

ATTACHMENT NO. 22

ENGINEERING DESCRIPTION OF EXISTING STRUCTURES

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During the 2009 beach renourishment project, the 190-foot rock groin which was located north of FDEP monument R-38 was removed.

One 165-foot rock groin structure is within the proposed fill template in Lido Key located near R-38.4. The structure has been periodically buried and exposed by sand placement and natural beach processes. No adverse effects have been observed, and some benefit of sand retention in the immediate area is apparent from a review of past photography. As-built drawings are not available but aerial photographs from 1998, 1999, 2000, 2001, 2005, 2012 and 2014 are provided with this attachment. The beach adjacent to the groins is being monitored annually. Based on the recent history, no change to the structure is warranted. The applicant proposes to leave the existing structure in place to be buried by the beach fill as previous projects have done.

P:\Sarasota\Lido Key\150252 City of Sarasota SPP Assist USACE with Permitting\CAD\Figures\Historical Aerials\02112014.dwg - Mar 06, 2015 @ 2:59pm - howard.nejib



NOTES:

1. COORDINATES SHOWN HEREON ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: NOVEMBER 1998.

CB&I COASTAL PLANNING & ENGINEERING, INC.

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TITLE:

**LIDO KEY
EXISTING ROCK GROIN STRUCTURES
1998 CONDITIONS**

DATE: 01/07/07

BY: JRC

COMM NO.: 8486.46

ATTACHMENT NO. 22

P:\Sarasota\Lido Key\150252 City of Sarasota SPP Assist USACE with Permitting\CAD\Figures\Historical Aerials\02112014.dwg - Mar 06, 2015 @ 3:00pm - howard.nejib



NOTES:

1. COORDINATES SHOWN HEREON ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: MARCH 1999.

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TITLE:

**LIDO KEY
EXISTING ROCK GROIN STRUCTURES
1999 CONDITIONS**

DATE: 01/07/07

BY: JRC

COMM NO.: 8486.46

ATTACHMENT NO. 22



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TITLE:

LIDO KEY EXISTING ROCK GROIN STRUCTURES 2000 CONDITIONS

DATE: 01/07/07

BY: JRC

COMM NO.: 8486.46

ATTACHMENT NO. 22



NOTES:

1. COORDINATES SHOWN HEREON ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: 2001

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TITLE:

**LIDO KEY
EXISTING ROCK GROIN STRUCTURES
2001 CONDITIONS**

DATE: 01/07/07

BY: JRC

COMM NO.: 8486.46

ATTACHMENT NO. 22

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NOTES:

1. COORDINATES SHOWN HEREON ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: 2005

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TITLE:

**LIDO KEY
EXISTING ROCK GROIN STRUCTURES
2005 CONDITIONS**

DATE: 01/07/07

BY: JRC

COMM NO.: 8486.46

ATTACHMENT NO. 22



NOTES:

1. COORDINATES SHOWN HEREON ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL PHOTOGRAPH: AUGUST 2014

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TITLE:

**LIDO KEY
EXISTING ROCK GROIN STRUCTURES
2014 CONDITIONS**

DATE: 02/12/15

BY: HN

COMM NO.: 150252

ATTACHMENT NO. 22