



August 9, 2016

Mr. James Bouquet, P.E.
Engineering Director
CITY OF KEY WEST
3140 Flagler Avenue
Key West, Florida 33040

Subject: **PRELIMINARY WHITE BOX ENGINEER ESTIMATE
KEY WEST DIESEL PLANT PROPERTY**
101-111 GERALDINE STREET
KEY WEST, FLORIDA 33040
AMEC FOSTER WHEELER PROJECT NUMBER 6783-16-2825

Dear Mr. Bouquet

In accordance with our with our proposal dated March 31, 2016, Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared a Preliminary White Box Engineer Estimate for the Key West Diesel Plant Property (the Property) located in Key West, Florida. Amec Foster Wheeler understands the City of Key West is considering acquiring a portion of the Key West Diesel Plant Property for redevelopment (the Site). The estimate is based on limited data obtained during the structural and environmental assessments completed in July 2016. The estimate is a preliminary cost that will need to be refined upon completion of additional design analysis not covered under this proposal.

Sincerely,

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

A handwritten signature in blue ink, appearing to read "Greg Corning".

Greg Corning, P.E.
Project Engineer

A handwritten signature in blue ink, appearing to read "Ricardo Fraxedas".

Ricardo Fraxedas, P.E.
Chief Engineer

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**PRELIMINARY WHITE BOX ENGINEER
ESTIMATE**

**PRELIMINARY ENGINEER COST ESTIMATE
 WHITE BOX KEY WEST DIESEL PLANT
 KEY WEST, FLORIDA**

ITEM NO.	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Demolition of Building II, III, IV, and V	1	LS	\$435,814.49	\$435,814
2	White Box of Building I	1	LS	\$329,459.92	\$329,460
3	Architect and Engineer Design Fees	1	LS	\$241,318.60	\$241,319
Subtotal					\$1,006,593
Total White Box Estimate(plus 15% contingency)					\$1,157,582
Notes:					
This estimate is based on limited data obtained during structural and environmental assessments completed in July 2016					
Additional design and sediment analysis will be required to optimize the estimate					

Bid Item Quantities and Cost

Project: Keys Energy Diesel Facility Assessment, City of Key West, FL

Prepared by: G.Corning Date: 8/5/2016

Check by: R. Fraxedas Date: 8/8/2016

Bid Item: 1 Demolition of Building II, III, IV, and V

1. Quantity

A. Building II (See Structural Assessment, Existing Floor Plan S1.1)

1. Width: 58 FT
 2. Length: 70 LF
 3. Height: 30 FT
 4. Building Demolition: 121,800 CF
 5. Foundation Demolition: 4,060 SF
 6. Building Material Weight (estimated unit weight for steel of 150 lb/cu ft): 440 TN
 7. Scrap Metal Weight (estimated unit weight for steel of 490 lb/cu ft): 735 TN

B. Building III (See Structural Assessment, Existing Floor Plan S1.1)

1. Width: 58 FT
 2. Length: 73 LF
 3. Height: 30 FT
 4. Building Demolition: 127,020 CF
 5. Foundation Demolition: 4,234 SF
 6. Building Material Weight (estimated unit weight for steel of 150 lb/cu ft): 454 TN

C. Building IV(See Structural Assessment, Existing Floor Plan S1.1)

1. Width: 58 FT
 2. Length: 27 LF
 3. Height: 30 FT
 4. Building Demolition: 46,980 CF
 5. Foundation Demolition: 1,566 SF
 6. Building Material Weight (estimated unit weight for steel of 150 lb/cu ft): 250 TN
 7. Scrap Metal Weight (estimated unit weight for steel of 490 lb/cu ft): 559 TN

D. Building V(See Structural Assessment, Existing Floor Plan S1.1)

1. Width: 12 FT
 2. Length: 20 LF
 3. Height: 12 FT
 4. Building Demolition: 2,880 CF
 5. Foundation Demolition: 240 SF

2. Bid Estimate

A. Building Demolition \$0.53 per CF
 Source: RS Means 2016
 Building demolition, large urban projects, concrete includes 20 mile haul, excludes foundation and dump fees

B. Concrete Footing Demolition \$8.90 per SF
 Source: homewyse, 2016
<http://www.homewyse.com/>

C. Tipping Fee \$123.50 per TN
 Source: Monroe County Transfer Station, 2016

D. Scrap \$70.00 per TN
 Source: Capital Scrap Metal, LLC, 2016
<http://www.capital scrap metal.com/prices/>

E. Asbestos Removal \$6.67 per SF
 Source: PM Environmental Inc's Pre-Renovation Survey July 2013

F. Lead Based Paint Removal \$75,000.00 per LS
 Source: PSI's Lead-Based Paint Survey July 2013

3. Total Item Cost

A. Building II				
Building Demolition	121800 CF	x	\$0.53 per CF	<u>\$64,554.00</u>
Foundation Demolition	4060 SF	x	\$8.90 per SF	<u>\$36,134.00</u>
Tipping Fee	454 TN	x	\$123.50 per TN	<u>\$56,010.34</u>
Scrap	735 TN	x	\$70.00 per TN	<u>\$51,450.00</u>
B. Building III				
Building Demolition	127020 CF	x	\$0.53 per CF	<u>\$67,320.60</u>
Foundation Demolition	4234 SF	x	\$8.90 per SF	<u>\$37,682.60</u>
Tipping Fee	454 TN	x	\$123.50 per TN	<u>\$56,010.34</u>
C. Building IV				
Building Demolition	46980 CF	x	\$0.53 per CF	<u>\$24,899.40</u>
Foundation Demolition	1566 SF	x	\$8.90 per SF	<u>\$13,937.40</u>
Tipping Fee	250 TN	x	\$123.50 per TN	<u>\$30,871.91</u>
Scrap	559 TN	x	\$70.00 per TN	<u>\$39,102.00</u>
C. Building V				
Building Demolition	2880 CF	x	\$0.53 per CF	<u>\$1,526.40</u>
Foundation Demolition	240 SF	x	\$8.90 per SF	<u>\$2,136.00</u>
D. Asbestos Removal	2250 SF	x	\$6.67 per SF	<u>\$15,007.50</u>
E. Lead Based Paint Removal	1 LS	x	\$75,000.00 per LS	<u>\$75,000.00</u>

Demolition Cost \$481,090
Scrap Cost (50% return removed for pick-up) \$45,276
Total Demolition Cost \$435,814

Bid Item Quantities and Cost

Project: Keys Energy Diesel Facility Assessment, City of Key West, FL

Prepared by: G. Corning Date: 8/5/2016

Check by: R. Fraxedas Date: 8/8/2016

Bid Item: 2 White Box Building I

1. Quantity

A. Exterior Windows (See Structural Assesment, Existing Floor Plan S1.1) 11 EA

B. Exterior Doors (See Structural Assesment, Existing Floor Plan S1.1) 4 EA

C. Foundation Repair (See Structural Assesment, Existing Floor Plan S1.1) 75 CY

D. Brick Veneer Repair (See Structural Assesment, Existing Floor Plan S1.1) 7680 SF

2. Bid Estimate

A. Exterior Windows \$572 per EA
Source: Astor Windows & Doors, 2016

B. Exterior Doors \$1,125 per EA
Source: Home Depot, 2016
36" x 80" Impact Front Door

C. Foundation Repair \$2,600 per CY
Source: FDOT 6 month moving average (01/01/16 to 06/30/16)
Concrete for Joint Repair

D. Brick Veneer Repair \$16.04 per SF
Source: IRS, 2016

3. Total Cost

A. Exterior Windows	<u>11 EA</u> x	<u>\$572.00 per EA</u>	<u>\$6,292.00</u>
B. Exterior Doors	<u>4 EA</u> x	<u>\$1,124.81 per EA</u>	<u>\$4,499.24</u>
C. Foundation Repair	<u>75 CY</u> x	<u>\$2,600.00 per CY</u>	<u>\$195,481.48</u>
D. Brick Veneer Repair	<u>7680 SF</u> x	<u>\$16.04 per SF</u>	<u>\$123,187.20</u>
		Total Cost	<u>\$329,460</u>

Bid Item Quantities and Cost

Project: Keys Energy Diesel Facility Assessment, City of Key West, FL

Prepared by: G. Corning Date: 8/5/2016

Check by: R. Fraxedas Date: 8/8/2016

Bid Item: 3 A&E Fees

1. Bid Estimate

A. Architect and Engineer Fee 25% Project
RS Means, 2016

B. Soil and Groundwater Management Plan \$50,000 Project
Environmental Assessment, July 2016

2. Total Cost

A. Architect & Engineer Fee 765,274.41 Project x 25.00% per project \$191,318.60

B. Soil and Groundwater Management Plan 1.00 Project x \$50,000 per project \$50,000.00

Total Cost \$241,319