

Peer Review of Town-Wide Underground Utilities Master Plan

Summary of Report Findings

Town of Palm Beach

Presented by: Anthony Hanson
December 12, 2017



Peer Review

Objectives

- **Project Overview**
 - Perform independent, technical peer review of the “Town-Wide Undergrounding of Utilities Master Plan” completed in April 2017 by Kimley-Horn and Associates
- **Project Goals**
 - Analyze the project’s approach and design, the master plan, scheduling, sequencing, phasing, and the probable cost of construction.
 - Report on potential real, tangible improvements/modifications available to the Town/KHA

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Acknowledgements

- **Commitment of TC and UTTF**
 - The dedication of the TC and UTTF to executing this project in the best way possible is unmistakable.
- **Complexity of Project Scope**
 - We recognize the extensive scope of this undergrounding project and acknowledge all the hard work put into its development. There is lots of good work being done.
- **Stakeholder Participation**
 - We greatly appreciate the active participation and cooperation of all the project's stakeholders, including the Town's staff, the KHA design team, staff from FP&L, and the Phase 1 CMAR contractors and electrical subcontractors.
- **Our Contribution**
 - While we hope to be helpful, our peer review analysis and recommendations constitute only our opinions as outside consultants performing a thorough, albeit concise review.

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Tasks

- Kickoff Meeting
- Data Request and Review
 - Reviewed reference materials, comprising more than 62 individual documents totaling more than 2,500 pages.
- Stakeholder Consultations
 - Interviewed the Town's staff, the KHA design team, staff from FP&L, Comcast, and AT&T, the Phase 1 CMAR contractors and electrical subcontractors, as well as electrical subcontractors whose bids for work were unsuccessful.
 - Attended meeting of the UTTF Committee on 10/03/2017

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Focus Areas

- Our analysis concentrated on these areas:
 - Focus Area I – Program Management & Delivery Method
 - Focus Area II – Costing and Applicability of Opinion of Probable Cost
 - Focus Area III – Scheduling and Sequencing
 - Focus Area IV – Planning and Engineering Design
 - Focus Area V – Traffic Impacts
- There are several changes we believe have the highest potential to mitigate risk and positively impact cost, schedule, and/or quality of this project.

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Recommendations

- Finding 1.3: Implement a formal Project Management Plan (PMP)
 - Project Governance and Execution Document
 - Accumulation of multiple sub-plans discussing Scope, Timing, Cost, Personnel and Resource Management, and Communication
 - Guides management action to ensure "no surprises"
 - Dynamic, living document – to be used as part of project execution, not something that sits on a shelf

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Recommendations

- Finding 1.1 and 3.2: Maintain CMAR delivery method, but execute as single contract utilizing the unit pricing approach
 - CMAR is an acceptable delivery method
 - Execute single CMAR contract for remaining phases
 - Phases as currently designed remain in place
 - Utilize unit pricing as basis for establishing and adjusting contract value throughout life of project (Finding 2.1)

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Recommendations

- **Finding 2.1: Prepare deterministic cost estimate for future phases/entire project**
 - Master Plan estimates are based on historical costs for similar systems, which is acceptable for that stage of a project
 - Typically, project estimates are based on actual project details established during the preliminary design phase
 - Process is complicated by lack of electrical detail or schematic drawings. Requires system inventory.
 - Could increase confidence in original cost estimate

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Recommendations

- Finding 4.2: Vet FP&L design and negotiate improvement on equipment selection where possible
 - Currently being done at Design level
 - Should be discussed among entire project team to get consensus of preferences based on cost and functionality
 - Make informed decision on type and quantity of switchgear
 - Confirm cost difference for TPB-specific application

Switchgear Comparison

PME



Vista



Thank you!

Feedback and Questions?

