is quoted and then you reference “Firtel’s account...” in the following paragraph – I read this to say that I had summarized the information provided by the project team in stating the contractor’s intentions and status at the time of the resolution passed by commission. In essence, I was simply doing my job.

At the top of page 91, the draft report says, “CIP’s communications with residents between January and March signaled the City’s plans to use those right-of-way drainpipes for their intended purpose: as permanent connection points for private-side yard drains to the mainline pipe.” I can see how in retrospect and with reading the advisories parallel to researching/creating the draft report how one might conclude that “stormwater and secondary drainage installation” alludes to the above. However, while we were writing these notices, we were very much in the day-to-day communications and decidedly unaware of any intentions to make the drains permanent later in the project.

Admittedly, as a communications professional I was not in the loop on the various sets of plans, permits or regulatory agency visits to the project site. Please note (with some humility) that while the communications/outreach team works closely with the project team and engineers – we are not trained in permitting processes and/or regulatory agency requirements.

I am not sure of your end-goal in releasing this report. I, for one, would like to put this messy series of events behind us and put our lessons learned and collective city leadership efforts into how we can educate, share or explain things better in the future – both internally and externally.

Thank you for considering my standpoint, and my general input in this response.

**MIAMIBEACH**

**Lauren Firtel, Neighborhood Affairs Coordinator**

MARKETING & COMMUNICATIONS DEPARTMENT

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discussed that are the center piece of this investigation cover less than a quarter of the project area. While the changes are limited in scope when compared to the total project effort, nevertheless the focus of this investigation centered around this limited area in an attempt to highlight many of the larger issues looming over this Project and its stakeholders. While many of the findings and recommendations are valid, I believe the investigation placed too much emphasis on the first of its goals (“the enforcement actions taken by the Division of Environmental Resources Management, Miami-Dade County Department of Regulatory and Economic Resources, regarding the City’s alleged unpermitted construction of yard drains on public and private property”), as stated in page 124, and not enough emphasis was placed on the second goal (“the Project’s frequent design changes, schedule delays, escalating costs and unfinished status”). I hope my comments have been useful and will further the OIG’s efforts to make the Report findings comprehensive and accurate with recommendations that are relevant and actionable.

Sincerely,

A handwritten signature in cursive script that reads "Daniel I. Garcia". The signature is written in black ink and is positioned below the word "Sincerely,".

Daniel Garcia, PE

Enclosure: Commented PDF of OIG Report

CC: James McGee



January 18, 2021

Mr. Joseph Centorino  
Inspector General  
Office of the Inspector General  
City of Miami Beach  
1130 Washington Avenue, 6th floor  
Miami Beach, FL 33139

RE: Office of Inspector General Report of Investigation on the Management of the Palm and Hibiscus Islands Neighborhood Infrastructure Improvement Project OIG No. 20-07

Dear Mr. Centorino,

We received your Draft report, OIG No. 20-07 on December 4<sup>th</sup> 2020, which we have reviewed.

Unfortunately, we must note from the outset of our comments that the language and tone used in the report's various sections would appear to demonstrate that the Palm Hibiscus Star Islands Homeowners Association acted with the deliberate intention to specifically rush and force the decision-making process or had unreasonable demands. However, to the contrary, our Homeowners Association was instead expressing the resident's frustration at the relentless project delays and construction fatigue. Our Association was simply trying to move the process along towards reasonable and timely completion. The Homeowners Association also expressed our residents' frustration to the City. The contract for the original two-year project with Lanzo was signed by the MB City Commission in September 2013 with a completion date of August 2015. It is now January 2021, and notably the project is still ongoing in its 7<sup>th</sup> year and counting.

We would like to bring the following points to your attention prior to its finalization, along with our recommended changes:

1. **Page 31 item G:**

a. Please add the words in red:

**(Jan. – Sept. 2014) The Redesign: The City and Lanzo struggle to incorporate new road elevation design criteria over fears that raising roads will cause new flooding; under pressure from Homeowners Association *to keep the project moving*, City awards Lanzo a contract for the project's design phase without a finished DCP**

**2. Page 32:**

The HOA president Pierre De Agostini's quote in your report from the August 17, 2014 email left out important points. When pushing for the contract negotiation, Pierre noted that we had formed a committee over a year earlier, and that the city had been negotiating the contract for more than a year. Our residents had also been paying for the utility undergrounding for over four years through a special taxing district voted for by our residents to voluntarily tax themselves. We were simply hoping to move forward with whichever company the City decided upon. If you are including the quote from our then-President Pierre de Agostini, *please include this entire paragraph in your quote:*

"To date, the contract negotiation with the firm selected as the first choice, Lanzo Construction, has not been finalized! It should not take over a year to work out a contract between the City and this firm. The lack of progress on this negotiation is very disturbing. By now, a contract should be worked out with the firm chosen as the 1st choice, if not, let's negotiate with the 2nd choice firm, or if need be, the 3rd choice firm. We need to move on with this! Mr. Mayor, please push this contract negotiation to finalization! Our residents would be most grateful."

**3. Page 42 item C:**

The header text in section IV C. page 42 "...*intent on minimizing conflicts with residents...*" mentions "**Homeowners Association objects to clearing right-of-ways**" yet there is no mention of the objections or anything regarding the Homeowners Association in that section.

- a. Please remove the Homeowners Association reference in that header.
- b. Please also update Page 2 header to remove the Homeowners Association reference.

**4. Page 43 item D** please add the words in red, and remove the word *clearing*:  
**D. (June 2015) Lanzo submits 90% plans, with Rubio's near-finished stormwater and hardscape sections; Homeowners Association objects to *removing all trees from the clearing* right-of-ways to build swales; City postpones milestone review**

**5. Page 53 Item B**

There is no text in Section V. B. page 53 that mentions the Homeowners Association or the yard drains. The header states "**....tells Homeowner's Association that a new City policy will allow residents to connect personal yard drains to the City drainage system**".

- a. Please remove the Homeowners Association reference in the header in that location
- b. Also remove the Homeowners Association reference in the same header from Page 3.



**6. Page 80 Item B**

The text under the header states that the Homeowners Association *requested* changes, and your header says "*demands*".

- a. Please change to "requests": **B. (May 2016 – Dec. 2017) The City and Lanzo make significant changes to the construction plans to accommodate *demands requests* from the Homeowners Association; Wade Trim engineers recommend notifying DERM and obtaining a permit modification; the City and Lanzo decline to notify DERM**
- b. Please also change to *requests* on Page 4.

**7. Page 17, Last Paragraph**

Pierre held two roles at the Homeowners Association; President and then Executive Director. To be factually correct for the reference in September of 2019 on Page 17, his title at that time was Executive Director. (The reference on page 32, President, is correct for 2014)

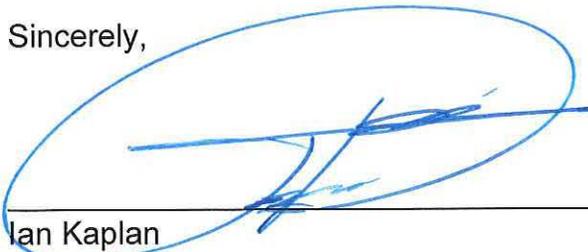
- a. Please change Pierre's title to Executive Director "The disclosures came as a surprise to Samuelian and to Pierre De Agostini, **President Executive Director** of the Homeowners Association that represents residents of the islands."

**8. Page 45, Last Paragraph**

"As a consequence of the complaints by the HOA, the City postponed..."

The assertion that the Homeowners Association is responsible for delays in the project due to objections over the removal of trees is false. There was clearly a lack of adequate planning in the original plans to preserve the trees, which we understood to also be the design policy mandate from the City. Had proper planning taken place initially, no delays would have been encountered and the financial savings from minimizing tree removals would have been maximized. Thankfully, our residents and Association stood firm to ensure proper design and tree preservation in the swales. The end proof is that we have a final working drainage system design that preserved most of the trees and works extremely well.

Sincerely,



---

Ian Kaplan  
President & Board Chair  
Palm Hibiscus Star Islands Homeowners Association

## Memorandum

To	Joseph Centorino, Inspector General	Page	1 of 3
CC	James McGee, Special Agent		
Subject	Palm & Hibiscus Islands – Confidential OIG Draft as of December 4, 2020		
From	Thomas F. McGowan, PE		
Date	January 7, 2021		

My general thoughts regarding the draft report are that, as it relates to my recollections, the report seems to be a reasonable and thorough representation of project events for the level and duration of my involvement. As such, I am content with the language as is, but I offer a couple points of clarification which may assist in formulating the final report.

My comments that follow are in referenced to the alpha-numeric outline and page numbers contained within the draft report.

### Specific Comments:

- (1) Article 3 Section F (page 30) / and FINDING 3: General Comment regarding AECOM's role with the Blue-Ribbon Panel:

AECOM's master contract for "flood mitigation consulting services" was executed by the City on July 14, 2014. Our initial task order was approved on August 29, 2014. My first day at the City working in the Public Works Department was August 11, 2014. For the next three weeks I spent considerable time with then Assistant City Engineer, Douglas Seaman, who had been working closely with CIP on multiple neighborhood redevelopment projects – particularly on DCP roadway and stormwater issues, and the ever-evolving genesis of the envisioned stormwater master plan – including; 1) initial project prioritization, 2) initial pump station siting, 3) preliminary cost estimates presented to the Finance and Citywide Projects Committee and ultimately to the City Commission and as the basis for authorization of additional stormwater bond sales, 4) water quality treatment areas, volumes and methods, AND 5) the City's position regarding water quality treatment requirements for single family residences. Douglas' last day with the City was August 29, 2014.

In addition to making heads or tails out of the myriad of information bequeathed by Douglas, at the time AECOM was brought on board, there were a minimum of four (4) design build neighborhood projects for which the design phase was substantially underway or completed which were "shelved" and had been directed by the City to be revised to incorporate the new design tidal boundary condition of 2.7 feet, NAVD and incorporating pumping systems for stormwater removal. These included, but might not necessarily be limited to, Palm & Hibiscus Islands, Lower North Bay Road, the Venetian Islands, and Sunset Harbour together with various nearing completion, or recently completed projects in the Nautilus and Central Bayshore Neighborhoods and the ongoing FDOT construction on the Alton Road / West Avenue corridor.

The engineering methodologies and solutions presented in these project redesigns varied significantly and pumping and water quality treatment systems were equally varied and numerous.

In my opinion it was not the intention of the BRP to “usurp” the responsibility of the DCP professional hired for the Palm and Hibiscus progressive design-build project, but rather a realization that the City had a “tiger by the tail” and for the long-term benefit, economy of scale and maintenance of the completed system, there needed to be some efforts made to “standardize” the Design Criteria for the reconstruction of stormwater systems to be applied citywide.

As requested, AECOM reviewed, and consolidated salient aspects of the various design criteria imposed in the DCP’s and clarifications provided in the various RFI’s for the “shelved” projects (as they evolved over time) and incorporate various BRP directives to “standardize” the stormwater section of the City’s DCP to the extent practicable. Particularly, the “master” DCP language sought to standardize the design storm event, modeling techniques, pumping system requirements, water quality treatment areas and rates, AND at the heart of this matter, baseline elevations for road crowns, minimum inlet elevations, and the use of swales within the right-of-way as a tool in the design of the stormwater management system.

All the while knowing each project is unique, and that certain information was, as yet, unknown – case in point FFE’s for Palm and Hibiscus Islands. This information was unavailable at the time the DCP language was requested, **therefore, some flexibility in the DCP language was necessary.**

- (2) Article III, Section H (page 34) of the Draft report states no design storm was specified....and refers to a range of flood stages.

This statement is incorrect. The copy of the draft DCP that I have containing review comments by both Crews and Rubio contains explicit criteria for the design storm as being the 5-year / 24-hour storm consisting of 7.5 inches of rainfall.

- (3) Article III, Section H (pages 34-35) of the Draft report infers, implies or directly states the language in the DCP regarding minimum elevations was unclear, ambiguous, or difficult to decipher and deferred resolution of difficult technical issues. While I will agree that it was not definitive (arguably necessarily so), to a professional drainage engineer the language has clear meaning. The ambiguity is in the need for use of the qualifier “to the extent practicable”. The reference to the minimum grate elevation of 1.66, was contained in, and taken directly from, the then Public Works Manual.

However, during my involvement in the Palm and Hibiscus project, I attended several meetings at CIP including Rubio and Crews wherein the intent of the DCP language was discussed, where flexibility existed, and means and methods to resolve the technical issues. The result was the Rubio design with road crowns in specific locations at 2.2 feet, NAVD, and a standard stormwater management system design as reflected in the 100% Rubio plans.

As documented in your report, subsequent decisions made by the City in reaction flooding from King Tides and pressure from the Homeowner’s Association regarding clearing and tree removal in the right-of-way for swale construction contributed greatly to the resulting non-standard stormwater system design.

(4) Article VI, Section E (pages 87 & 88) Cost Overrun vs. Engineer's Report Estimate:

Not all the project cost is booked against the stormwater utility – particularly the landscaping, lighting, water and sewer, and utility undergrounding, etc. However, I would have to dig deep to pull the exact numbers attributable to the stormwater program.

(5) Article VI, Section E (page 88) Discussion on water quality treatment during Round Table discussion:

The water quality treatment devices were sized to treat an area and subsequent volumetric runoff over a period of 1 hour (the Water Quality Treatment Area and Water Quality Treatment Rate, respectively) for the **Right-of-Way ONLY** - not private properties. While it is true the device continuously treats all runoff at pumping rates below the water quality treatment rate, in **MY** involvement in the stormwater program, water quality treatment of private properties was never discussed with DERM.

(6) Article XIX – Engineer's Report Part 4 (page 154): AECOM's Role:

AECOM (in the person of me) did not start working on the flood mitigation project until August 2014 (not 2013). We were not contracted solely to review and rewrite the Palm and Hibiscus DCP. It was merely one of the initial tasks, to wit to review all outstanding DCP's and develop standardized language as described in Item 1, above.

Summary:

It is my hope this information in some way aids in the preparation of your final report. You are to be commended as this appears to be a complete and thorough synopsis of events and I'm sure a monumental undertaking. If I can be of further assistance, please contact me at your earliest convenience.