

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY

Meeting Date: October 5, 2010

☒ Consent    ☐ Regular  
☐ Workshop    ☐ Public Hearing

Department:

Submitted By:    Engineering & Public Works  
Submitted For:    Engineering Services Division

I. EXECUTIVE BRIEF

**Motion and Title: Staff recommends motion to approve:** A Department of the Army Consent to Easement (Consent) to use the Corps of Engineers right-of-way of the Okeechobee Waterway at the Point Chosen Swing Bridge in Belle Glade.

**SUMMARY:** Approval of this Consent will expedite the repair of the Point Chosen Swing Bridge. Palm Beach County is in the process of replacing the existing fender system under Project No. 2010906. The fender system is in the Okeechobee Waterway, which is under the jurisdiction of the Corps of Engineers, who are requiring that this Consent be executed.

District 6 (MRE)

**Background and Justification:** The consultant for the Florida Department of Transportation, who inspects bridges, stated that the existing timber fender system was in an advanced state of deterioration. In the design process to replace the fender system with concrete pile it was established that various approvals were required, such as the attached Consent, before construction can begin.

**Attachments:**

1. Location Sketch
2. Corp Cover Letter
3. Consent to Easement (2)

Recommended by: Charlie Rich  
Division Director

9/2/10 [Signature]  
Date

Approved By: S. T. Welch  
County Engineer

9/14/10  
Date

## II. FISCAL IMPACT ANALYSIS

### A. Five Year Summary of Fiscal Impact:

Fiscal Years	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Capital Expenditures	-0-	-0-	-0-	-0-	-0-
Operating Costs	-0-	-0-	-0-	-0-	-0-
External Revenues	-0-	-0-	-0-	-0-	-0-
Program Income (County)	-0-	-0-	-0-	-0-	-0-
In-Kind Match (County)	-0-	-0-	-0-	-0-	-0-
NET FISCAL IMPACT		-0-	-0-	-0-	-0-
# ADDITIONAL FTE	-0-	-0-	-0-	-0-	-0-
POSITIONS (Cumulative)	-0-	-0-	-0-	-0-	-0-

Is Item Included In Current Budget? Yes \_\_\_\_\_ No \_\_\_\_\_

### Budget Account No.:

Fund \_\_\_\_\_ Department \_\_\_\_\_ Unit \_\_\_\_\_ Object \_\_\_\_\_

### B. Recommended Sources of Funds/Summary of Fiscal Impact:

**NO FISCAL IMPACT**

C. Departmental Fiscal Review: Amullhite

## III. REVIEW COMMENTS

### A. OFMB Fiscal and/or Contract Dev. and Control Comments:

Consent to use USACOE Right of way only - No fiscal impact.  
John D. [Signature] 9/15/10  
OFMB 1009-15-10 9/15/10  
Am. J. Jacobus 9/16/10  
Contract Dev. and Control

### B. Legal Sufficiency:

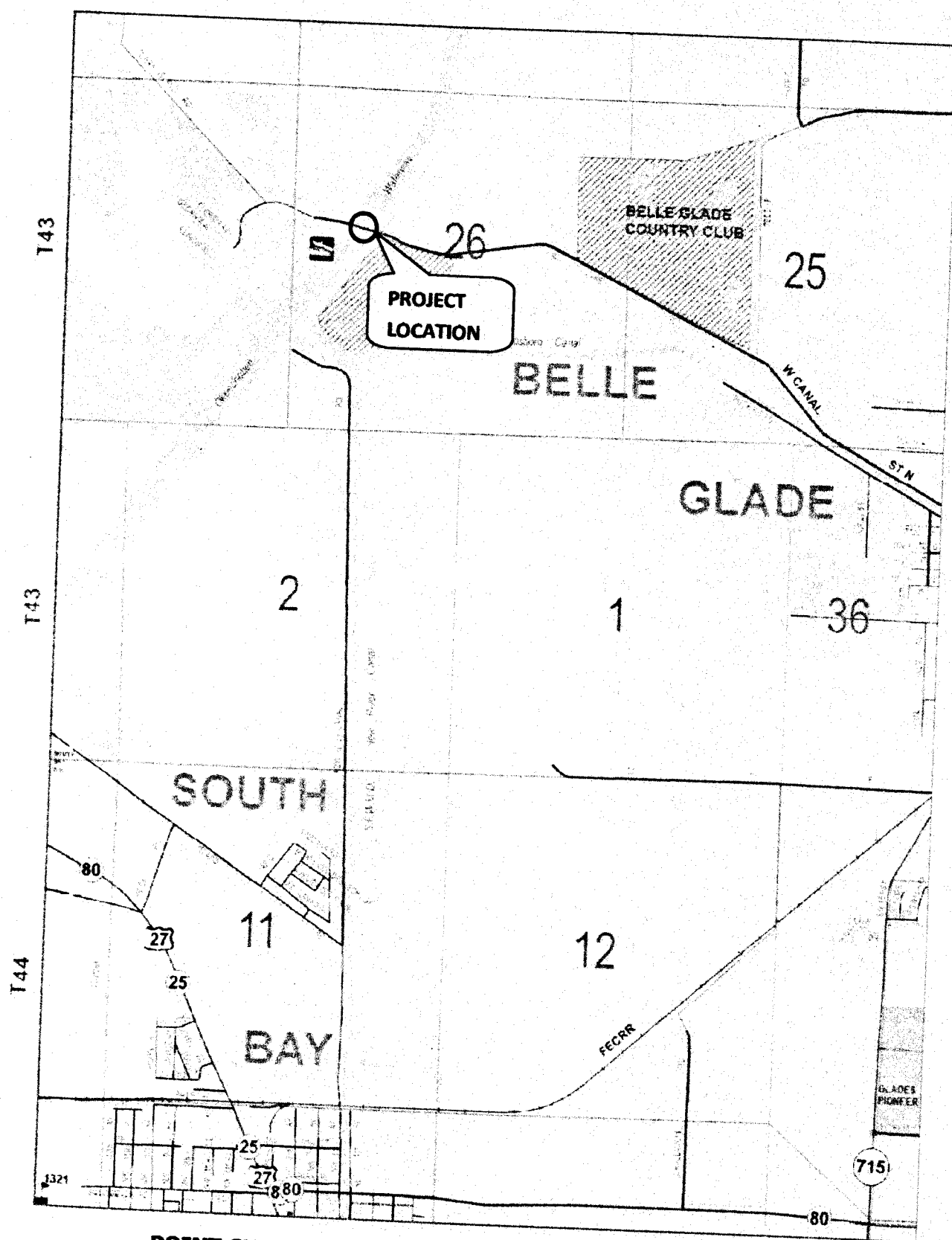
Mark R. [Signature]  
Assistant County Attorney

### C. Other Department Review:

\_\_\_\_\_  
Department Director

This summary is not to be used as a basis for payment.

N:\ENG\_SER\2010906 Point Chosen Bridge Fender System Replacement\AIS.doc



POINT CHOSEN BRIDGE FENDER SYSTEM REPLACEMENT

PROJECT NO. 2010906



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
P.O. BOX 4970  
JACKSONVILLE, FLORIDA 32232-0019

August 17, 2010

Real Estate Division  
Management and Disposal Branch

Mr. Charles Rich  
Palm Beach County Engineering Services  
2300 North Jog Road, 3W-52  
West Palm Beach, Florida 33411

Dear Mr. Rich:

Reference is made to Department of the Army Permit No. 2010-01788 (NPR-ERG), for replacement of the Point Chosen Swing Bridge fender system.

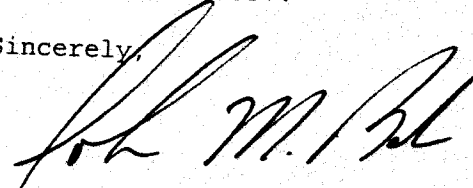
Since the proposed work, pursuant to the above referenced permit, is within the Federal right-of-way of the Okeechobee Waterway, a consent to easement must be executed by Palm Beach County and on behalf of the Government prior to construction.

Enclosed you will find two copies of Department of the Army Consent to Easement No. DACW17-9-10-0082, designed to allow construction of the swing bridge within the Government's right-of-way of the Okeechobee Waterway. This property is identified as Tract No. 712, Intracoastal Waterway, Tributary Channel, Okeechobee Waterway.

Please review the enclosed consent and have both copies executed on behalf of the Board of County Commissioners. Please do not date the consent; it will be dated when signed on behalf of the Government. Return both complete sets of the signed consent (with exhibits) to this office, together with a check in the amount of \$300.00 for payment of our non-refundable administrative fee. Please make the check payable to FAO USAED Jacksonville. Upon receipt of the signed consent, it will be dated and signed on behalf of the Government. A signed copy will be forwarded to you.

Thank you for your cooperation. If you have any questions, please telephone Mr. Larry Wright of this office at 904-232-2537.

Sincerely,

  
John M. Baker  
Chief, Real Estate Division

Enclosure

RECEIVED  
AUG 23 2010



**DEPARTMENT OF THE ARMY  
CONSENT TO EASEMENT  
TO USE CORPS OF ENGINEERS RIGHT-OF-WAY**

Consent No. DACW17-9-10-0082  
Project: Intracoastal Waterway-  
Tributary Channel, Okeechobee Waterway  
Palm Beach County, Florida  
Tract Nos. 712

**THIS CONSENT TO EASEMENT AGREEMENT**, made by and between the **UNITED STATES OF AMERICA, DEPARTMENT OF THE ARMY**, hereinafter referred to as the "Government", acting by and through the Chief, Real Estate Division, U.S. Army Corps of Engineers, Jacksonville District, hereinafter referred to as "said officer," and **PALM BEACH COUNTY, FLORIDA** hereinafter referred to as the "Grantee":

**WHEREAS**, the Government has acquired a right-of-way easement over the above-numbered tract of land, which easement, by its terms, reserves to the Government, in perpetuity, the right to use said easement for the construction, improvement, and maintenance of the Intracoastal Waterway-Tributary Channel, Okeechobee Waterway, Palm Beach County, Florida; and

**WHEREAS**, the Grantee has requested permission to, construct, operate, use, maintain, repair and remove a swing bridge in, on, across, over, and under a portion of the lands identified as Tract No. 712, Section 26, Township 43 South, Range 36 East, Palm Beach County, Florida. The area comprising 0.10 of an acre more or less, is shown in red on Exhibit "A", attached hereto and made a part hereof.

**NOW THEREFORE**, this consent is granted and accepted under the following conditions:

1. That it is understood that this consent is effective only insofar as the property rights of the Government in the land to be occupied are concerned, and that it does not relieve the Grantee from the necessity of obtaining grants from the owners of the fee and/or other interests, therein, nor does it obviate the requirement that the Grantee obtain State or local assent required by law for the activity authorized herein.
2. That any proposed improvements or use authorized herein shall not be commenced until appropriate rights shall have been obtained by the Grantee from the record owners and encumbrancers of the fee title to the lands involved, or until the Grantee has obtained all Federal, State, or local permits required by law.
3. That the proposed improvements or use authorized herein shall be consistent with the terms and conditions of this consent; and that any improvements or use not specifically identified and authorized shall constitute a violation of the terms and conditions of this consent which may result in a revocation of this consent and in the institution of such legal proceedings as the Government may consider appropriate, whether or not this consent have been revoked or modified.

4. That the exercise of the privileges hereby consented to shall be without cost or expense to the Government and under the super-vision of and subject to the approval of the said officer having immediate jurisdiction over the property and subject to such regulations as he may from time to time prescribe, including, but not limited to, the specific conditions, requirements, and specifications set forth in paragraph 14 below.
5. That the Grantee shall supervise and maintain the said improvements and cause it to be inspected at reasonable intervals, and shall immediately repair any damage found therein as a result of such inspection, or when requested by said officer to repair any defects. Upon completion of the installation of said improvements or the making of any repairs thereto, the premises shall be restored immediately by the Grantee, at the Grantee's own expense, to the same condition as that in which they existed prior to the commencement of such work, to the satisfaction of said officer.
6. That any property of the Government damaged or destroyed by the Grantee incident to the exercise of the privileges herein granted shall be promptly repaired or replaced by the Grantee to the satisfaction of the said officer, or in lieu of such repair or replacement, the Grantee shall, if so required by said officer and at his option, pay to the Government an amount sufficient to compensate for the loss sustained by the Government by reason of damage to or destruction of Government property.
7. That the Government shall not be responsible for damages to the property or injuries to persons which may arise from or be incident to the exercise of the privileges herein granted, or for damages to the property of the Grantee, or for damages to the property or injuries to the person of the Grantee, or the persons of Grantee's officers, agents, servants, or employees, or others who may be on said premises at the invitation of the Grantee or the invitation of one of them, arising from Governmental activities on or in the vicinity of the said premises, and the Grantee shall hold the Government harmless from any and all claims to the extent allowed by law.
8. That the Government shall in no case be liable for any damage, either hidden or known, to any improvements herein authorized which may be caused by any action of the Government, under the rights obtained in its easements, or that may result from the future operations undertaken by the Government, and no claim or right to compensation shall accrue from such damage, and if further operations of the Government require the alteration or removal of any improvements herein authorized, the Grantee shall, upon due notice, from said officer, alter or remove said improvements without expense to the Government and subject to the supervision and approval of the said officer and no claim for damages shall be made against the Government on account of such alterations or removal.
9. That construction and/or operation, maintenance, and use of any improvements incident to the exercise of the privileges herein granted shall be in such a manner as not to conflict with the rights of the Government, nor to interfere with the operations by the Government under such rights nor to endanger lives and safety of the public.
10. That this consent may be terminated by the Government or said officer upon reasonable notice to the Grantee if the Government or said officer shall determine that any improvements or use to which consent is herein granted interferes with the use of said land or any part thereof by the Government, and this consent may be annulled and forfeited by the declaration of the

Government or said officer for failure to comply with any or all of the provisions and conditions of this consent, or for nonuse for a period of two (2) years, or for abandonment.

11. That upon relinquishment, termination, revocation, forfeiture, or annulment of this consent, the Grantee shall vacate the premises, remove all property of the Grantee therefrom, and restore the premises to a condition satisfactory to the said officer. If the Grantee shall fail or neglect to remove the said property and so restore the premises, then at the option of the Government or said officer, the said property shall either become the property of the Government without compensation therefor, or the Government or said officer, may cause it to be removed, and the premises to be so restored at the expense of the Grantee, and no claim for damages against the Government, or its officer or agents, shall be created by or made on account of such removal and restoration.

12. That the Grantee within the limits of its respective legal powers shall comply with all Federal, interstate, State, and/or local governmental regulations, conditions, or instructions for the protection of the environment and all other matters as they relate to real property interests granted herein.

13. That the Grantee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archeological, architectural, or other cultural artifacts, relics, vestiges, remains, or objects of antiquity. In the event such items are discovered on the premises, the Grantee shall immediately notify the District Engineer, Jacksonville District, Post Office Box 4970, Jacksonville, Florida 32232-0019, and the site and the material shall be protected by the Grantee from further disturbance until a professional examination of them can be made or until a clearance to proceed is authorized by the District Engineer.

14. That construction shall be in accordance with the drawings attached hereto and made a part hereof as Exhibit "B" and with Department of the Army Permit No. 2010-01788 (NPR-EGR). That no additional permanent structures shall be constructed waterward of the Government's right-of-way line and that any structures currently within the right-of-way must be removed by the Grantee's, at the Grantees' expense, if future needs of the Government so require.

15. That this consent may not be transferred to a third party without the prior written notice to the Chief, Real Estate Division, U.S. Army Corps of Engineers, Jacksonville District, Post Office Box 4970, Jacksonville, Florida 32232-0019, and by the transferee's written agreement to comply with and be bound by all the terms and conditions of this consent. In addition, if the Grantee transfers the improvements authorized herein by conveyance of realty, the deed shall reference this consent and the terms and conditions herein and the consent shall be recorded along with the deed in the Registrar of Deeds or with other appropriate official.

This consent is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, I have hereunto set my hand, by authority of the  
Secretary of the Army, this \_\_\_\_\_ day of \_\_\_\_\_ 2010.

**UNITED STATES OF AMERICA**

By: \_\_\_\_\_  
JOHN M. BAKER  
Chief, Real Estate Division  
U.S. Army Engineer District  
Jacksonville, Florida

**AGREED TO AND ACCEPTED**

**PALM BEACH COUNTY, FLORIDA**

By: ITS BOARD OF COUNTY COMMISSIONERS

By: \_\_\_\_\_

ATTEST:

By: \_\_\_\_\_

**CERTIFICATE OF AUTHORITY**

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_ of  
the Board of County Commissioners, Palm Beach County, Florida, that  
\_\_\_\_\_ who signed the foregoing instrument on behalf of the  
grantee was then \_\_\_\_\_ of Palm Beach County Board of County  
Commissioners. I further certify that the said officer was acting within the  
scope of powers delegated to this officer by the governing body of the grantee  
in executing said instrument.

Date: \_\_\_\_\_

\_\_\_\_\_  
(Signature)



TORRY ISLAND

BERTHA ELBRADDOCK ET AL

PARCEL T-3  
13.91 AC.

T.I.F. 714

713

PRM

T.I.F. 713

PARCEL NO 45-VX  
36.79 A

T.I.F. 712

PARCEL NO 45-A  
230 A

TOWNSHIP 43S.  
RANGE 36E.  
PALM BEACH COUNTY

Hillsboro Canal

HURRICANE GATE  
STRUCTURE NO. 4

Unsurveyed Corner

TWP. 43S.  
TWP. 44S.

5280.00'

Unsurveyed Corner

NOTE: ALL TRACTS ARE ADJ.  
EXCEPT TRACT 714.

TOWNSHIP 44S.  
RANGE 36E.  
PALM BEACH CO.

Note:  
Sections through which the Right-of-Way  
passes were located by projecting section lines  
of mainland survey lakeward from the State  
meander line. That part of the Right-of-Way  
lying within the U.S. meander line around  
Torry Island is actually within the section  
as shown. There is no relation between  
the Torry Island sections as surveyed  
by the United States and the sec-  
tions on the mainland as establish-  
ed by the State of Florida.

Note:  
Bearings of all lines on this sheet are based  
on adjusted meridians obtained from true mer-  
idians at Clewiston and Equest Point.

Note:  
The 15' Contour was superimposed  
on these sheets from a  
various surveys which  
prior to the construction of the levee.

EXHIBIT "A"

COUNTY OF PALM BEACH  
STATE OF FLORIDA

BOARD OF COUNTY COMMISSIONERS  
PROJECT NO. 2010006

FENDER REPLACEMENT FOR  
POINT CHOSEN SWING BRIDGE  
OVER THE RIM CANAL

BURT AARONSON  
CHAIRPERSON - DISTRICT 5

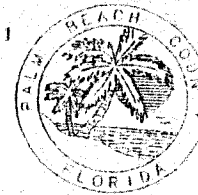
KAREN T. MARCUS  
VICE CHAIRPERSON - DISTRICT 1

JOHN F. EGORS  
DISTRICT 2

SHELLEY VANA  
DISTRICT 3

STEPHEN L. ABRAMS  
DISTRICT 4

JESS R. SANTAMARIA  
DISTRICT 6



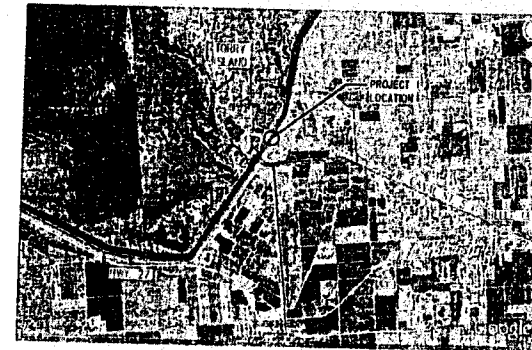
PRISCILLA A. TAYLOR  
DISTRICT 7

US ARMY  
CORPS OF ENGINEERS

AUG 11 2010

PALM BCH GRDNS. OFFICE  
COE #: SWJ-2010-1798

PROJECT MANAGER: \_\_\_\_\_  
PAGE 1 OF 12



LOCATION MAP  
Scale N.T.S.



BRIDGE DESIGN ASSOCIATES, INC.  
1400 N.W. 11th Street, Suite 100  
Fort Lauderdale, FL 33304  
TEL: (954) 574-1100  
FAX: (954) 574-1101  
WWW.BDA-FLA.COM

PROJECT NO. 00-574

DATE: 08/11/10  
BY: [Signature]  
CHECKED BY: [Signature]  
APPROVED BY: [Signature]

NO.	DATE	REVISION
1	08/11/10	Initial Design
2	08/11/10	Final Design

DESIGNED BY: [Signature]  
CHECKED BY: [Signature]  
APPROVED BY: [Signature]  
FENDER REPLACEMENT FOR  
POINT CHOSEN SWING BRIDGE  
OVER THE RIM CANAL

Sheet List Table

Sheet No.	Sheet Title
C1	Cover Sheet
S1	Summary of Quantities & Notes
S2	Fender Site Plan
S3	Fender Plan
S4	Substructure Pile Plan
S5	Pile Data
S6	Soil Boring Data
S7	East Fender Access Plan
S8	East Fender Access Details
S9	West Fender Access Plan
S10	West Fender Access Details
S11	Typical Fender Details

PROJECT STANDARD SHEETS

INDEX NO.	DESCRIPTION
S12 (21030)	Fender Design Standards Data
S13 (20000)	Notes & Details for Square Prestressed Concrete Piles
S14 (20014)	14" Square Prestressed Concrete Pile
S15 (21000)	Fender System General Notes & Layout (Sheet 1 of 4)
S16 (21004)	Fender System General Notes & Layout (Sheet 2 of 4)
S17 (21006)	Fender System - Light Duty (Sheet 1 of 3)
S18 (21009)	Fender System - Light Duty (Sheet 2 of 3)
S19 (21006)	Fender System - Light Duty (Sheet 3 of 3)
S20 (21009)	Fender System - Light Duty (Sheet 4 of 4)
S21 (21009)	Fender System - Light Duty (Sheet 5 of 4)

US ARMY  
CORPS OF ENGINEERS

AUG 11 2010

COE # 2010-1788  
PROJECT MANAGER



PROJECT NO. 08 073

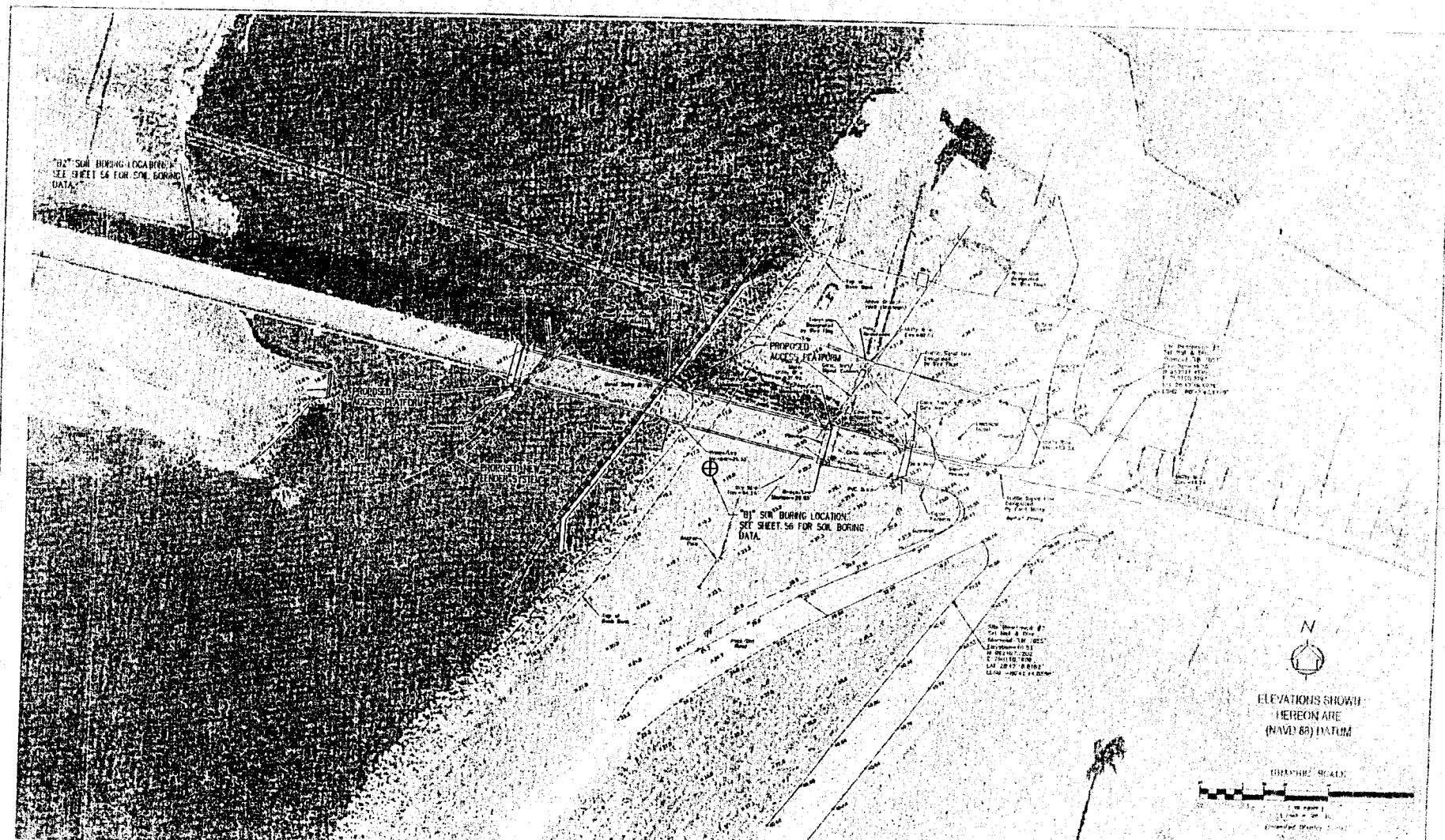
DATE	10/10/10
TIME	10:00 AM
LOCATION	10000
STATUS	10000
REMARKS	10000

FOR THE DISTRICT OF COLUMBIA  
UNITED STATES OF AMERICA  
OFFICE OF THE DISTRICT ENGINEER  
WASHINGTON, D.C.

**GENERAL NOTES**  
General Specifications  
Federal Specification of Transportation Standard Specifications for Road and Bridge Construction (2009)  
MATERIAL SPECIFICATIONS  
The following materials shall be used in the construction of the project:  
1. Concrete shall be in compliance with FDOT Specifications 200  
2. Steel shall be in compliance with FDOT Specifications 200  
3. Bituminous shall be in compliance with FDOT Specifications 200  
4. Gravel shall be in compliance with FDOT Specifications 200  
5. Sand shall be in compliance with FDOT Specifications 200  
6. Filler shall be in compliance with FDOT Specifications 200  
7. Cement shall be in compliance with FDOT Specifications 200  
8. Water shall be in compliance with FDOT Specifications 200  
9. Air shall be in compliance with FDOT Specifications 200  
10. Oil shall be in compliance with FDOT Specifications 200  
11. Grease shall be in compliance with FDOT Specifications 200  
12. Lubricants shall be in compliance with FDOT Specifications 200  
13. Paints shall be in compliance with FDOT Specifications 200  
14. Coatings shall be in compliance with FDOT Specifications 200  
15. Sealants shall be in compliance with FDOT Specifications 200  
16. Adhesives shall be in compliance with FDOT Specifications 200  
17. Fasteners shall be in compliance with FDOT Specifications 200  
18. Welding materials shall be in compliance with FDOT Specifications 200  
19. Electrical materials shall be in compliance with FDOT Specifications 200  
20. Plumbing materials shall be in compliance with FDOT Specifications 200  
21. Heating materials shall be in compliance with FDOT Specifications 200  
22. Cooling materials shall be in compliance with FDOT Specifications 200  
23. Ventilation materials shall be in compliance with FDOT Specifications 200  
24. Fire protection materials shall be in compliance with FDOT Specifications 200  
25. Safety materials shall be in compliance with FDOT Specifications 200  
26. Traffic control materials shall be in compliance with FDOT Specifications 200  
27. Signage materials shall be in compliance with FDOT Specifications 200  
28. Illumination materials shall be in compliance with FDOT Specifications 200  
29. Sound materials shall be in compliance with FDOT Specifications 200  
30. Vibration materials shall be in compliance with FDOT Specifications 200  
31. Odor materials shall be in compliance with FDOT Specifications 200  
32. Air quality materials shall be in compliance with FDOT Specifications 200  
33. Noise materials shall be in compliance with FDOT Specifications 200  
34. Environmental materials shall be in compliance with FDOT Specifications 200  
35. Cultural resources materials shall be in compliance with FDOT Specifications 200  
36. Historic resources materials shall be in compliance with FDOT Specifications 200  
37. Archaeological materials shall be in compliance with FDOT Specifications 200  
38. Paleontological materials shall be in compliance with FDOT Specifications 200  
39. Biological resources materials shall be in compliance with FDOT Specifications 200  
40. Geological resources materials shall be in compliance with FDOT Specifications 200  
41. Hydrological resources materials shall be in compliance with FDOT Specifications 200  
42. Meteorological resources materials shall be in compliance with FDOT Specifications 200  
43. Climatological resources materials shall be in compliance with FDOT Specifications 200  
44. Oceanographic resources materials shall be in compliance with FDOT Specifications 200  
45. Atmospheric resources materials shall be in compliance with FDOT Specifications 200  
46. Terrestrial resources materials shall be in compliance with FDOT Specifications 200  
47. Aquatic resources materials shall be in compliance with FDOT Specifications 200  
48. Wetland resources materials shall be in compliance with FDOT Specifications 200  
49. Wetland resources materials shall be in compliance with FDOT Specifications 200  
50. Wetland resources materials shall be in compliance with FDOT Specifications 200

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
100-1	REINFORCEMENT	100 LBS	100
100-2	REINFORCEMENT	100 LBS	100
100-3	REINFORCEMENT	100 LBS	100
100-4	REINFORCEMENT	100 LBS	100
100-5	REINFORCEMENT	100 LBS	100
100-6	REINFORCEMENT	100 LBS	100
100-7	REINFORCEMENT	100 LBS	100
100-8	REINFORCEMENT	100 LBS	100
100-9	REINFORCEMENT	100 LBS	100
100-10	REINFORCEMENT	100 LBS	100
100-11	REINFORCEMENT	100 LBS	100
100-12	REINFORCEMENT	100 LBS	100
100-13	REINFORCEMENT	100 LBS	100
100-14	REINFORCEMENT	100 LBS	100
100-15	REINFORCEMENT	100 LBS	100
100-16	REINFORCEMENT	100 LBS	100
100-17	REINFORCEMENT	100 LBS	100
100-18	REINFORCEMENT	100 LBS	100
100-19	REINFORCEMENT	100 LBS	100
100-20	REINFORCEMENT	100 LBS	100
100-21	REINFORCEMENT	100 LBS	100
100-22	REINFORCEMENT	100 LBS	100
100-23	REINFORCEMENT	100 LBS	100
100-24	REINFORCEMENT	100 LBS	100
100-25	REINFORCEMENT	100 LBS	100
100-26	REINFORCEMENT	100 LBS	100
100-27	REINFORCEMENT	100 LBS	100
100-28	REINFORCEMENT	100 LBS	100
100-29	REINFORCEMENT	100 LBS	100
100-30	REINFORCEMENT	100 LBS	100

Contractor shall verify all dimensions and quantities prior to construction and fabrication. Discrepancies shall be brought to the attention of the Engineer before construction.



**US ARMY  
CORPS OF ENGINEERS**

**AUG 11 2010**

**PROPOSED FENDER SITE PLAN**  
Scale: 1"=20'-0"

BRIDGE DESIGN ASSOCIATES, INC.  
1410 N. W. 10th Ave., Suite 100  
Fort Lauderdale, FL 33311  
TEL: (954) 574-1111  
FAX: (954) 574-1112  
WWW.BDAINC.COM

PROJECT NO.	00-874
DATE	
REVISION	

NO.	DATE	BY	CHKD.	APP'D.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

DESIGNED BY: [Signature]  
CHECKED BY: [Signature]  
APPROVED BY: [Signature]  
FENDER REPLACEMENT FOR  
POINT CHERRY SWAMP BRIDGE  
OVER THE RIM CANAL

PALM BCH GRDNS OFFICE  
COE # 2010-1788  
PROJECT MANAGER  
PAGE 3 OF 12



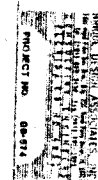
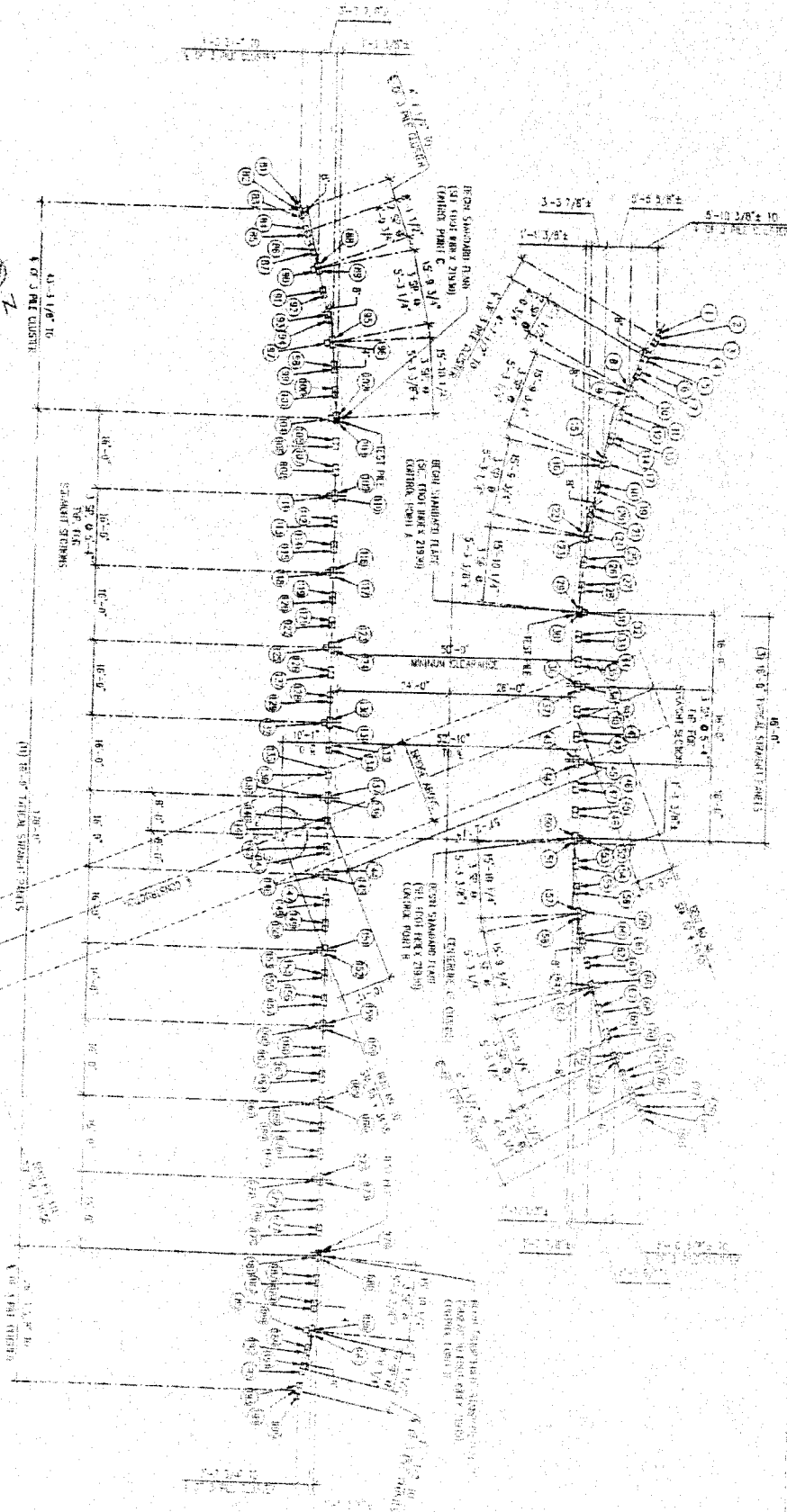
# US ARMY CORPS OF ENGINEERS

AUG 11 2010

COE # PALM BCH GRIDS OFFICE  
PROJECT MANAGER 2010-1788  
PAGE 5 OF 12

## SUBSTRUCTURE PILE PLAN

SCALE: 1"=10'-0"



NO.	DATE	REVISION
1	08-11-10	ISSUED FOR CONSTRUCTION

NO.	DATE	REVISION
1	08-11-10	ISSUED FOR CONSTRUCTION

DESIGNED BY: [Signature]  
CHECKED BY: [Signature]  
DATE: 08-11-10

AUG 11 2010

PALM BCH GRDNS. OFFICE  
COE #: 2010-1788  
PROJECT MANAGER:   
PAGE: 6 OF 17

Pile Data Table													
Installation Criteria								Design Criteria					
Fenders	Pile Size (in.)	Normal Bearing Capacity (tons)	Tension Capacity (tons)	Minimum Tip Elevation (MSL+VE)	Test Pile Length (ft)	Required Jet Erosion (MSL+VE)	Required Penetration Elevation (MSL+VE)	Performance Factor (tons)	Design Pile Capacity (tons)	Total Spigot Resistance (tons)	Net Resistance (tons)	Long Term Allowable Penetration (ft)	10 Year Allowable Penetration (ft)
Test Piles 26, 103, 119	14	31	N/A	(-) 35.0	72	N/A	N/A	50	0	N/A	N/A	N/A	N/A
Piles 1-26, 31-102, 104-170, 180-195	14	31	N/A	(-) 35.0	N/A	N/A	N/A	50	0	N/A	N/A	N/A	N/A

[illegible]

PRECAST PRESTRESSED CONCRETE PILES  
LOADING SHALL BE AS FOLLOWS:

FILES (1) - (29) AND (31) - (52) AND (70) - (79) AND (99) - (99)  
14" SOLID FILES WITH 20 TON CAPACITY (57-07, 1202 APPROX)

Contractor to verify location of all obstructions prior to any pile driving.  
Minimum Top Elevations required for piling standards:

Normal hearing capacity (NHC) = (Maximum hearing level + 60 dB HL) / 2

Maximum tip elevation of 1.5° is required for lateral stability. Pitching of the poles is effected in order to allow windward use of the windward armament of 20 feet required for attack stability.

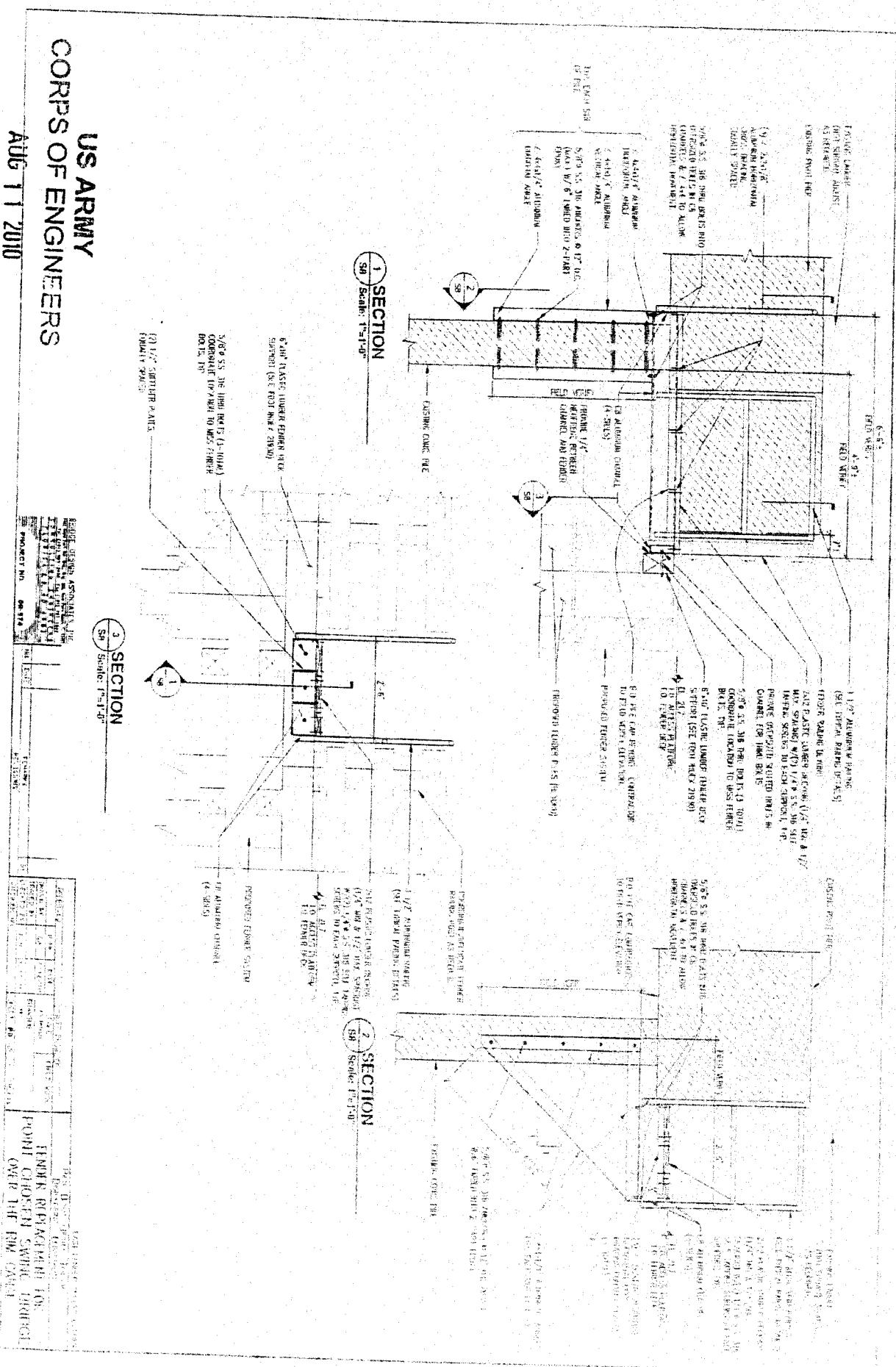
[illegible]

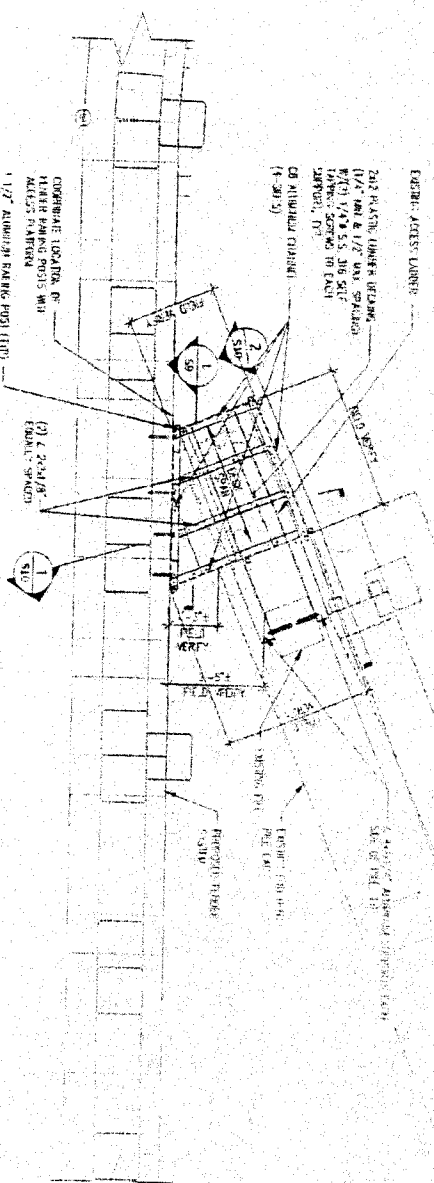




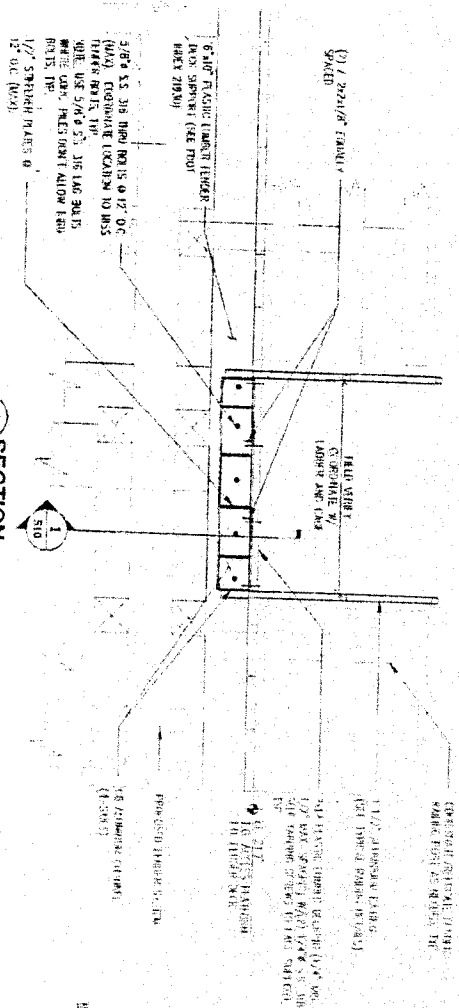
AUG 11 2010

OF 77





**PROPOSED WEST FENDER ACCESS PLAN**  
Scale: 3/4" = 1'-0"



**SECTION 1**  
Scale: 1" = 1'-0"

**US ARMY  
CORPS OF ENGINEERS**

**AUG 11 2010**

COE # **PALM BCH GRDNS OFFICE**  
PROJECT # **2010-1788**  
PAGE **9** OF **12**

<b>ENGINEERING ASSOCIATES, INC.</b> <b>11111 W. 111TH AVENUE</b> <b>DENVER, CO 80231</b> <b>TEL: 303.755.1111</b> <b>FAX: 303.755.1112</b> <b>WWW.EA-INC.COM</b>		<b>PROJECT NO.</b> 08-374 <b>DATE</b> 08-11-10 <b>BY</b> [Signature] <b>CHECKED BY</b> [Signature] <b>APPROVED BY</b> [Signature]						
<b>REVISIONS</b> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>08-11-10</td> <td>ISSUED FOR PERMIT</td> </tr> </table>	NO.	DATE	DESCRIPTION	1	08-11-10	ISSUED FOR PERMIT	<b>DESIGNED BY</b> [Signature] <b>CHECKED BY</b> [Signature] <b>APPROVED BY</b> [Signature]	<b>PROJECT TITLE</b> <b>FENDER REPAIR/REINFORCEMENT FOR</b> <b>POINT CHOSEN IN SANDY BEACHES</b> <b>OVER THE RAIN CANAL</b>
NO.	DATE	DESCRIPTION						
1	08-11-10	ISSUED FOR PERMIT						

**NOTES:**  
1) FENDER CARRIER TO BE SET IN PLACE BY 09/01/10.  
2) FENDER AND FENDER TO BE SET BY 09/01/10.  
3) FENDER TO BE SET BY 09/01/10.



AUG 11 2010

11 of 17



**Scale: 1"=1'-0"**

THE STATE OF FLORIDA

## FINER REPLACEMENT FOR POINT CHOICE SWITCHING OVER THE PDA CABLE

