

STAFF REPORT

DATE: August 1, 2017

RE: **1300 Atlantic Boulevard (C.B. Harvey Rest Beach Park)
(permit application # T17-8522)**

FROM: Karen DeMaria, City of Key West Urban Forestry Manager

An application was received regarding the shoreline stabilization of Rest Beach, a City of Key West Engineering Department project. The project, authorized by the State and Federal environmental agencies, will place a sheet piled wall above the mean high water line to stop any future erosion of the beach and dune area. Trees must be removed from the site for machinery to access the area to install the sheetpile. There are (29) Palms (Thatch, Sabal, and Coconut Palms) and (1) Blackbead tree that will be impacted by the work. It is hoped that most of the palms and the blackbead tree will be transplanted (staff approval process). Palm removals are also staff approvals. A total of (4) Buttonwood, (3) Sea Grape, (2) Jamaican Caper, (1) Seven Year Apple, and (1) Bay Cedar tree will be impacted by the work and need Tree Commission review for possible removal.







07/26/2017



07/26/2017



07/26/2017



07/26/2017

Tree Species: Buttonwood (*Conocarpus erectus*)

Tree #2A:





Diameter: 14.9"

Location: 90%

Species: 100% (on protected tree list)

Condition: 60% (fair, co-dominant trunks)

Total Average Value = 83%

Value x Diameter = 12.3 replacement caliper inches

NOTE: It might be possible to do a heavy maintenance trim on this tree to remove one of the main branches. A final decision will be made once site is staged for work.

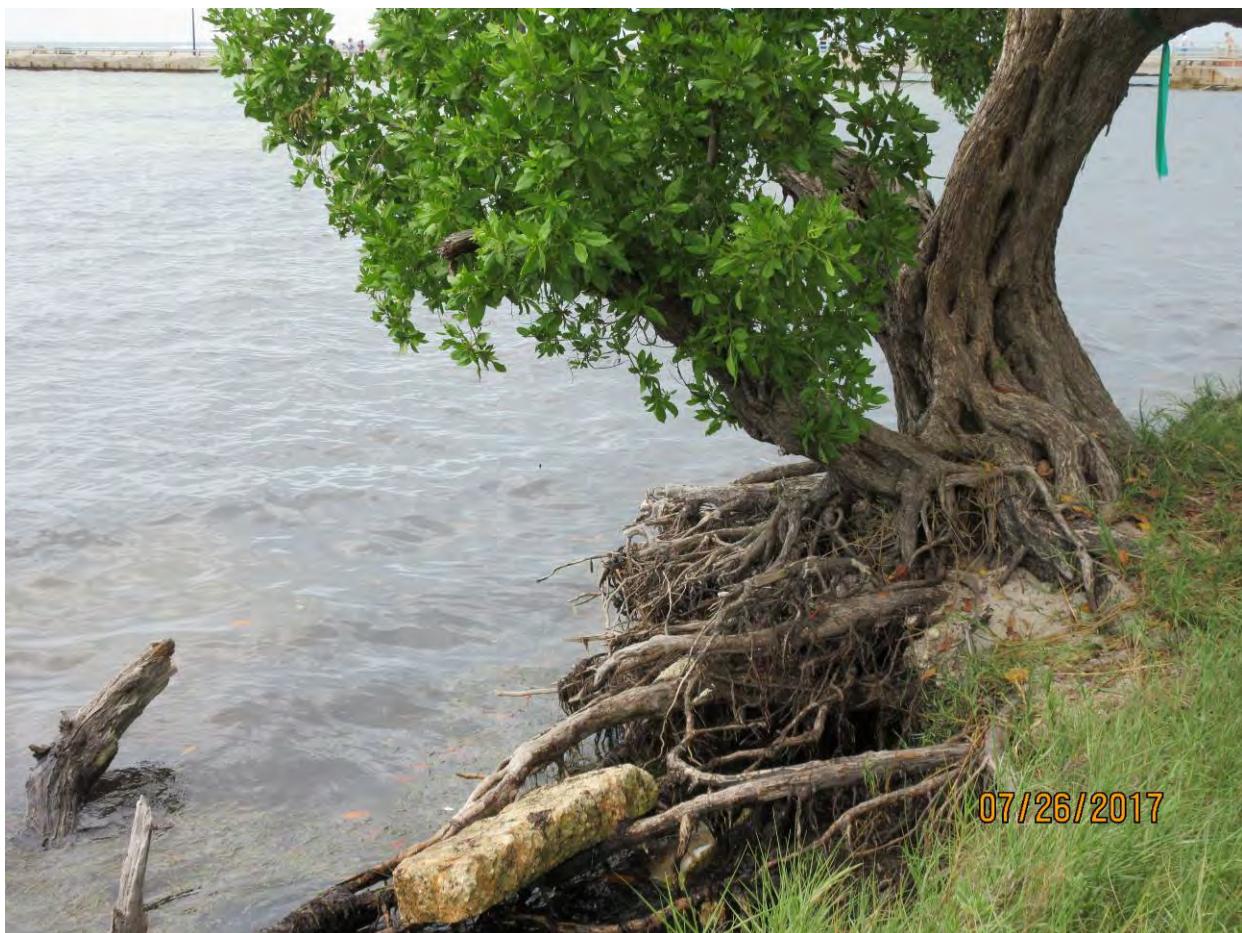
Tree#40:



07/26/2017



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Diameter: 20.3"

Location: 20% (on edge of mean high water line-in a year tree will be dead and in the water)

Species: 100% (on protected tree list)

Condition: 40% (poor, part of tree already dead due to salt water intrusion and bare root system)

Total Average Value = 53%

Value x Diameter = 10.7 replacement caliper inches

Recommend removal of tree.

Tree# 100:





07/26/2017

Diameter: 45.2"

Location: 90%

Species: 100% (on protected tree list)

Condition: 80% (multi trunked tree, typical dune shaped buttonwood)

Total Average Value = 90%

Value x Diameter = 40.6 replacement caliper inches

At the present time it appears that this tree is in the middle of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree #106:





07/26/2017



07/26/2017

Diameter: 22.9"

Location: 90%

Species: 100% (on protected tree list)

Condition: 80% (good, multitrunked tree)

Total Average Value = 90%

Value x Diameter = 20.6 replacement caliper inches

NOTE: It might be possible to do a heavy maintenance trim on the tree to remove one of the trunks. A decision will be made once site is staged for work.

Tree Species: Sea Grape (*Coccoloba uvifera*)



Tree #9:





07/20/2017



07/26/2017



07/26/2017

Diameter: 16.5"

Location: 60% (on dune edge, continual erosion will expose roots and cause death of tree)

Species: 100% (on protected tree list)

Condition: 80% (good, sprawling tree structure-typical dune/beach tree)

Total Average Value = 80%

Value x Diameter = 13.2 replacement caliper inches

It appears that this tree is in the middle of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree#13:



07/26/2017



Diameter: 12.7"

Location: 60% (on dune edge, continual erosion will expose roots and cause death of tree)

Species: 100% (on protected tree list)

Condition: 60% (fair, sprawling tree structure-typical dune/beach tree)

Total Average Value = 73%

Value x Diameter = 9.2 replacement caliper inches

It appears that this tree is in the middle of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree #86G:



Diameter: 1"

Location: 90%

Species: 100% (on protected tree list)

Condition: 60% (fair, young tree)

Total Average Value = 83%

Value x Diameter = 0.83 replacement caliper inches

It appears that this tree is in the middle of the work area. It is not known at this time whether the tree can successfully be transplanted.



Tree Species: Jamaican Caper (*Capparis cynophallophora*)

Tree #67:



07/26/2017



07/26/2017

Diameter: 21"

Location: 90%

Species: 100% (on protected tree list)

Condition: 80% (good)

Total Average Value = 90%

Value x Diameter = 11.3 replacement caliper inches

It appears that this tree is in the middle of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree #68:



07/26/2017



Diameter: 15.6"

Location: 90%

Species: 100% (on protected tree list)

Condition: 70% (good)

Total Average Value = 86%

Value x Diameter = 13.4 replacement caliper inches

It appears that this tree is on the edge of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree Species: Seven Year Apple (*Casasia clusiifolia*)

Tree #66:



Diameter: 8.5"

Location: 90%

Species: 100% (on protected tree list)

Condition: 70% (fair, sprawling tree)

Total Average Value = 86%

Value x Diameter = 7.3 replacement caliper inches

It appears that this tree is on the edge of the work area. It is not known at this time whether the tree can successfully be transplanted.

Tree Species: Bay Cedar (*Suriana maritima*)

Tree #48:



Diameter: 7.3"
Location: 90%
Species: 100% (on protected tree list)
Condition: 70% (old specimen, some dead branches, single trunk with typical dune canopy structure)
Total Average Value = 86%
Value x Diameter = 6.2 replacement caliper inches

At the present time it appears that this tree is in the work area. It is not known at this time whether the tree can successfully be transplanted.

NOTES: For several years, the City has been working with the State and Federal Environmental agencies regarding a shoreline stabilization project for Rest Beach. Other plans had a much more significant impact on existing trees in the area. If no work is done, the area will erode away and there will be significant impacts to Atlantic Blvd.

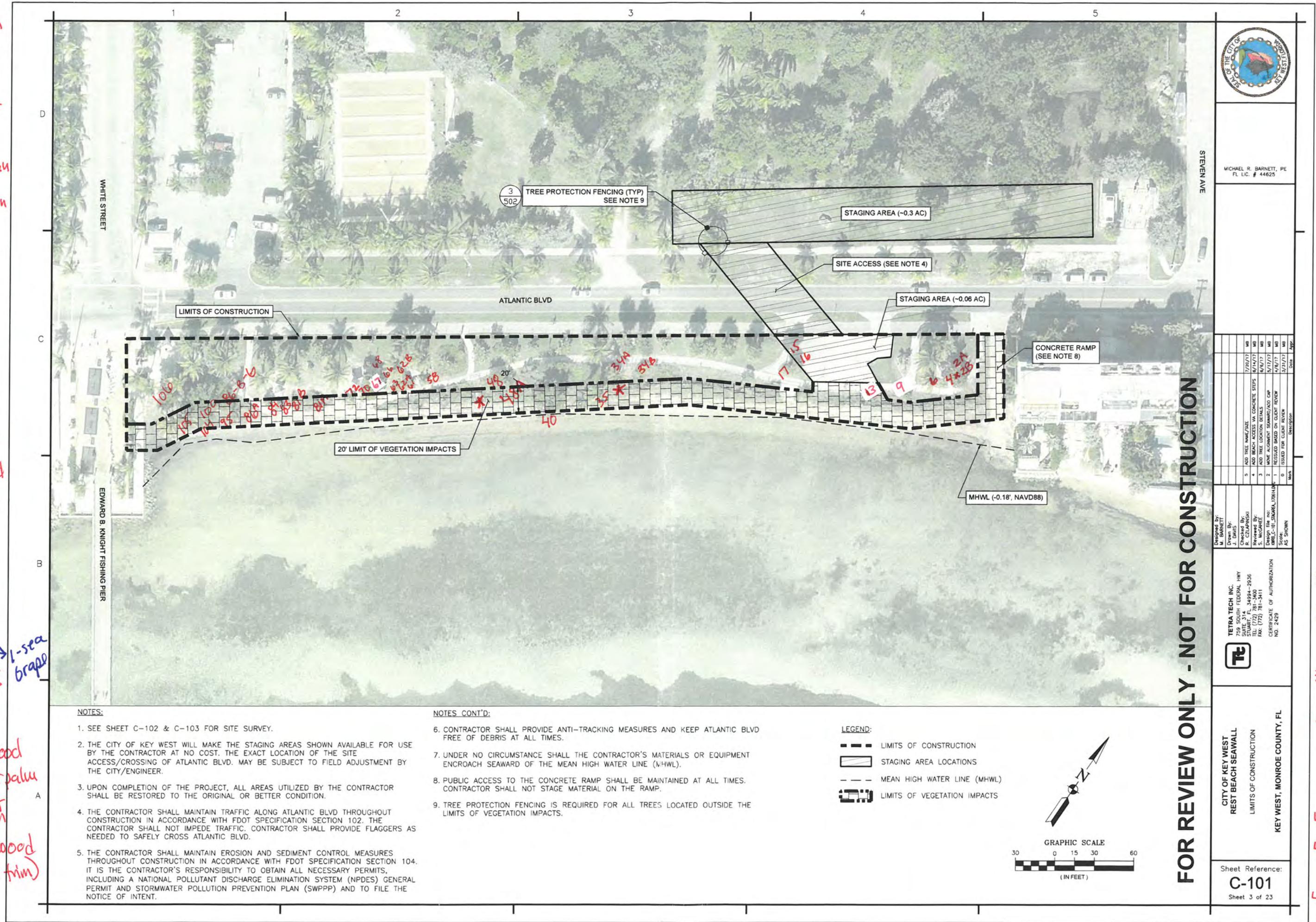
Two of the buttonwood trees appear to be on the edge of the proposed work area. It is hoped that these trees will only need to have some branches/trunks removed. It is not known at this time the likelihood of the survivability of transplanting a large buttonwood tree, the Jamaican Capers, or the Bay Cedar tree or the cost of such work. During the contract process through engineering, this information will be clarified.

Recommendation: **Recommend approval of the removal of (4) Buttonwoods, (3) Sea Grapes, (2) Jamaican Capers, (1) Seven Year Apple, and (1) Bay Cedar tree at 1300 Atlantic Boulevard, Rest Beach, to be replaced with a total of 145.6 caliper inches of dicot trees from the approved list, FL#1, to be planted on site, if all of the trees are removed.**

The Contractor must work with the Engineering Department and the Urban Forester to specifically identify the work area in order to minimize impacts to the trees. No permits will be issued for the project until a specific tree removal/transplantation/maintenance trimming plan has been submitted to the Urban Forester.

Any transplants or trimming work to the trees must be done by professionals in that field.

58
 61 Thatch
 62A Palms
 62B /
 63 /
 66 Seven Yr
 Apple
 tree
 67 Jamaican
 Caper
 68 Jamaican
 Caper
 70 Thatch
 Palm
 72 Thatch
 Palm
 (Seagrape
 Shrub-not
 regulated)
 81A Thatch
 palm
 (buttonwood
 Shrub-not
 regulated)
 81B Thatch
 Palm
 83 Thatch
 Palm
 84 Thatch
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 86 Thatch
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 b-F palms
 75 coconut
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