

City of Key West Key West Bight Marina Wood Piles Assessment



June 2014



Prepared by:



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State of Florida Engineering Business License No. 4593

Chen Moore and Associates Project Number: 107.017

June 2, 2014

John Paul Castro
Deputy Director of Port and Marine Services
3132 Flagler Avenue
Key West, FL 33040

Subject: City of Key West Bight Marina – Wood Piles Assessment

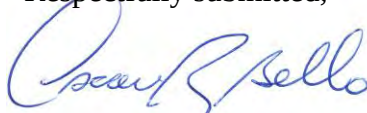
Mr. John Paul Castro:

On April 4 and 18, 2014, Chen Moore & Associates, along with United Engineering, conducted a visual assessment of the wood piles for the City of Key West at the Key West Bight Marina. The purpose of the assessment was to evaluate the condition of the existing wood piles and braces on the City-owned piers. Wood piles were assessed from the dock and deterioration at the tidal range of the piling was documented.

Enclosed are the findings of the assessments, including a preliminary cost estimate and exhibits showing location and pictures of wood piles that are in need of replacement.

If you have any questions, please contact me at 954.650.0164 or obello@chenmoore.com.

Respectfully submitted,

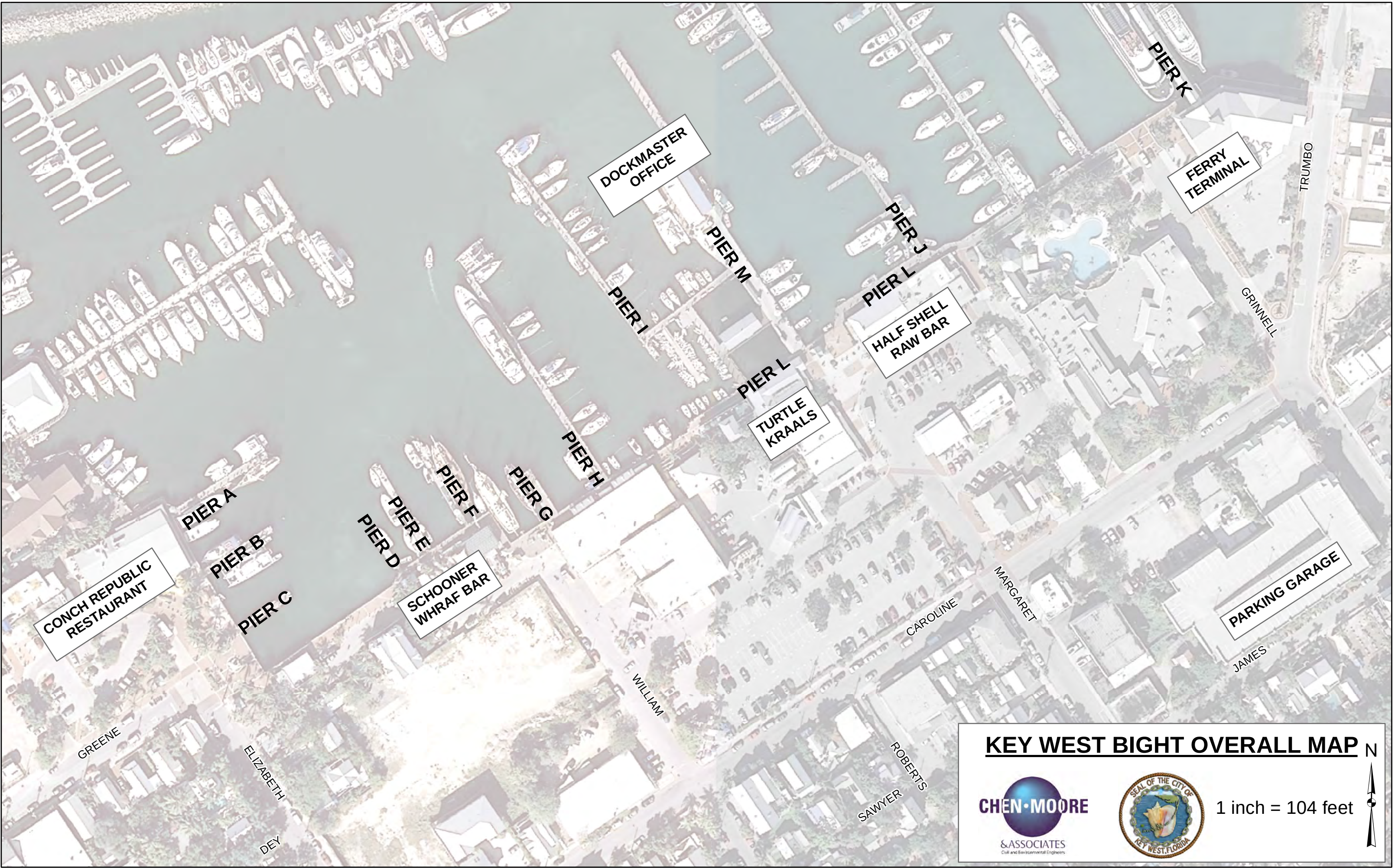


CHEN AND ASSOCIATES
Oscar R. Bello, P.E.
Project Manager

ORB/
Enclosures

**Key West Bight- Pile Assessment
Cost Estimate**

Description	Qty	Unit	Unit Price	Total
Replace Wood Piles	29	EA	\$1,250	\$36,250
Replace Missing/damaged Cross Braces	22	EA	\$250	\$5,500
			SubTotal	\$41,750
			20% Contingency	\$8,350
			Total	\$50,100



KEY WEST BIGHT OVERALL MAP N

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 1 inch = 104 feet

KEY WEST BIGHT MARINA PILE ASSESSMENT



LEGEND:

- Pile - No Visible Damage
- Piles to be Replaced
- Pile with Missing/Broken Brace

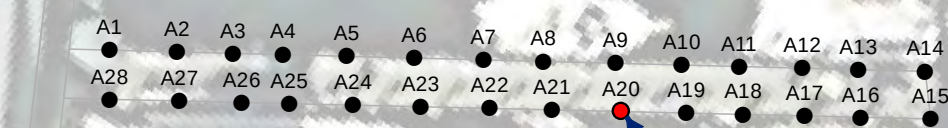
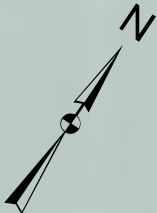
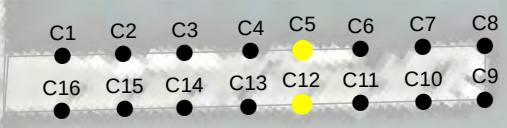
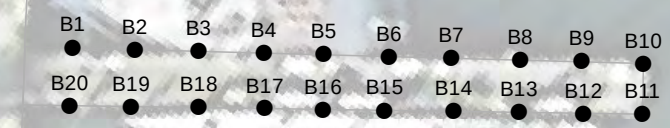


Photo 1: Pile A20



Pier D

Pier E

Pier F

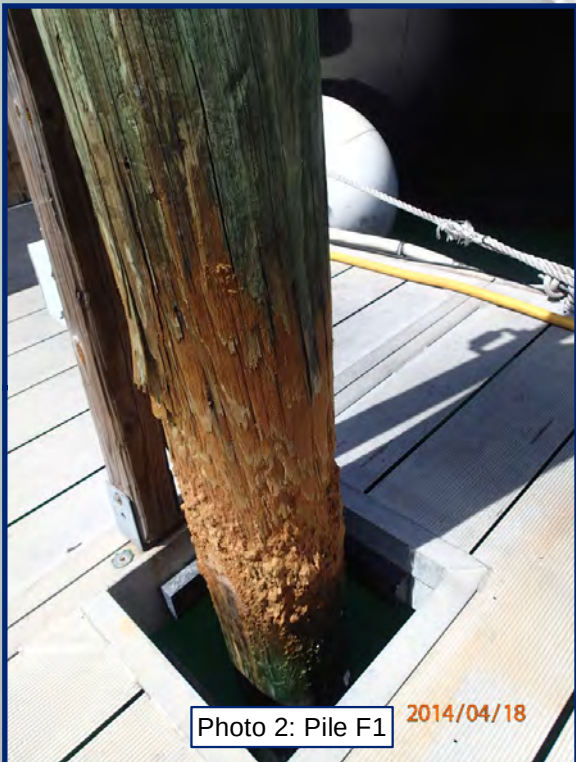
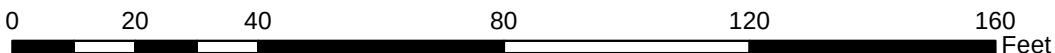
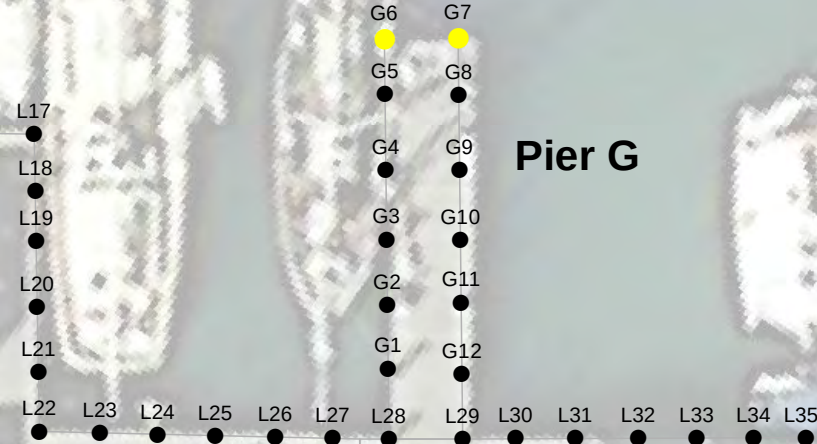
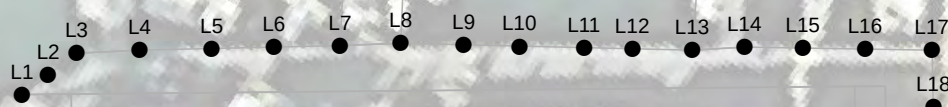


Photo 2: Pile F1

2014/04/18



KEY WEST BIGHT MARINA PILE ASSESSMENT



- LEGEND:
- Pile - No Visible Damage
 - Piles to be Replaced
 - Pile with Missing/Broken Brace

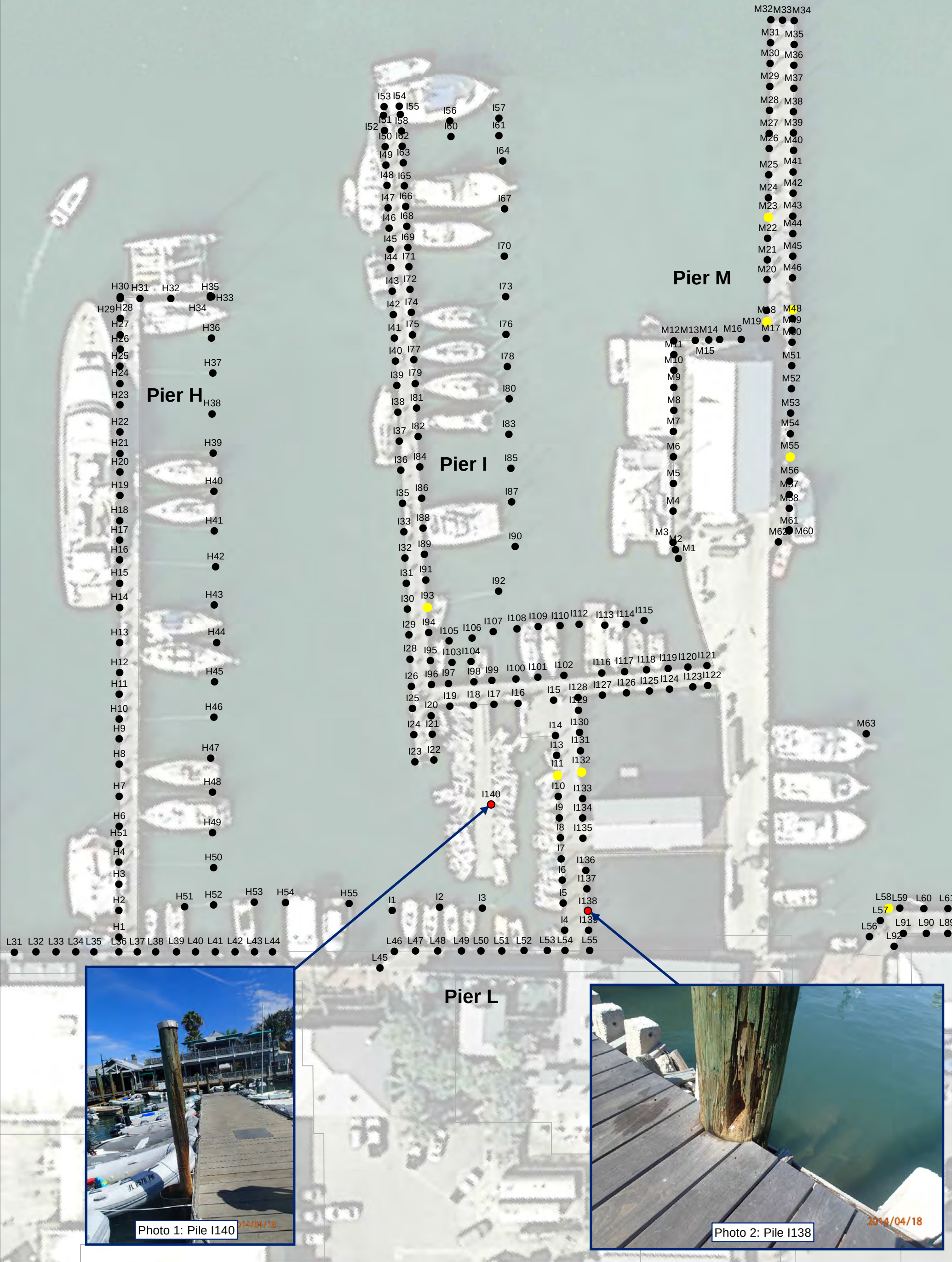


Photo 1: Pile I140



Photo 2: Pile I138

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- Pile - No Visible Damage
- Piles to be Replaced
- Pile with Missing/Broken Brace



KEY WEST BIGHT MARINA PILE ASSESSMENT



- LEGEND:
- Pile - No Visible Damage
 - Piles to be Replaced
 - Pile with Missing/Broken Brace



Photo 1
Piles K1- K11

- Pier K
- K11
 - K12
 - K10
 - K13
 - K9
 - K14
 - K8
 - K15
 - K7
 - K16
 - K6
 - K17
 - K5
 - K18
 - K4
 - K19
 - K3
 - K20
 - K2
 - K21
 - K1
 - K22

- K27
- K26
- K25
- K24
- K23



Photo 2
Piles K22 - K12