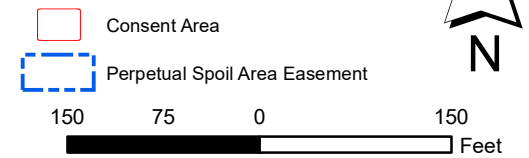


EXHIBIT A

Map for Consent to Easement
 Consent No. DACW17-9-25-0131
 Permit No. SAJ-2005-08610(NWP-ACD)
 Grantee: City of Delray Beach Public Works
 Mangrove Park Boat Launch Facility
 1055 SE 6th Avenue
 Delray Beach, Palm Beach County, Florida
 Section 21 - T 46 S - R 43 E
 29 September 2025

Intracoastal Waterway Jacksonville to Miami
 Affects Tract No. 823

LEGEND



SCALE: 1 INCH = 150 FEET



VICINITY MAP



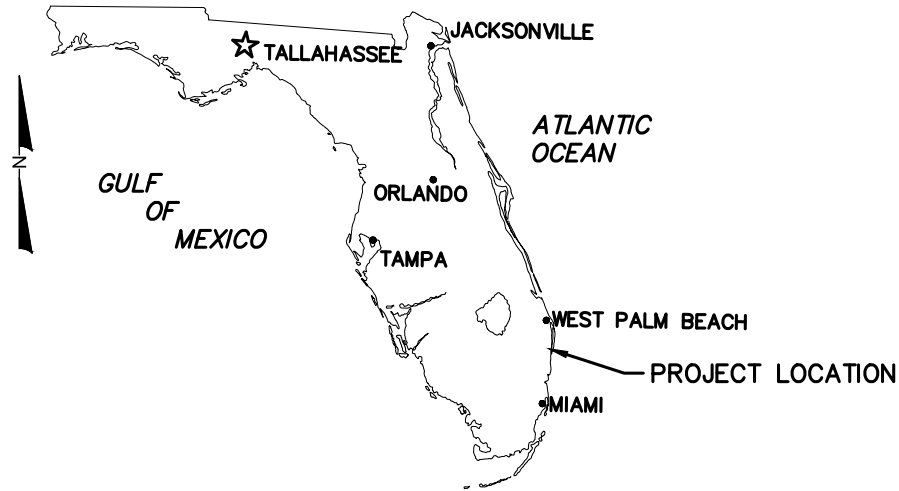
Prepared by:
 Department of the Army
 Corps of Engineers
 Jacksonville District
 Real Estate Division
 Technical Services Branch

MANGROVE PARK RAMP, DELRAY BEACH SEAWALL REPLACEMENT PROJECT PALM BEACH COUNTY, FLORIDA 33483

U.S. Army Corps of Engineers
SAJ-2005-08610-ACD
Sheet 1 of 12
08/01/2025

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INDEX TO SHEET	
1.	COVER SHEET
2.-3.	BOUNDARY SURVEY
4.-5.	EXISTING CONDITIONS AND DEMOLITION PLAN
6.	PLAN VIEW
7.-12.	DETAIL SHEETS



PROJECT LOCATION DETAIL: SCALE 1"=250'

REVISIONS	No.	Date	Description

Designed by:	RS	Checked by:	DM
Drawn by:	RS	Reviewed by:	DM
Date:	03/31/25	Submitted by:	DM
Plot Scale:	AS NOTED	Comm. No.:	631037197

Reference Files:

**MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT**

COVER SHEET

DRAWING NO.
CV-1
SHEET 1 OF 12

NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY

**DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"**
PG 1 OF 43

DOUGLAS W. MANN, P.E. NO. 44046

DATE

P:\Palm Beach\Delray Beach\31037197 - Delray Seawall Replacements\CAD\Mangrove Park_Sewall_1.dwg - Jul 18, 2025 @ 8:35am - ReneeSchurr

BOUNDARY SURVEY

SECTION 21, TOWNSHIP 46 SOUTH, RANGE 43 EAST,
PALM BEACH COUNTY, FLORIDA

LEGAL DESCRIPTION (PROVIDED BY CLIENT)

LOT 27 AND THAT PORTION OF LOT 11, BLOCK 2, OF MODEL LAND COMPANY'S SUBDIVISION OF SECTION 21, TOWNSHIP 46 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, FLORIDA, ACCORDING TO PLAT RECORDED IN PLAT BOOK 1, PAGE 128, OF THE PUBLIC RECORDS OF SAID PALM BEACH COUNTY, LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF THE INTRACOASTAL WATERWAY FROM JACKSONVILLE TO MIAMI, FLORIDA, AS THAT RIGHT OF WAY LINE IS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 17, AT PAGE 17-D, OF THE PUBLIC RECORDS OF SAID PALM BEACH COUNTY, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 21 FOR A POINT OF REFERENCE; FROM SAID POINT OF REFERENCE RUN ALONG THE SOUTH LINE OF SAID SECTION 21, NORTH 89°49'09" EAST, A DISTANCE OF 2414.37 FEET TO AN INTERSECTION WITH THE WESTERLY RIGHT OF WAY LINE OF THE INTRACOASTAL WATERWAY AFOREMENTIONED; THENCE ALONG SAID WESTERLY RIGHT OF WAY LINE, NORTH 01°22'42" EAST, A DISTANCE OF 1660.20 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF AFOREMENTIONED LOT 11, SAID POINT BEING MARKED BY A CONCRETE MONUMENT WITH A BRASS CAP THEREIN; STAMPED "U.S. RIGHT OF WAY", THE SAME BEING THE POINT OF BEGINNING FOR THE TRACT HEREIN DESCRIBED;

FROM SAID POINT OF BEGINNING RUN THENCE ALONG THE SOUTH LINE OF AFOREMENTIONED LOTS 11 AND 27, SOUTH 09°51'37" WEST, A DISTANCE OF 536.58 FEET TO AN INTERSECTION WITH THE ACCEPTED WEST LINE OF SAID LOT 27; THENCE ALONG SAID ACCEPTED WEST LINE OF LOT 27, NORTH 00°34'00" EAST, A DISTANCE OF 332.02 FEET TO AN INTERSECTION WITH THE NORTH LINE OF SAID LOT 27; THENCE ALONG THE NORTH LINE OF LOTS 27 AND 11, NORTH 89°52'07" EAST, A DISTANCE OF 537.75 FEET TO AN INTERSECTION WITH THE WESTERLY RIGHT OF WAY LINE OF SAID INTRACOASTAL WATERWAY; THENCE ALONG SAID WESTERLY RIGHT OF WAY LINE, SOUTH 00°46'07"11 WEST, A DISTANCE OF 331.96 FEET TO THE POINT OF BEGINNING HEREINABOVE MENTIONED.

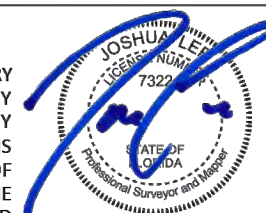
LESS

A PARCEL OR LAND BEING A PORTION OR LOT 27, BLOCK 2, OF THE "MODEL LAND COMPANY'S SUBDIVISION" IN SECTION 21, TOWNSHIP 46 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF THE PLAT OF "THE CORNICHE", AS RECORDED IN PLAT BOOK 53, AT PAGE 28, PUBLIC RECORDS OR PALM BEACH COUNTY, FLORIDA (SAID POINT ALSO BEING THE NORTHWEST CORNER OF SAID LOT 27, BLOCK 2) AND RUN THENCE SOUTH 00 DEGREES 19' 49" WEST ALONG THE EAST LINE OF THE SAID PLAT TO "THE CORNICHE", A DISTANCE OF 122.84 FEET; THENCE NORTH 32 DEGREES 00' 05" EAST, A DISTANCE OF 144.85 FEET; SOUTH 59 DEGREES 59' 58" WEST, ALONG THE NORTH LINE OF SAID LOT 27, BLOCK 2, A DISTANCE OF 76.05 FEET TO THE POINT OF BEGINNING.

CERTIFICATION:

I HEREBY CERTIFY THAT THE ATTACHED BOUNDARY SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS SURVEYED UNDER MY DIRECTION ON 2/12/25. I FURTHER CERTIFY THAT THIS SPECIFIC PURPOSE SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH IN CHAPTER 5J-17 ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS PURSUANT TO FLORIDA STATUTE 472.027.



JOSHUA LEE, PSM - FLORIDA REGISTRATION NUMBER 7322

Digitally signed by
Joshua Lee, PSM
7322

Date: 2025.02.17
19:14:49 -05'00'

DACW17-9-25-213
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 2 OF 43



VICINITY MAPS
NOT TO SCALE



SURVEY SITE

U.S. HWY. 1 / FEDERAL HIGHWAY

INTRACOASTAL WATERWAY

SURVEY SITE

PROJECT LOCATION

ABBREVIATIONS:

APX	APPROXIMATE
PBCR	PALM BEACH COUNTY RECORDS
ELEV	ELEVATION
EXST	EXISTING
FND	FOUND
ICWW	INTRACOASTAL WATER WAY
IP(C)	IRON PIPE (& CAP)
IR(C)	IRON ROD (& CAP)
L	LENGTH
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
NL/D	NAIL & DISK
ORB	OFFICIAL RECORDS BOOK
PB	PLAT BOOK
PBCR	PALM BEACH COUNTY RECORDS
PG(S)	PAGES(S)
PRM	PERMANENT REFERENCE MONUMENT
R	RADIUS
R/W	RIGHT OF WAY
TYP	TYPICAL

SURVEY NOTES:

- THIS IS A BOUNDARY SURVEY AS DEFINED IN THE STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING IN CHAPTER 5J-17 FLORIDA ADMINISTRATIVE CODE.
- THIS SURVEY IS CERTIFIED TO THE CITY OF DELRAY BEACH AND THE FLORIDA INLAND NAVIGATION DISTRICT.
- THIS SURVEY IS INTENDED EXCLUSIVELY FOR THE USE BY THOSE TO WHOM IT IS CERTIFIED. IT IS NOT TO BE USED BY OTHERS FOR CONSTRUCTION, PERMITTING, DESIGN OR ANY OTHER USE WITHOUT THE WRITTEN CONSENT OF TERRAQUATIC, INC.
- THIS SURVEY, AND ANY REPRODUCTION THEREOF, IS NOT VALID WITHOUT AN ORIGINAL OR VERIFIED DIGITAL SIGNATURE AND SEAL OF A FLORIDA REGISTERED SURVEYOR. ADDITIONALLY, THIS SURVEY IS NOT VALID IF PRINTED BEARING A DIGITAL SIGNATURE AND SEAL.
- OTHER THAN THOSE SHOWN ON THE REFERENCED PLAT, NO SEARCH OF THE PUBLIC RECORDS WAS PERFORMED FOR EASEMENTS, ENCUMBRANCES OR OTHER INSTRUMENTS OF RECORD WHICH MAY AFFECT THIS PARCEL OF LAND.
- THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1 INCH = 60 FEET OR SMALLER.
- UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THIS SURVEY.
- BEARING AND DISTANCES SHOWN HERON ARE RELATIVE TO THE NORTH AMERICA DATUM OF 1983, 1990 ADJUSTMENT (NAD 83/90), FLORIDA STATE PLANE, EAST ZONE (0901), TRANSVERSE MERCATOR PROJECTION IN THE U.S. SURVEY FOOT UNIT OF MEASUREMENT.
- LOCATIONS WERE OBTAINED USING REAL TIME KINEMATIC GPS METHODOLOGIES WITH BROADCAST CORRECTIONS FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION REFERENCE NETWORK AND ARE ACCURATE TO THIRD ORDER, CLASS II.
- UNLESS OTHERWISE NOTED, FIELD BEARINGS AND DISTANCES ARE CONSISTENT WITH THE RECORD PLAT.

PREPARED FOR / SITE ADDRESS
CITY OF DELRAY BEACH
1055 SE 6TH AVENUE
DELRAY BEACH, FL

PREPARED BY:
TERRAQUATIC, INC
1200 TANGELO TERR, UNIT A12
DELRAY BEACH, FL 33444
TELEPHONE: (561) 806-6085
CERTIFICATE OF AUTHORIZATION NO. 7324

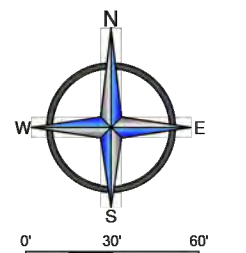
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SCALE: N/A	DATE: 2/17/25	JOB No.: 24-1849	CHECKED BY: JBL
REV:		SHEET 1 OF 2	

REVISIONS	No.	Date	Description

MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT
BOUNDARY SURVEY

DRAWING NO.
EC-1

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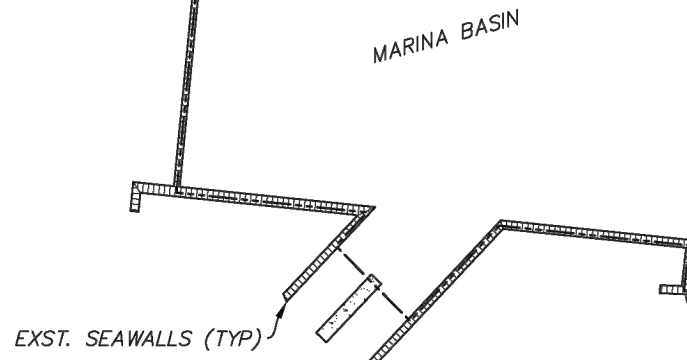


DELRAY HARBOR CLUB P.B. 43 PG. 36

NORTH BOUND
U.S. HIGHWAY #1
S.E. 6th AVENUE (P)
VARIABLE WIDTH RIGHT OF WAY
THE CORNICHE REPLAT
P.B. 79 PG. 50

MODEL LAND COMPANY'S
SUBDIVISION OF
SECTION 21
TOWNSHIP 46 SOUTH
RANGE 43 EAST
P.B. 1, PG. 128

MANGROVE PARK
1055 SE 6TH AVENUE
DELRAY BEACH, FL
P.C.N. 12-43-46-21-09-002-0110
IMPROVEMENTS NOT SHOWN



INTRACOASTAL WATERWAY P.B. 17, PG. 1

PREPARED FOR / SITE ADDRESS
CITY OF DELRAY BEACH
1055 SE 6TH AVENUE
DELRAY BEACH, FL

PREPARED BY:
TERRAQUATIC, INC
1220 TANGELO TERR, UNIT A12
DELRAY BEACH, FL 33444
TELEPHONE: (561) 806-6085
CERTIFICATE OF AUTHORIZATION NO. 7324

MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT
BOUNDARY SURVEY

DRAWING NO.
EC-2

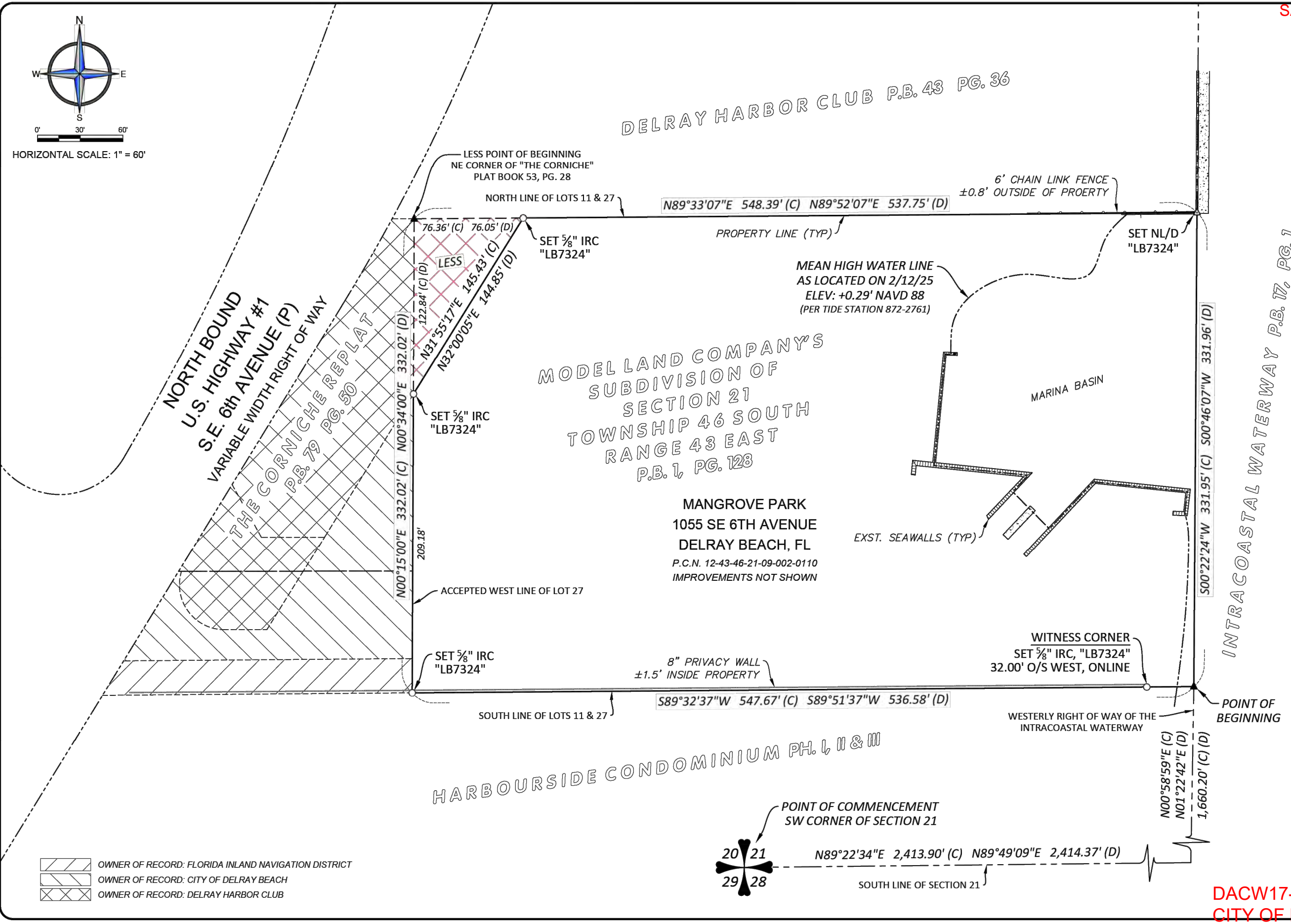
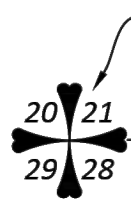
SHEET 3 OF 12

TERRAQUATIC
SURVEYING AND MAPPING

DRAWING: MANGROVE PARK SURVEY.dwg	DRAWN BY: BL	CHECKED BY: JR	SHEET 2 OF 2
SCALE: 1" = 60'	DATE: 2/17/25	JOB No.: 24-1849	REV:




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BOCA RATON, FLORIDA 33487
www.apetim.com

- OWNER OF RECORD: FLORIDA INLAND NAVIGATION DISTRICT
- OWNER OF RECORD: CITY OF DELRAY BEACH
- OWNER OF RECORD: DELRAY HARBOR CLUB

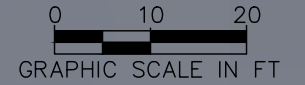


DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 3 OF 43

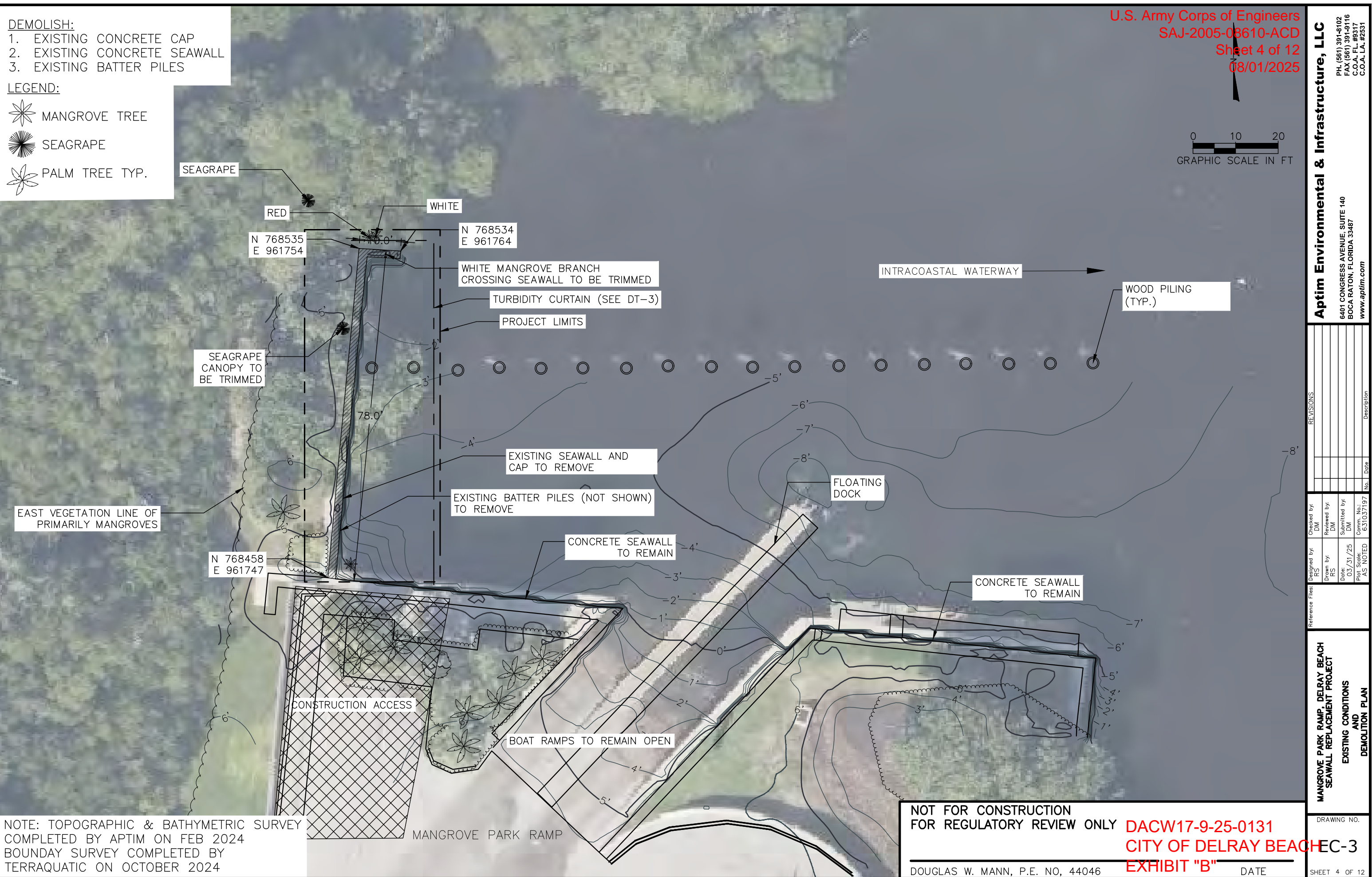
- DEMOLISH:**
1. EXISTING CONCRETE CAP
 2. EXISTING CONCRETE SEAWALL
 3. EXISTING BATTER PILES

- LEGEND:**
-  MANGROVE TREE
 -  SEAGRAPE
 -  PALM TREE TYP.

U.S. Army Corps of Engineers
SAJ-2005-08610-ACD
Sheet 4 of 12
08/01/2025



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NOTE: TOPOGRAPHIC & BATHYMETRIC SURVEY COMPLETED BY APTIM ON FEB 2024
BOUNDARY SURVEY COMPLETED BY TERRAQUATIC ON OCTOBER 2024

NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY
DOUGLAS W. MANN, P.E. NO. 44046
DATE

DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 4 OF 43

DRAWING NO. REC-3
SHEET 4 OF 12


REVISIONS	No.	Date	Description

Designed by:	RS	Checked by:	DM
Drawn by:	RS	Reviewed by:	DM
Date:	03/31/25	Submitted by:	DM
Plot Scale:	AS NOTED	Comm. No.:	631037197

MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT
EXISTING CONDITIONS
AND
DEMOLITION PLAN

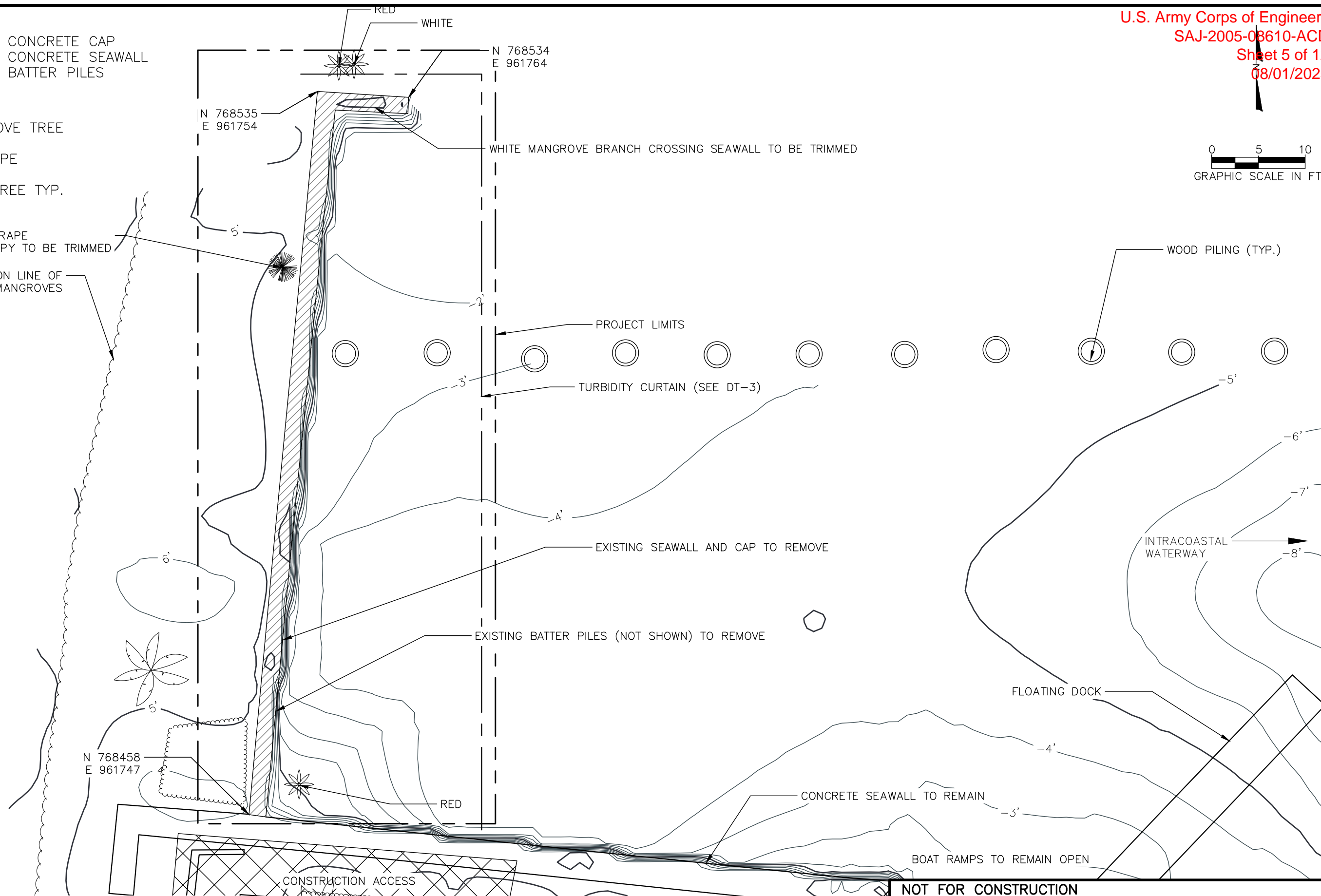
P:\Palm Beach\Delray Beach\31037197 - Delray Seawall Replacement\CAD\Mangrove Park Seawall_1.dwg - Jul 18, 2025 @ 8:38am - ReneeSchur

- DEMOLISH:**
- EXISTING CONCRETE CAP
 - EXISTING CONCRETE SEAWALL
 - EXISTING BATTER PILES

- LEGEND:**
-  MANGROVE TREE
 -  SEAGRAPE
 -  PALM TREE TYP.

SEAGRAPE CANOPY TO BE TRIMMED

EAST VEGETATION LINE OF PRIMARILY MANGROVES



U.S. Army Corps of Engineers
SAJ-2005-08610-ACD
Sheet 5 of 12
08/01/2025



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BOCA RATON, FLORIDA 33487
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REVISIONS	No.	Date	Description

Reference Files:	Designed by: RS	Checked by: DM
	Drawn by: RS	Reviewed by: DM
	Date: 03/31/25	Submitted by: DM
	Plot Scale: AS NOTED	Comm. No.: 631037197

MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT
EXISTING CONDITIONS
AND
DEMOLITION PLAN
DRAWING NO. EC-4
SHEET 5 OF 12

NOTE: TOPOGRAPHIC & BATHYMETRIC SURVEY COMPLETED BY APTIM ON FEB 2024
BOUNDARY SURVEY COMPLETED BY TERRAQUATIC ON OCTOBER 2024

NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY
DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 5 OF 43
DOUGLAS W. MANN, P.E. NO. 44046
DATE

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NOTE: NEW SEAWALL TO BE INSTALLED WITHIN EXISTING FOOTPRINT OF THE PREVIOUS SEAWALL LOCATION

LEGEND:

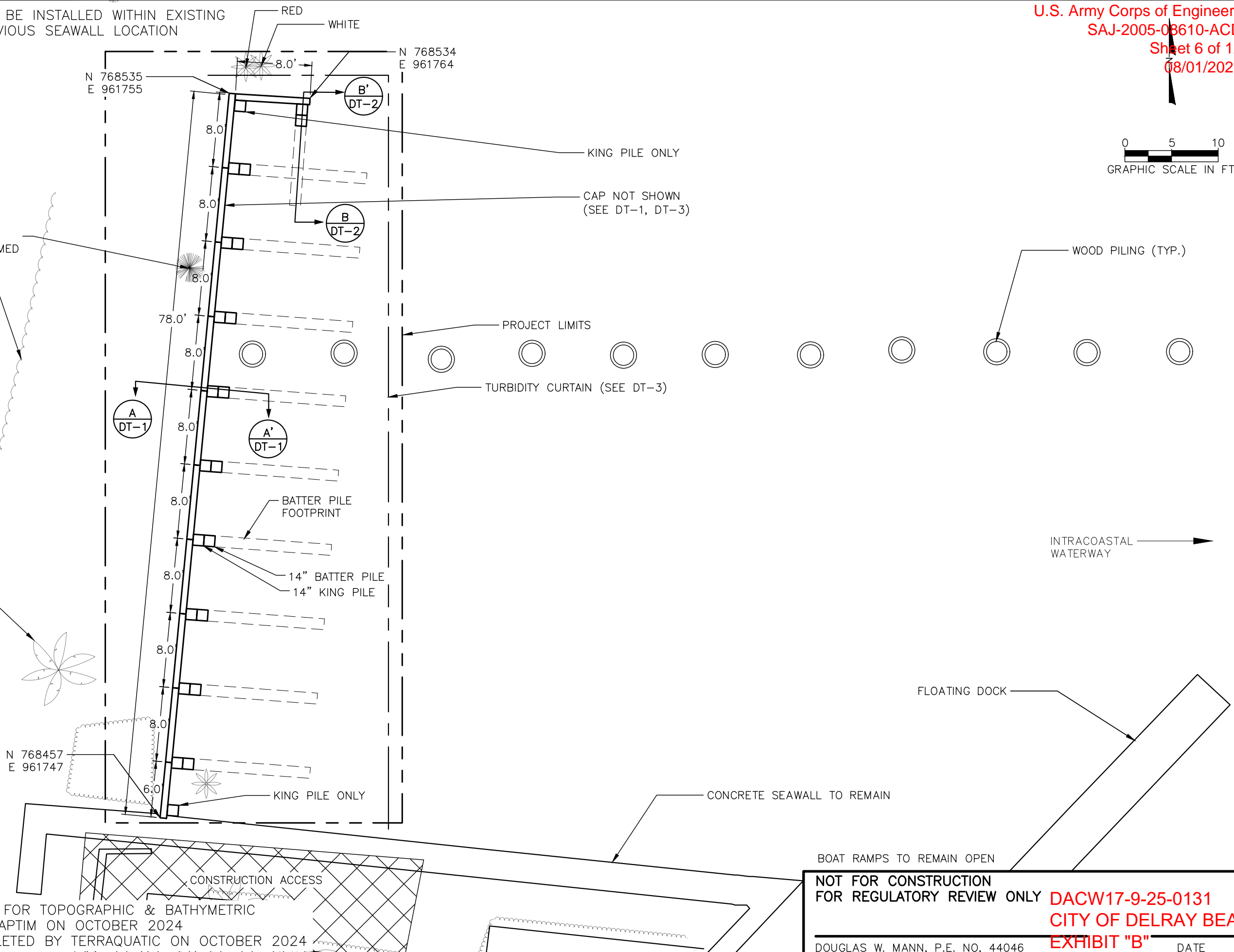
-  MANGROVE TREE
-  SEAGRAPE
-  PALM TREE TYP.

U.S. Army Corps of Engineers
SAJ-2005-08610-ACD
Sheet 6 of 12
08/01/2025



SEAGRAPE CANOPY TO BE TRIMMED
EAST VEGETATION LINE OF PRIMARILY MANGROVES

PALM TREE TYP.



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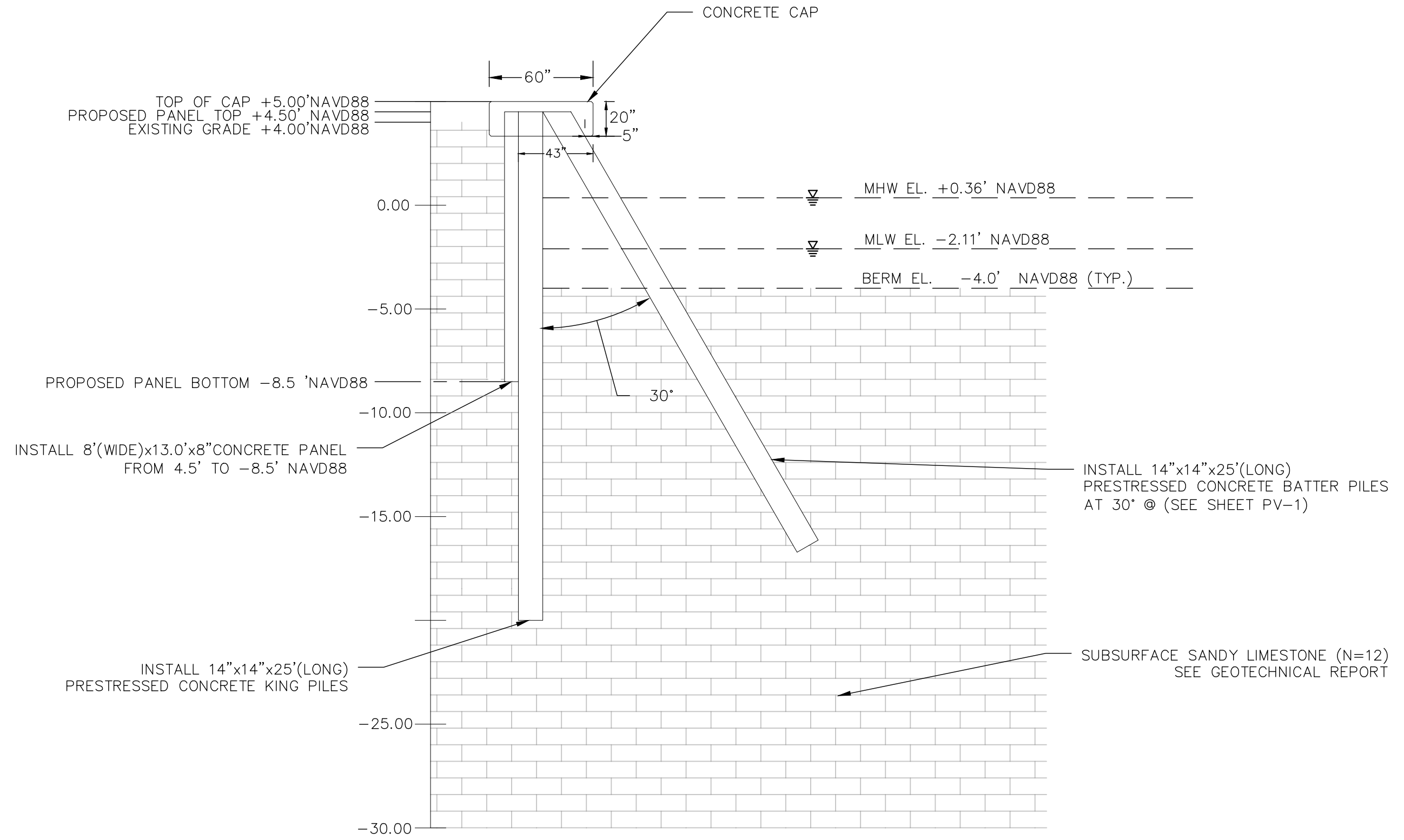
MANGROVE PARK RAMP, DELRAY BEACH SEAWALL REPLACEMENT PROJECT
PLAN VIEW

NOTE: SEE SHEET EC-3 FOR TOPOGRAPHIC & BATHYMETRIC SURVEY COMPLETED BY APTIM ON OCTOBER 2024 BOUNDARY SURVEY COMPLETED BY TERRAQUATIC ON OCTOBER 2024

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 DOUGLAS W. MANN, P.E. NO. 44046
 DATE
 DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 6 OF 43

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ELEVATION (FEET NAVD88)



SEAWALL DETAIL A'-A
 SCALE: 1"=5'

NOT FOR CONSTRUCTION FOR REGULATORY REVIEW ONLY		DACW17-9-25-0131 CITY OF DELRAY BEACH EXHIBIT "B"
DOUGLAS W. MANN, P.E. NO. 44046	DATE	
		DT-1
		SHEET 7 OF 12

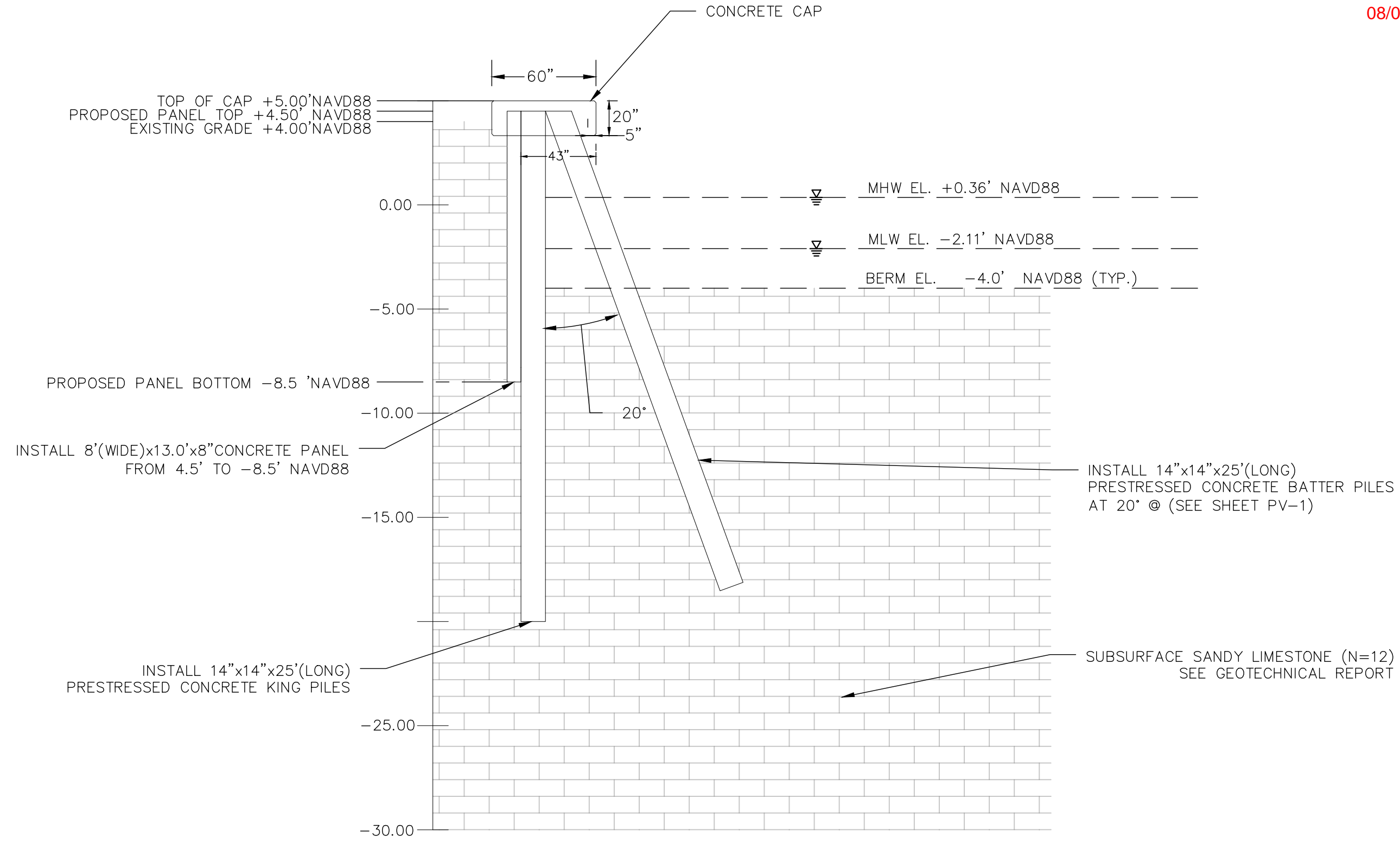
REVISIONS	No.	Date	Description

Reference Files:	Designed by: RS	Checked by: DM
	Drawn by: RS	Reviewed by: DM
	Date: 03/31/25	Submitted by: DM
	Plot Scale: AS NOTED	Comm. No.: 631037197

**MANGROVE PARK RAMP, DELRAY BEACH
 SEAWALL REPLACEMENT PROJECT**
DETAIL SHEET

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ELEVATION (FEET NAVD88)



SEAWALL DETAIL B'-B
 SCALE: 1"=5'

NOT FOR CONSTRUCTION
 FOR REGULATORY REVIEW ONLY

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"

DOUGLAS W. MANN, P.E. NO. 44046

DATE

REVISIONS	No.	Date	Description

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Drawn by:	RS	Reviewed by:	DM
Date:	03/31/25	Submitted by:	DM
Plot Scale:	AS NOTED	Comm. No.:	631037197

**MANGROVE PARK RAMP, DELRAY BEACH
 SEAWALL REPLACEMENT PROJECT**

DETAIL SHEET

DRAWING NO.
DT-2

SHEET 7 OF 12

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REVISIONS	
No.	Description

Designed by:	RS	Checked by:	DM
Drawn by:	RS	Reviewed by:	DM
Date:	03/31/25	Submitted by:	DM
Plot Scale:	AS NOTED	Comm. No.:	631037197

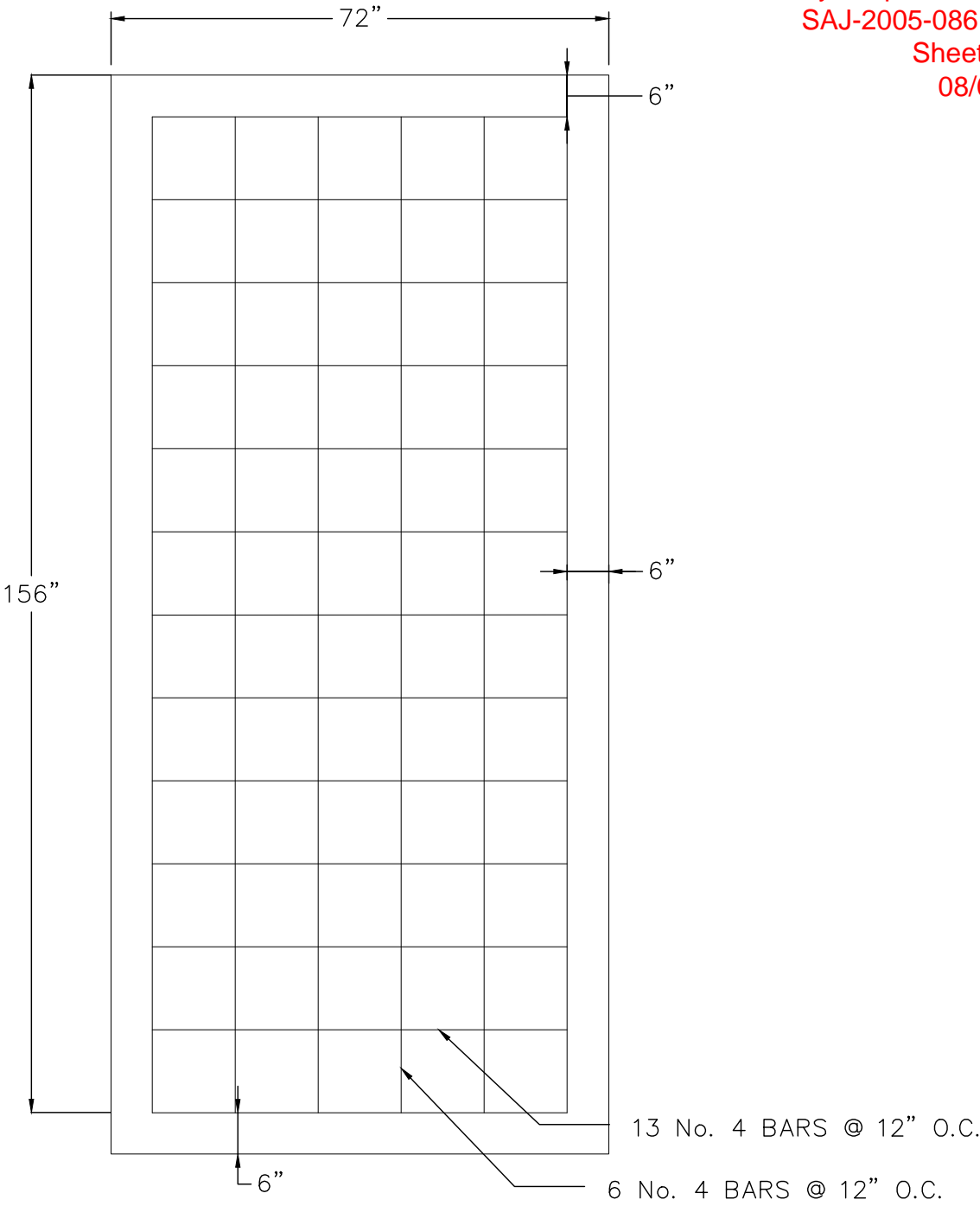
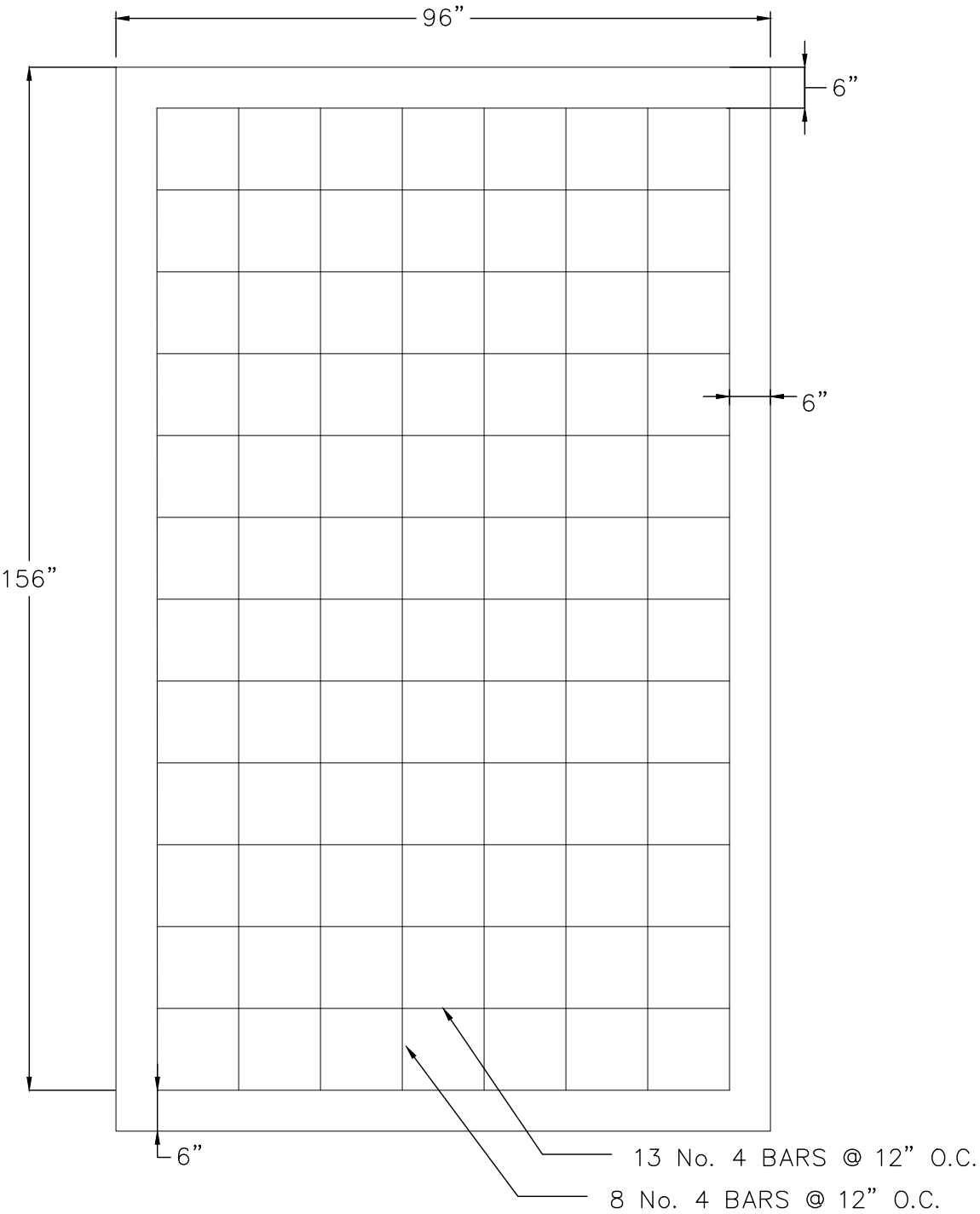
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**MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT**

DETAIL SHEET

DRAWING NO.
DT-3

SHEET 2 OF 12



**NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY**

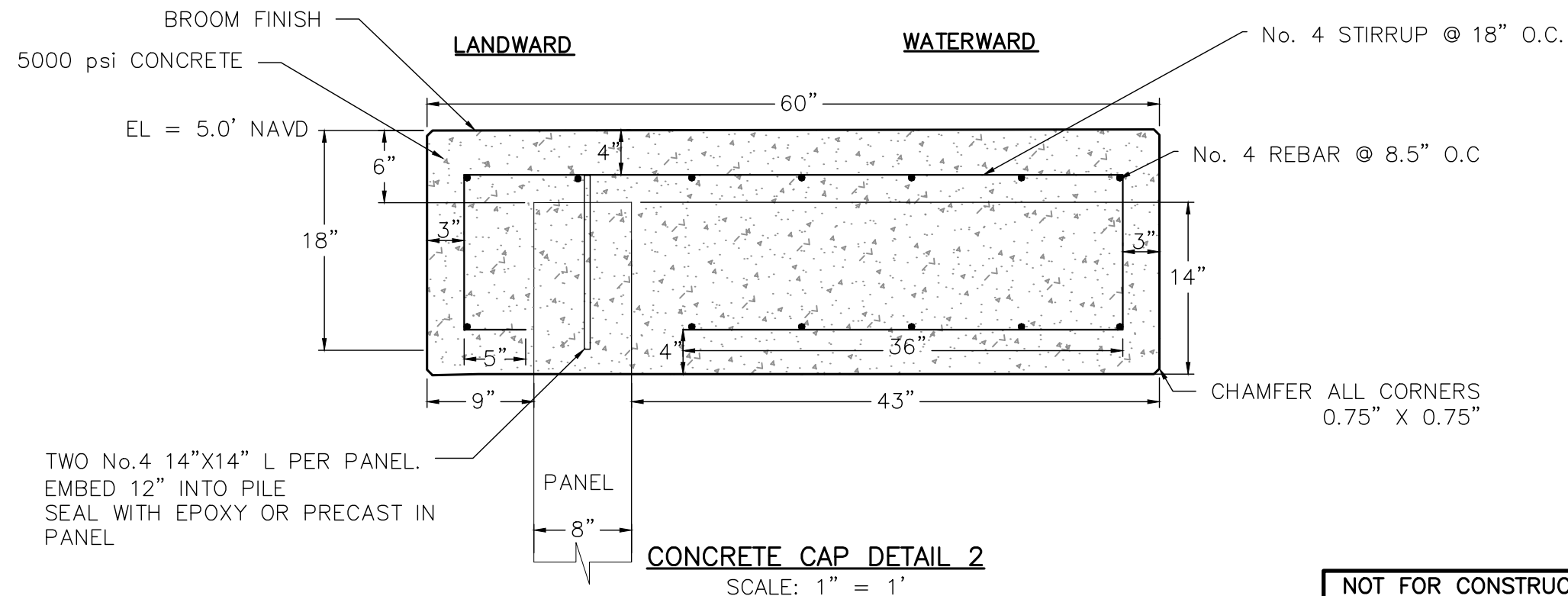
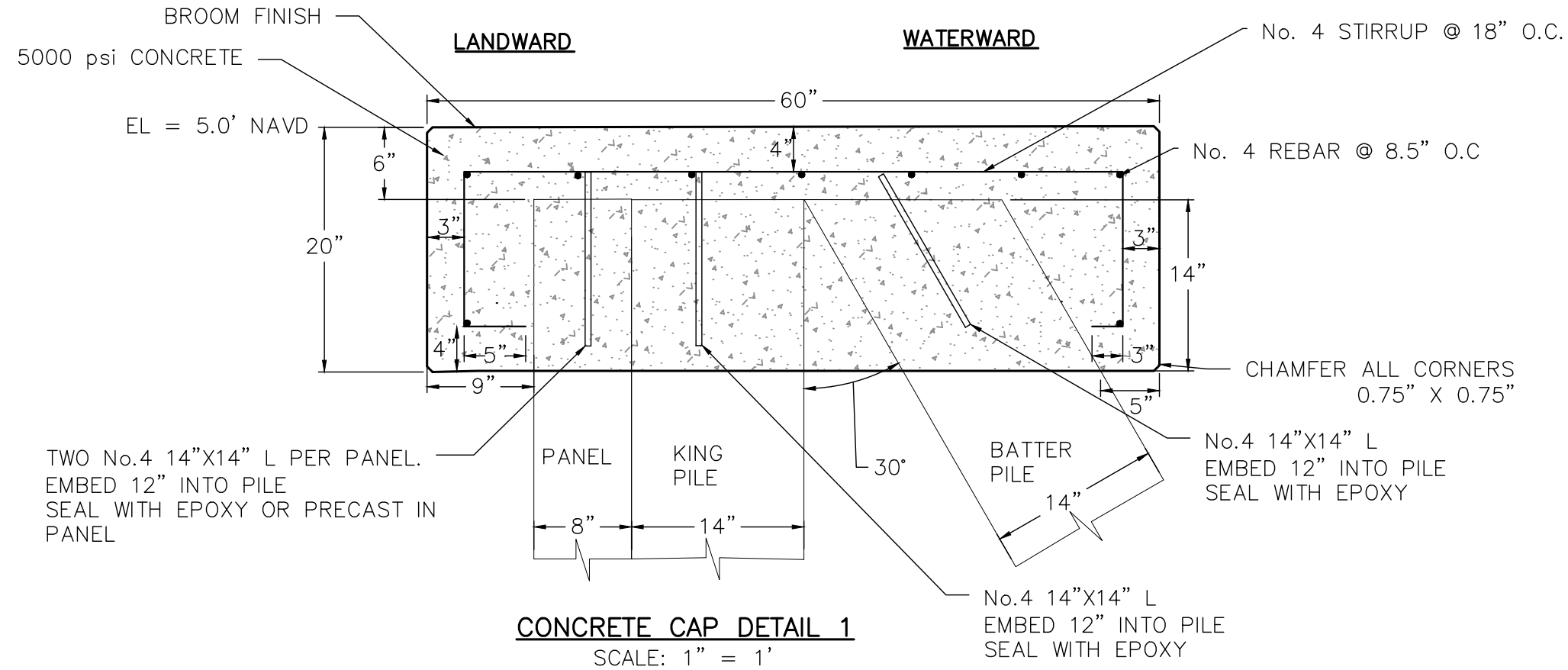
**DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"**

DOUGLAS W. MANN, P.E. NO. 44046

DATE

PG 9 OF 43

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FOR REGULATORY REVIEW ONLY
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 10 OF 43
DOUGLAS W. MANN, P.E. NO. 44046
DATE

REVISIONS		Checked by:		Reviewed by:		Submitted by:		Comm. No.:		Description	
No.	Date	DM	DM	DM	DM	DM	DM	631037197			

Reference Files:
Designed by: RS
Drawn by: RS
Date: 03/31/25
Plot Scale: AS NOTED

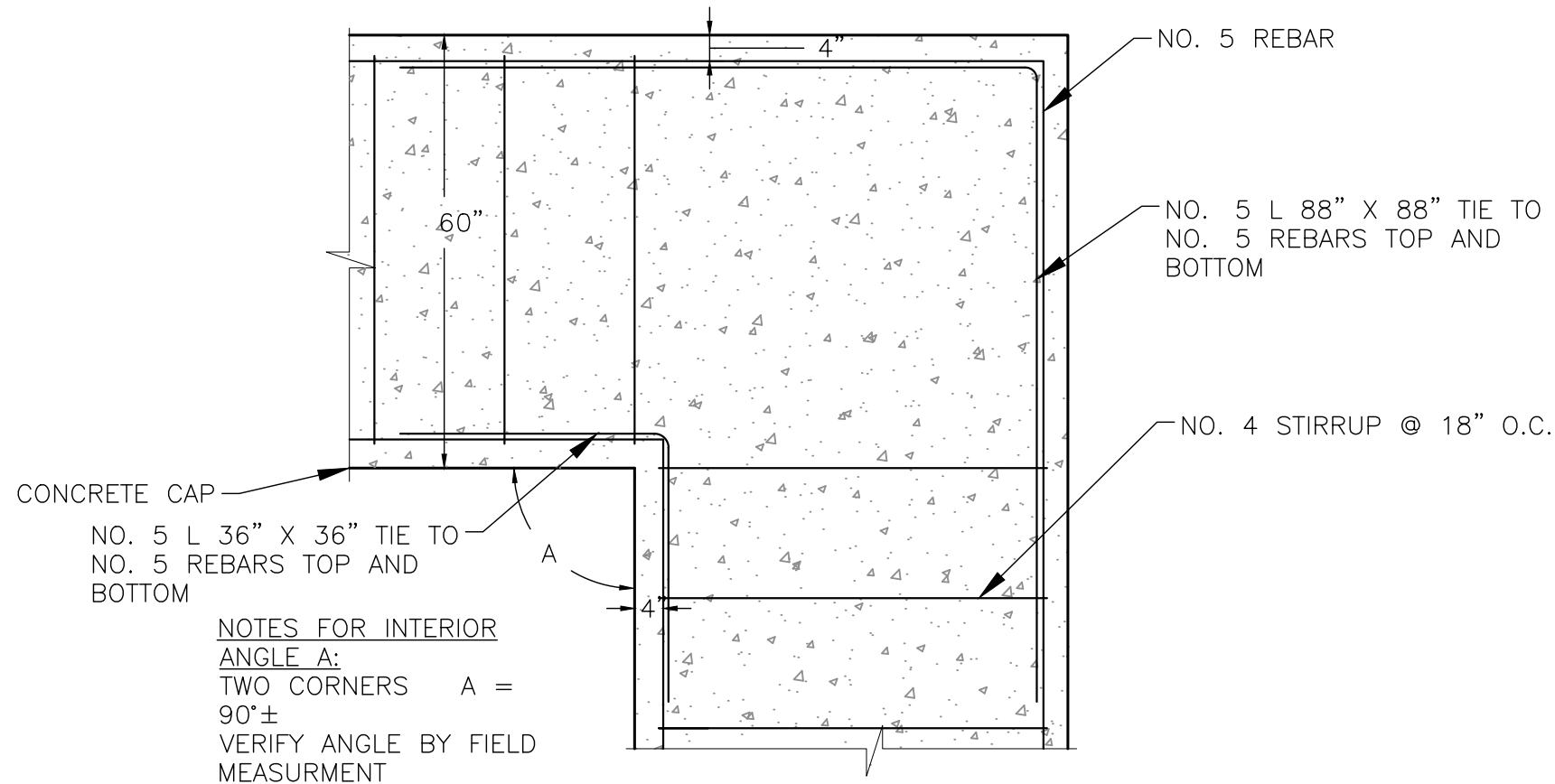
**MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT**

DETAIL SHEET

DRAWING NO.
DT-4

SHEET 10 OF 12

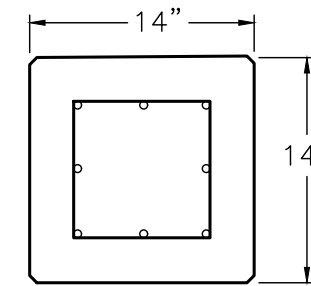
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CONCRETE CAP
NO. 5 L 36" X 36" TIE TO
NO. 5 REBARS TOP AND
BOTTOM

NOTES FOR INTERIOR
ANGLE A:
TWO CORNERS A =
90°±
VERIFY ANGLE BY FIELD
MEASUREMENT

**CONCRETE CAP
CORNER DETAIL**
SCALE: 1" = 2'



NOTE:
14"x14" PRESTRESSED CONCRETE PILE
8-1/2" Ø, GRADE 270 LRS, PULL AT
31 KIPS
REFER TO FDOT INDEX NO. 20614
SHEET NO. 1

SECTION PILE
SCALE: 1" = 1'

REVISIONS	No.	Date	Description

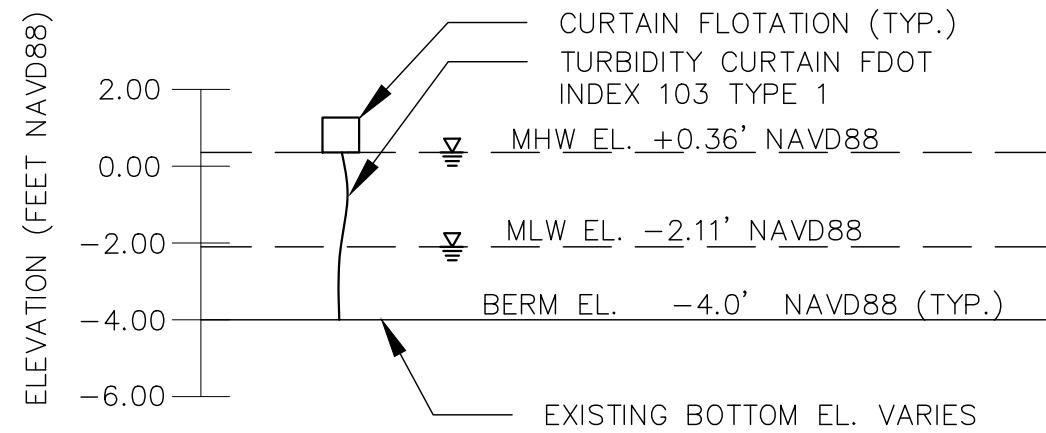
Designed by: RS	Checked by: DM
Drawn by: RS	Reviewed by: DM
Date: 03/31/25	Submitted by: DM
Plot Scale: AS NOTED	Comm. No.: 631037197

Reference Files:

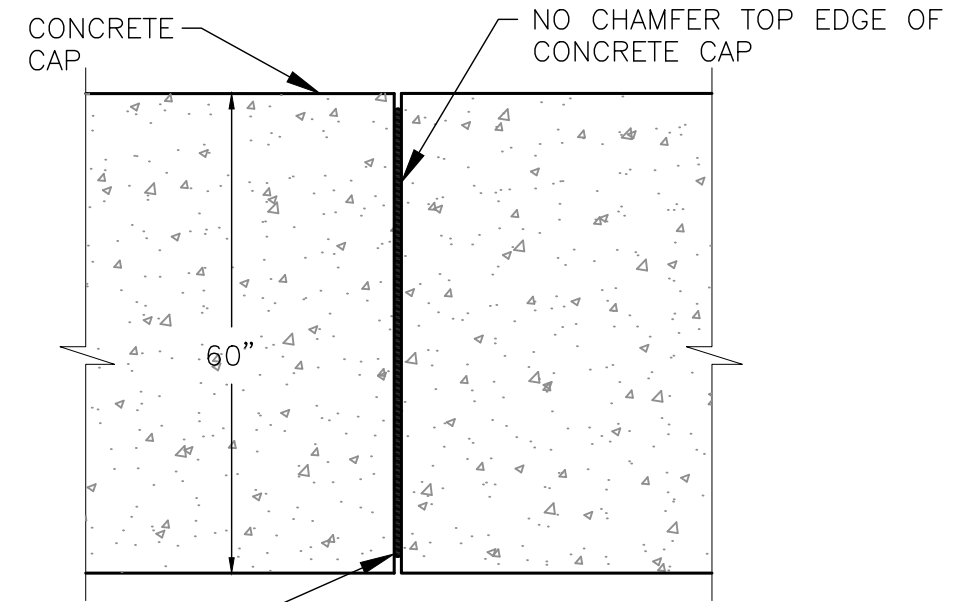
**MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT**

DETAIL SHEET

NOT FOR CONSTRUCTION FOR REGULATORY REVIEW ONLY	DACW17-9-25-0131 CITY OF DELRAY BEACH EXHIBIT "B" PG 11 OF 43	DRAWING NO. DT-5
DOUGLAS W. MANN, P.E. NO. 44046	DATE	SHEET 11 OF 12



**TURBIDITY CURTAIN
ELEVATION VIEW DETAIL**
SCALE: 1" = 5'



**CONCRETE CAP
EXPANSION JOINT DETAIL**
SCALE: 1" = 2'

NOTES:

1. EXPANSION JOINT STOP ALL REINFORCING STEEL AT JOINT. PROVIDE 4 INCHES OF CONCRETE COVER.
2. INSTALL 0.5" EXPANSION JOINT MATERIAL FDOT SECTION 932, OR EQUAL, FULL SECTION OF CAP.
3. CAULK REMAINING JOINT AFTER CONCRETE CURE AND FORM REMOVAL.
4. NO EXPANSION JOINT WITHIN 2 FEET OF PILES.

NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY
DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 12 OF 43
DOUGLAS W. MANN, P.E. NO. 44046 _____ DATE _____

REVISIONS	No.	Date	Description

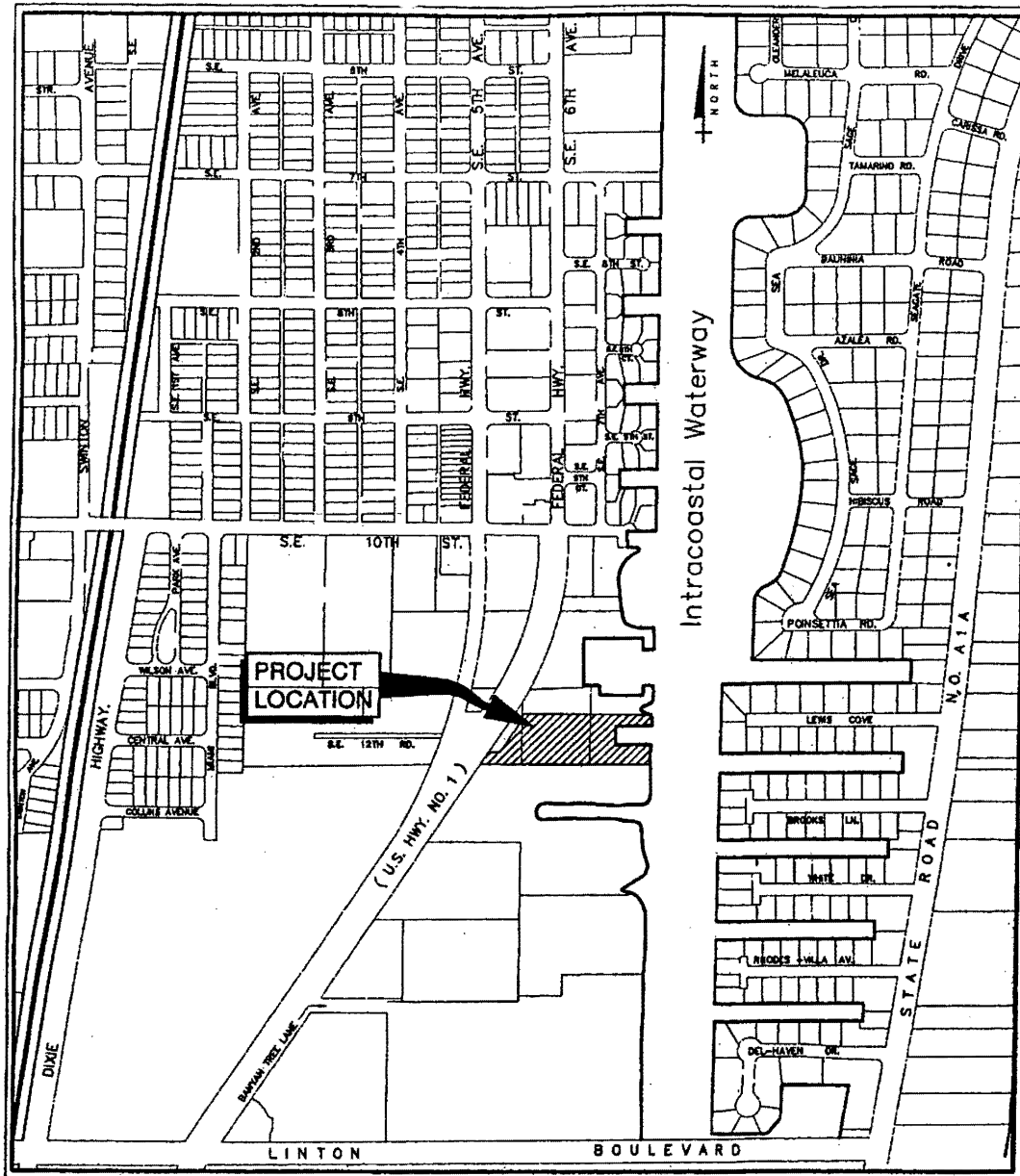
Designed by:	RS	Checked by:	DM
Drawn by:	RS	Reviewed by:	DM
Date:	03/31/25	Submitted by:	DM
Plot Scale:	AS NOTED	Comm. No.:	631037197

Reference Files:

**MANGROVE PARK RAMP, DELRAY BEACH
SEAWALL REPLACEMENT PROJECT**
DETAIL SHEET

DRAWING NO.
DT-6
SHEET 12 OF 12

P:\Palm Beach\Delray Beach\31037197 - Delray Seawall Replacement\CAD\Wangrow Park Seawall.dwg - Jul 18, 2025 8:37am - ReneeSchur



PROJECT LOCATION MAP
 SECTION 21, TWP 46, RGE 43
 N.T.S.

EXHIBIT 1

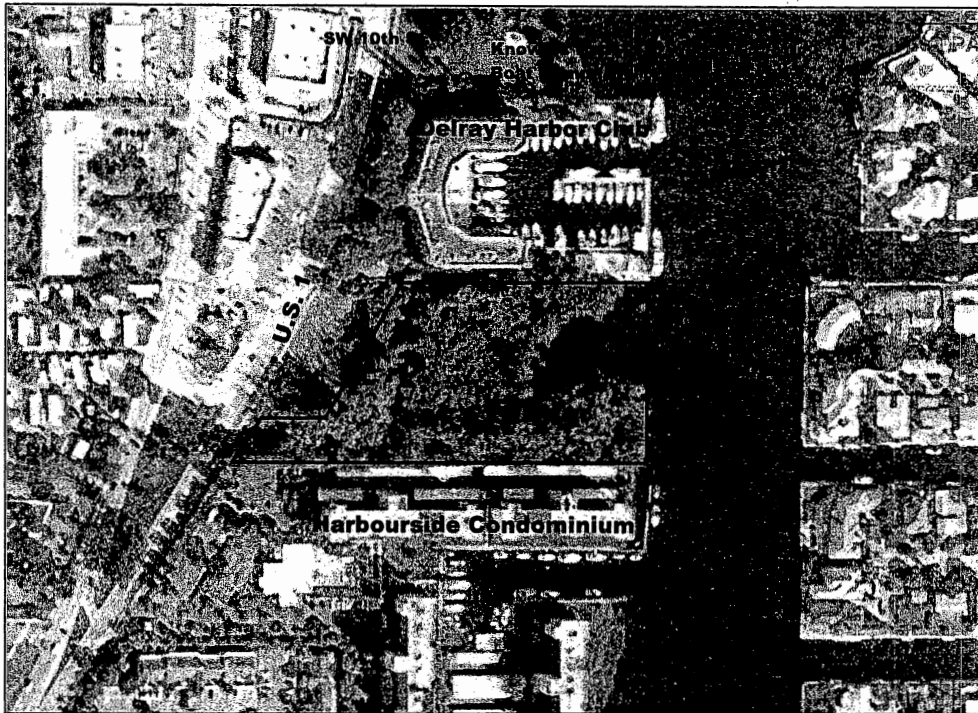
COE APPL # SAT-2005-8610
 DEP / SFWMD # 50-09332-P
 DATE 9/1/06
 DRAWING PAGE 1 OF 32

COE APPL # 505-2005 8610

DEP / SFWMD # 50-09332-P

8/31/06

PAGE 2 OF 32



Note: Property Boundary is Approximate.

300 0 300 Feet

1" = 300'

-050818-22
ORIGINAL SUBMITTAL

AUG 18 2005

WPB

RECEIVED
 SEP 06 2005
 JACKSONVILLE DISTRICT
 USACE
 DEPT. OF ENV. PROTECTION



RECEIVED

Exhibit
B

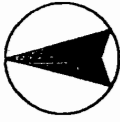
Site Aerial Photograph
Palm Beach County, 2002.

Intracoastal Park
Delray Beach, Florida



www.ecologicalassociatesinc.com

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 14 OF 43



COE APPL # SD5-2005-8610
 DEP / SFWMD # 50-09332-P
 DATE 9/1/06
 DRAWING PAGE 3 OF 32

RECEIVED

AUG 18 2005

DEPT. OF ENV. PROTECTION

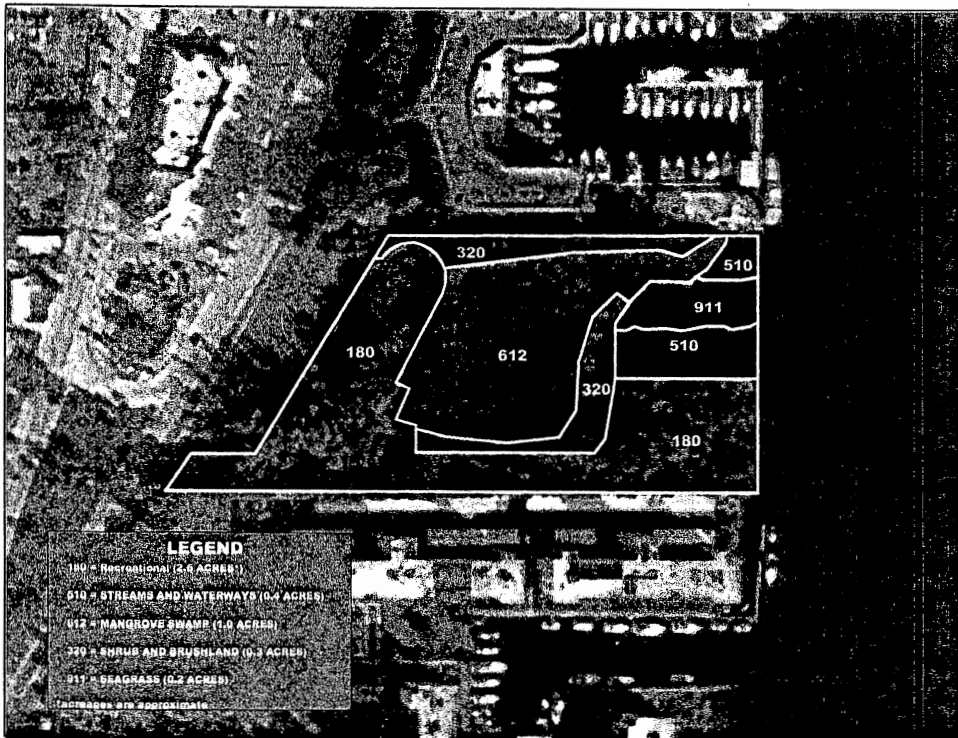


www.ecologicalassociatesinc.com

**Intracoastal Park
 Delray Beach, Florida**

**Existing Land Use
 & Cover (FLUCCS)**

**Exhibit
 E**



COE APPL # 545-2005-8610
 DEP / SFWRD # 50-09333-P
 DATE 9/1/06
 DRAWING PAGE 4 OF 32

RECEIVED
 AUG 18 2005
 DEPT. OF ENV. PROTECTION

Exhibit
G

**Proposed Land Use
& Cover (FLUCCS)**

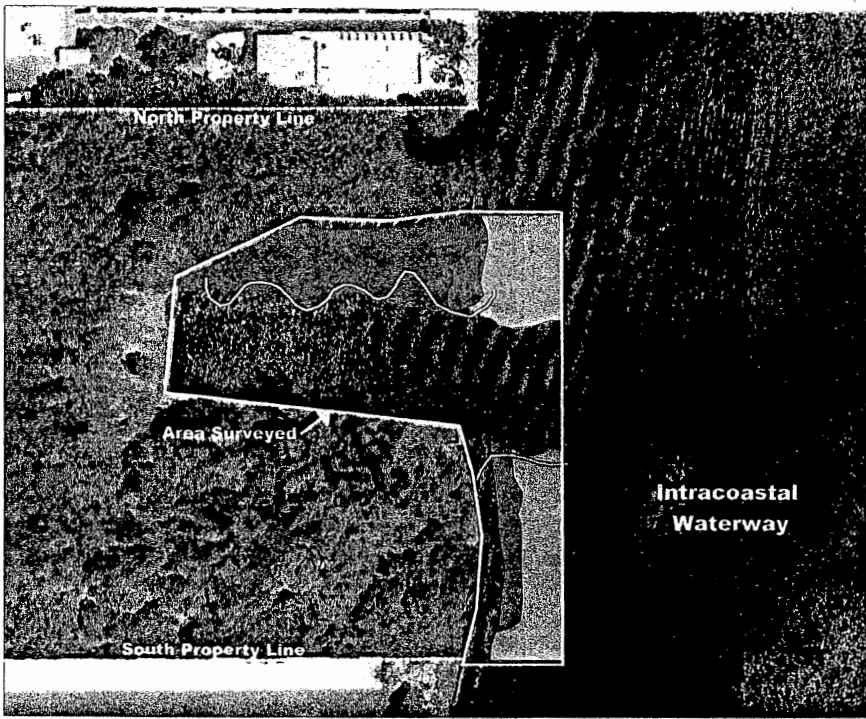
**Intracoastal Park
Delray Beach, Florida**






www.ecologicalassociatesinc.com

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 16 OF 43

COE APPL # SAT-2005-8610
 DEP / SFWMD # 50-07332-P
 DATE 9/1/06
 DRAWING PAGE 5 OF 32



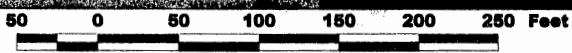
LEGEND


-  Halophila decipiens, patchy, sparse to dense
-  Mixed Halophila decipiens / Halophila johnsonii, patchy, sparse to dense
-  Halophila johnsonii, patchy, sparse to moderate

— Seagrass boundary as of June 2005

DEPT. OF ENV. PROTECTION
 AUG 18 2005

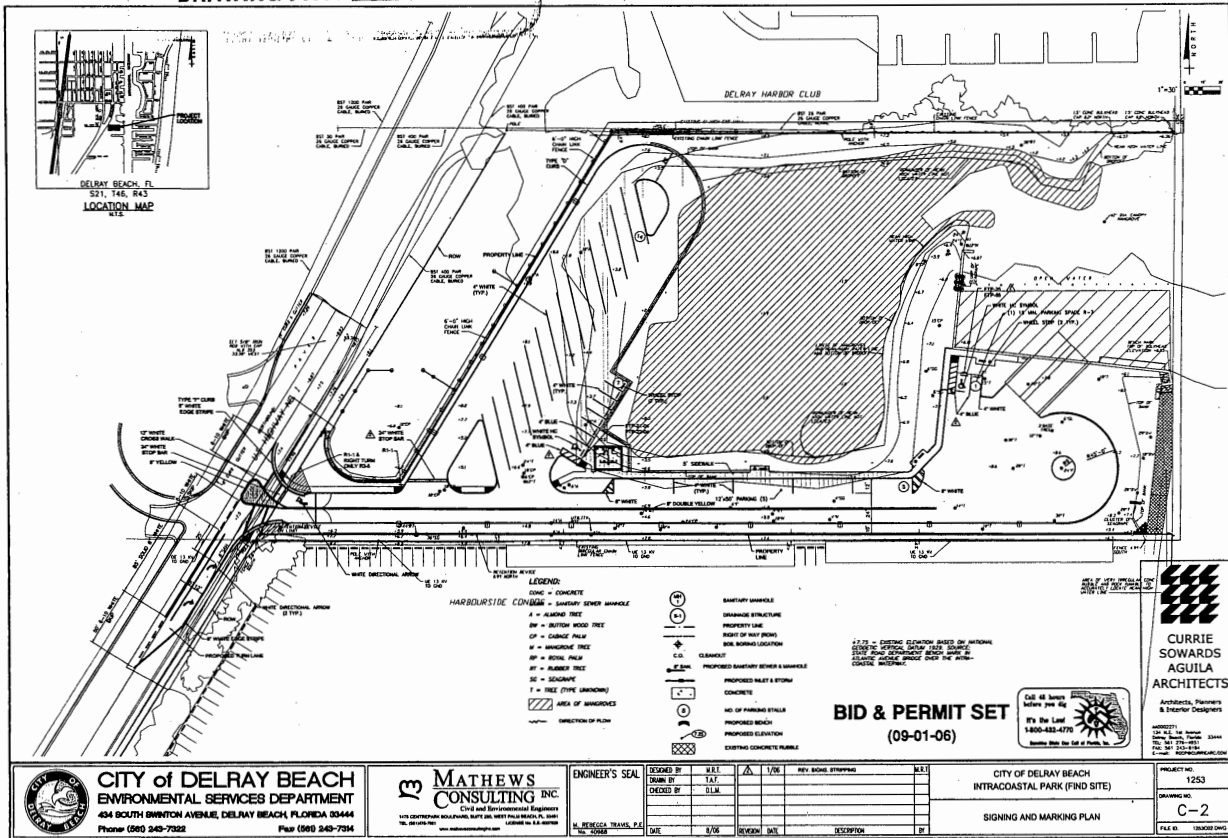
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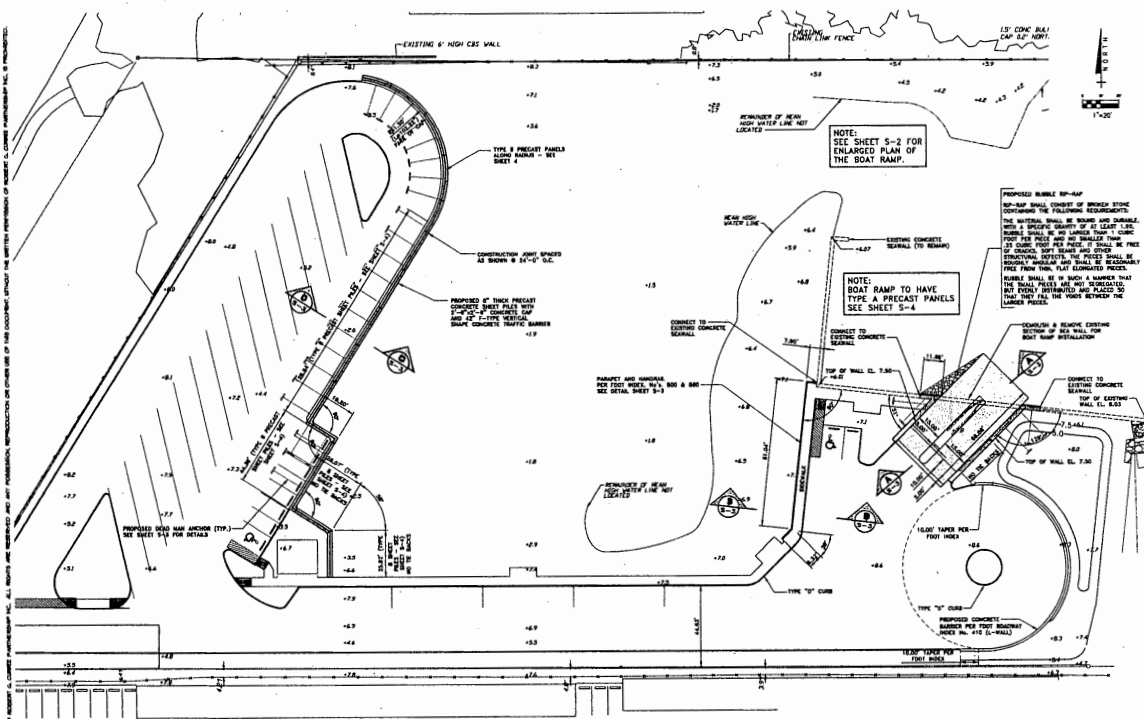


<p>Exhibit F</p>	<p>Seagrass Survey August 2003 Updated June 2005</p>	<p>Intracoastal Park Delray Beach, Florida</p>	 <p>www.ecologicalassociatesinc.com</p>
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DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 17 OF 43

DEP / SFWMD # 50-07332-P
 DATE 9/1/06
 DRAWING PAGE 7 OF 32





**CURRIE
SOWARDS
ARQUILA
ARCHITECTS**

Architects, Planners
& Interior Designers

1201 N.W. 4th Avenue, Suite 200
Fort Lauderdale, FL 33304
Tel: 954-575-2111
Fax: 954-575-2112
E-mail: info@curriesowards.com

ALAN L. GERWIG, P.E., SEABT

PROJECT FILE
**INTRACOASTAL
PARK (POND SITE)**

U.S. HIGHWAY #1
DELRAY BEACH, FL.
CLAY COUNTY
SEAWALL

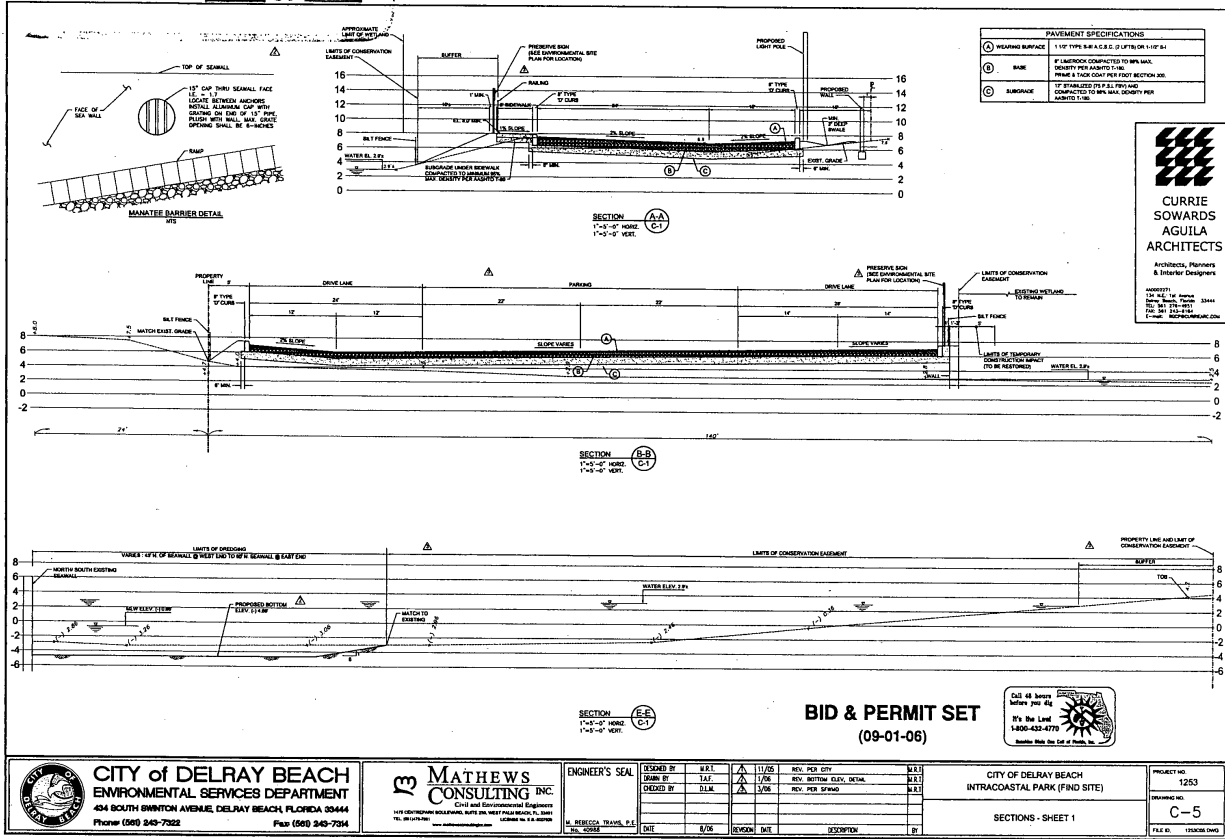
FILE NUMBER
PROJECT NO. 142
**OVERALL
SEAWALL
STRUCTURAL
GEOMETRY PLAN**
DATE 01.10.06
DRAWN BY SSP
CHECKED BY
DATE 02.10.06
PROJECT NUMBER
S-1



COE APPL # 64J-2005-8610
DEP / SFWMD # 50-09332-P
DATE 9/1/06
DRAWING PAGE 8 OF 32

Alan Gerwig & Associates, Inc.
Civil and Structural Engineers

DEP / SFWMD # 50-67332-P
 DATE 9/1/06
 DRAWING PAGE 9 OF 32



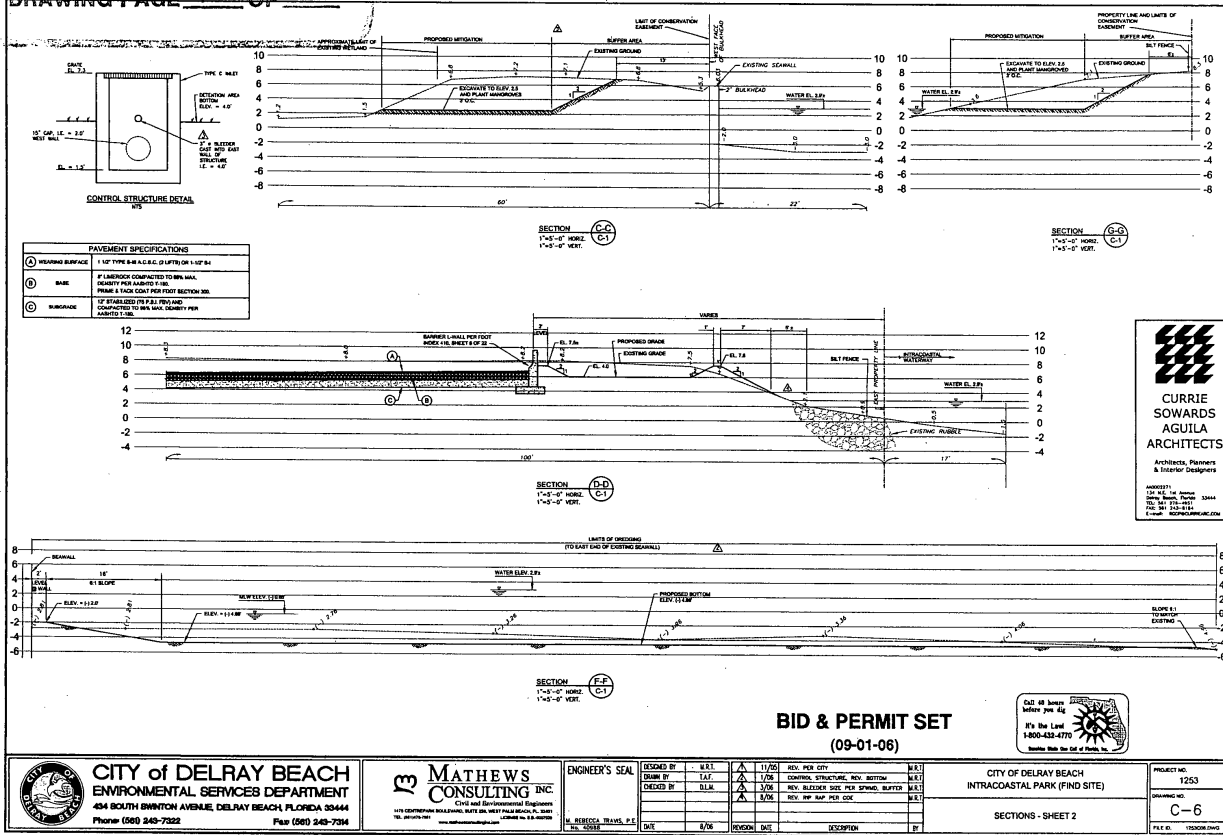
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DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 21 OF 43

DEP / SFWMD # 50-69332-P

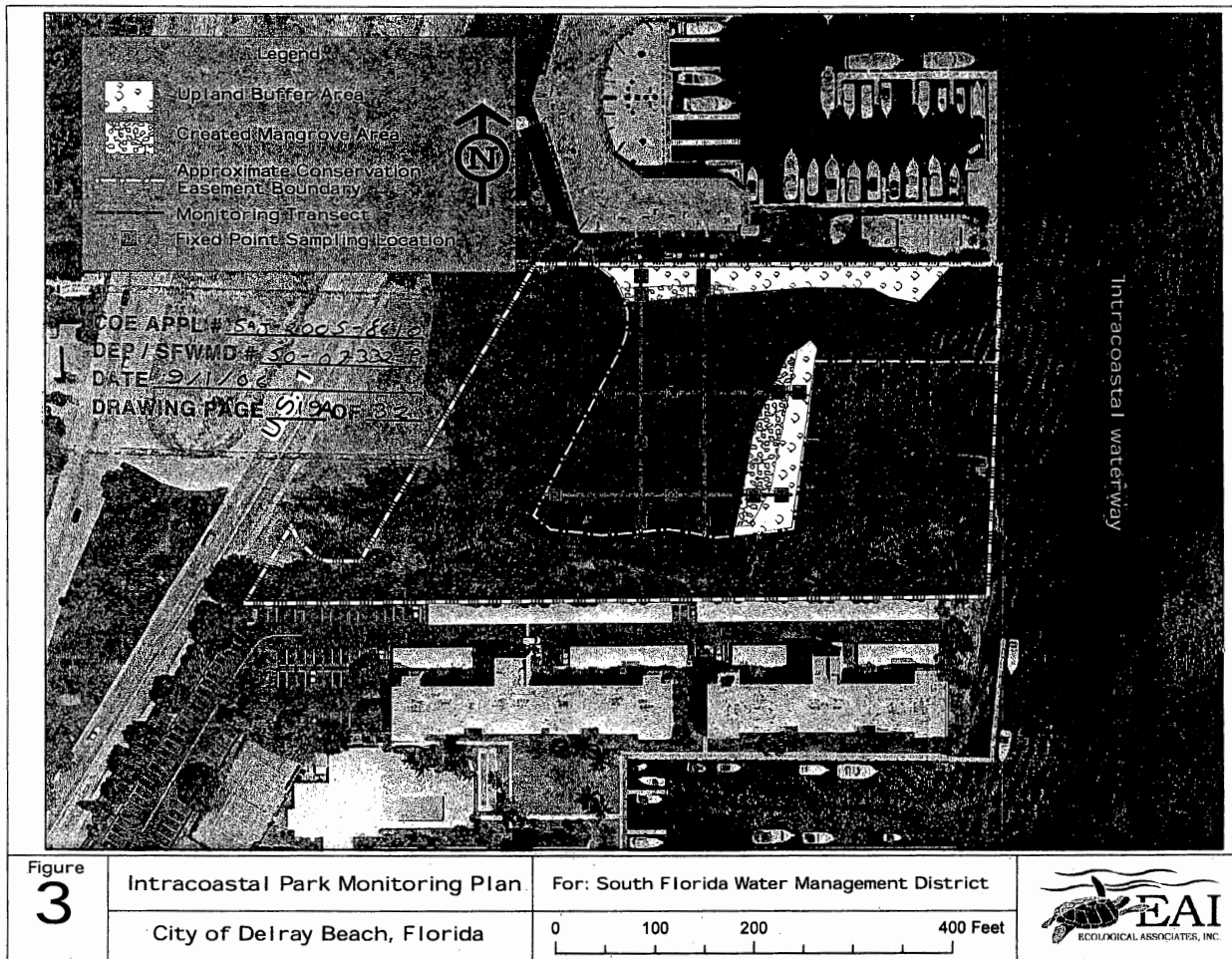
DATE 9/1/06

DRAWING PAGE 10 OF 32



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DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 22 OF 43



DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 24 OF 43

EXHIBIT 3.1

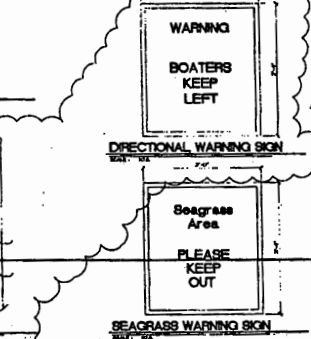
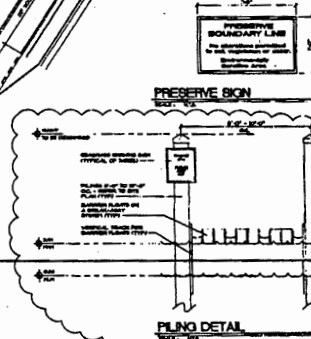
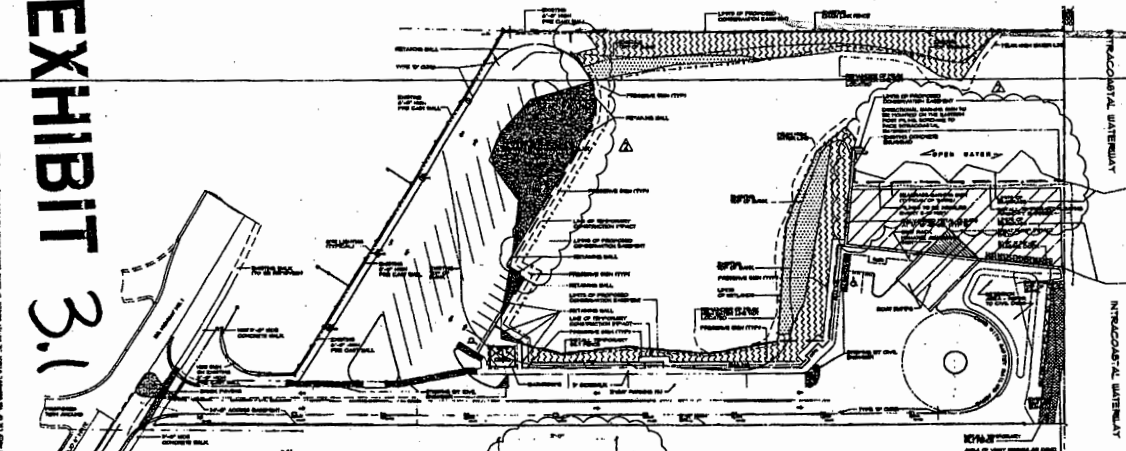
COE APPL # SAJ-2005-8610
DEP / SFWMD # 50-07332-P
DATE 9/1/06
DRAWING PAGE 20 OF 32



**CURRIE
SOWARDS
AGUILERA
ARCHITECTS**
Architects, Planners
& Interior Designers

PROJECT: Intracoastal Waterway
SHEET NO: 20 OF 32
DATE: 9/1/06
SCALE: AS SHOWN
DRAWN BY: [Name]
CHECKED BY: [Name]

INTRACOASTAL WATERWAY
INTRACOASTAL PARK (FIND SITE)

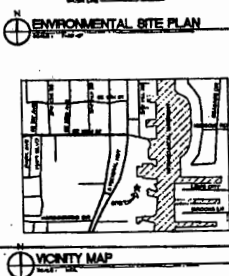


LEGEND:

[Symbol]	WATERWAY	[Symbol]	EXISTING
[Symbol]	PROPOSED	[Symbol]	NEW
[Symbol]	SEAGRASS	[Symbol]	...

SITE DATA

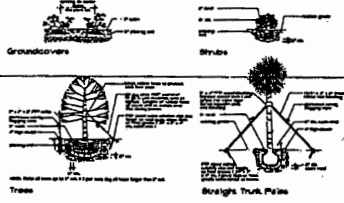
PARKING DATA



US HWY #1 DELRAY BEACH, FL
AGENCY REVIEW # A1.01
DATE: 9/1/06
SCALE: AS SHOWN

COE APPL # SAS-2005-8610
 DEP / SFWMD # 50-07332-P
 DATE 9/1/06
 DRAWING PAGE 21 OF 32

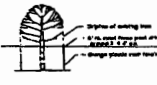
PLANTING DETAILS



CODE COMPLIANCE DATA

Item	Description	Code Reference	Compliance
1
2
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4
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EXISTING TREE PROTECTION BARRIER DETAIL



NOTE
 REMOVE ALL
 SMALLER PLANTING
 REMOVAL ALTHOUGH
 AUSTRALIAN FIRE
 RISK FOR VERTICALLY
 LANDSCAPE ARCHITECT

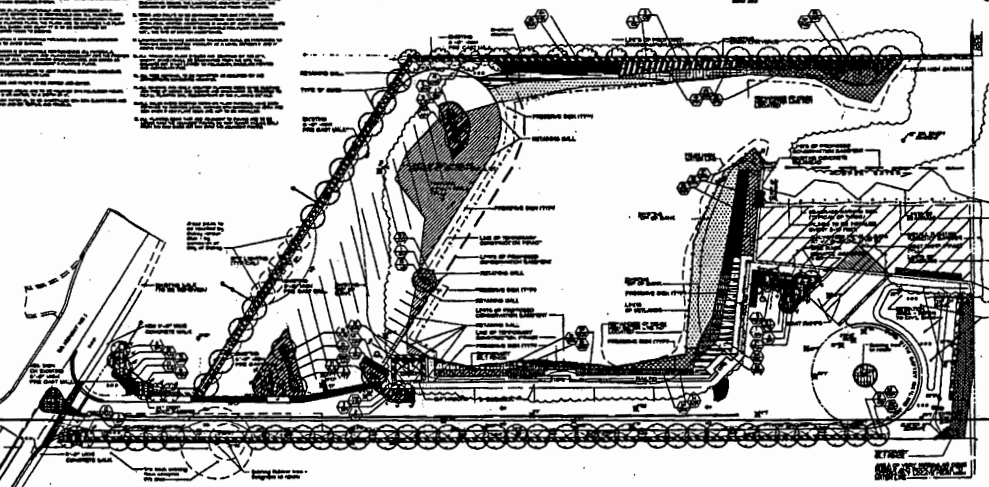
PLANTING NOTES

1. All plants to be installed in groups.
2. All plants to be installed in groups.
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LEGEND



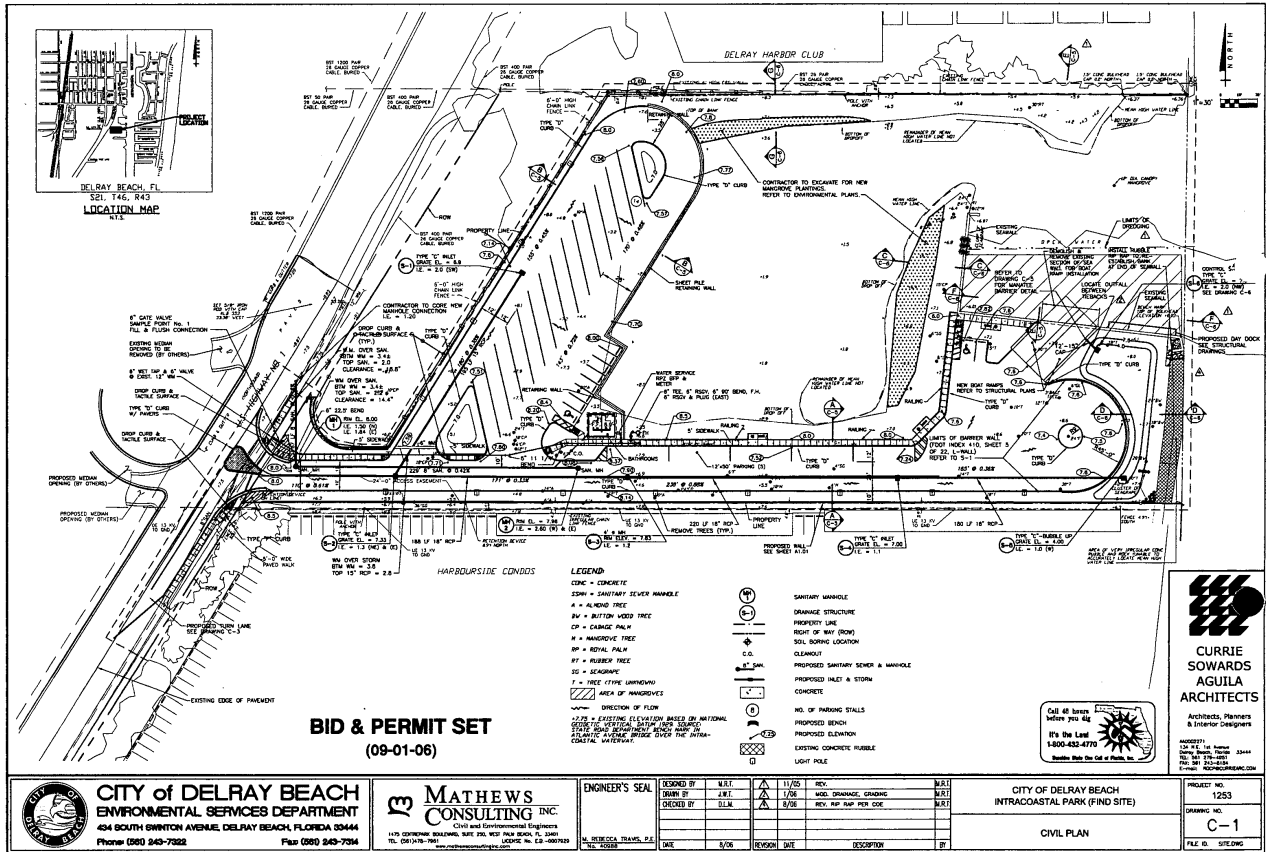
EXHIBIT B.2



INTRACOAST PART (find site)

planting plan

DATE: 9/1/06
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 SCALE: 1" = 10'-0"



BID & PERMIT SET
(09-01-06)

CITY of DELRAY BEACH
ENVIRONMENTAL SERVICES DEPARTMENT
404 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444
Phone (561) 243-7822 Fax (561) 243-7934

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
1175 GARDNER SQUARE, SUITE 200 WEST PALM BEACH, FL 33411
TEL: (561) 749-7881 FAX: (561) 749-7882
WWW.MATHEWSCONSULTING.COM

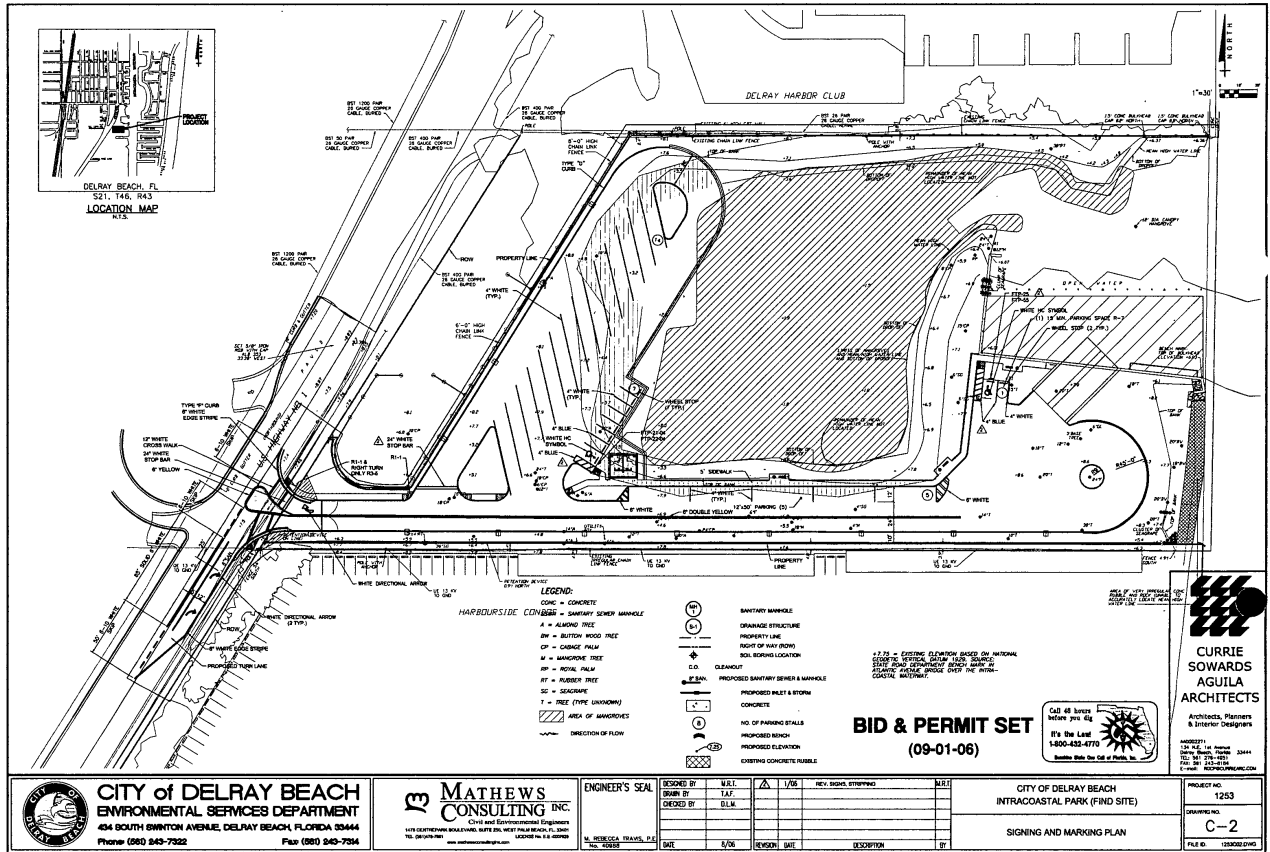
ENGINEER'S SEAL
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER
NO. 12533
EXPIRES 12/31/06

DESIGNED BY	W.S.T.	11/05	REV.	W.S.T.
DRAWN BY	J.R.T.	1/06	MOD. DRAINAGE, GRADING	J.R.T.
CHECKED BY	D.L.M.	8/06	REV. RFP PER CODE	J.R.T.
DATE	8/06	REVISION	DATE	DESCRIPTION

CITY OF DELRAY BEACH
INTRACOASTAL PARK (PIND SITE)
CIVIL PLAN

PROJECT NO. 1253
DRAWING NO. C-1
FILE NO. SFDWG

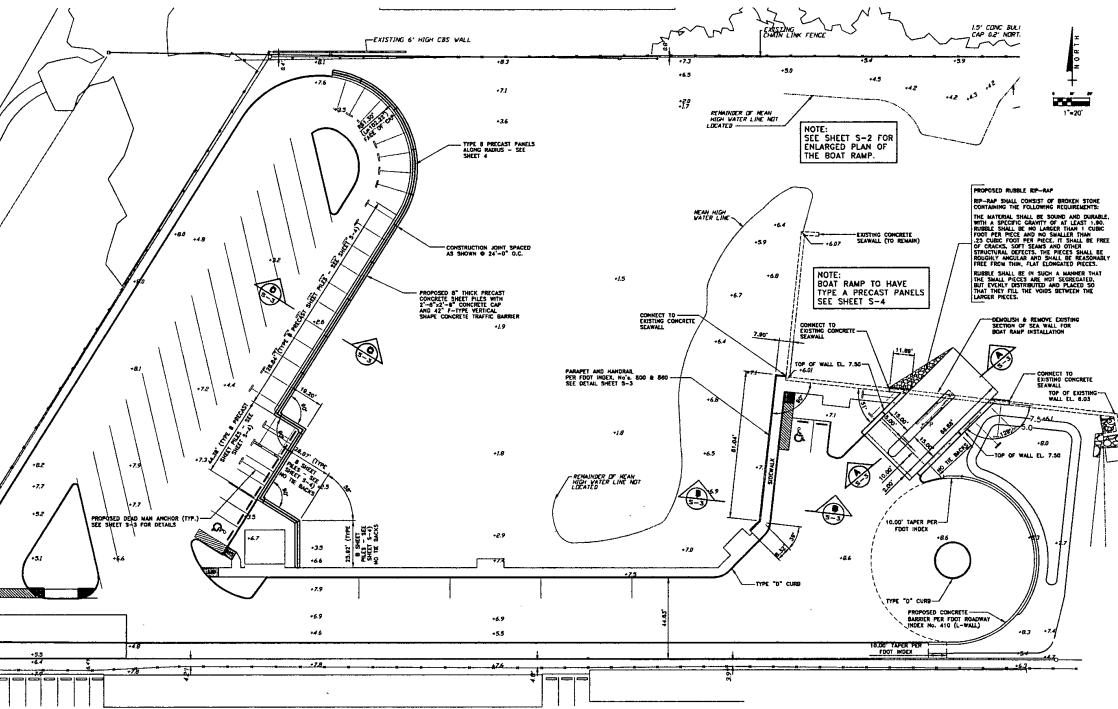
CURRIE SOWARDS AGUILA ARCHITECTS
Architects, Planners & Interior Designers
Call 408 488-1100
17th Floor
1400-433-4770
Boulder, Colorado
www.curriesowards.com



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DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 28 OF 43

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Alan Gerwig & Associates, Inc.
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 FAX: (561) 321-1202
 E-MAIL: info@gerwig.com
 Civil and Structural Engineers

CURRIE SOWARDS AGUILA ARCHITECTS
 ARCHITECTS, PLANNERS & INTERIOR DESIGNERS
 1000 N. UNIVERSITY BLVD., SUITE 200
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 FAX: (561) 321-1202
 E-MAIL: info@currie.com

MARK L. GERWIG, P.E., PRINCIPAL
 PROJECT NO. 14
INTRACOASTAL PARK (FIND SITE)
 U.S. HIGHWAY #1 DELRAY BEACH, FL.
 CLIENT: N/A
 REVISIONS:

FILE NUMBER: 14-01-000
 DRAWING TITLE: **OVERALL SEAWALL STRUCTURAL GEOMETRY PLAN**
 DATE: 08/31/2006
 DRAWN BY: DSP
 CHECKED BY: DSP
 PROJECT NUMBER: 021002
S-1

STRUCTURAL SPECIFICATIONS

MISCELLANEOUS

1. THE STRUCTURAL SYSTEM IS INDICATED UNTIL ALL CONNECTIONS HAVE BEEN MADE AS SHOWN IN THE STRUCTURAL DRAWINGS.
2. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION TO BE USED TO COMPLETE THE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS.
3. CONTRACTOR TO VERIFY BRIDGE AND DECKING CONSTRUCTION AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE DECK BRIDGE CONSTRUCTION.
4. APPLICABLE BRIDGE CODE: 2004 FLORIDA BRIDGE CODE WITH 2005 REVISIONS.
5. CURBWAY DESIGN LOADS:

AREA	SUPERIMPOSED DEAD LOAD	TOTAL DEAD LOAD
DECK	100 PSF	100 PSF
6. WIND DESIGN CRITERIA:

WIND SPEED	110 MPH (1 SECOND DURATION)
WIND EXPOSURE	2
WIND DIRECTION	0
7. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REFERENCED BRIDGE CODE.
8. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS TO THE DECK FINISH.
9. CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.
10. CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
11. ANY CHANGES TO THE STRUCTURE SHALL HAVE BEEN REVIEWED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK ON THEM. APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK ON THEM. APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK ON THEM.
12. CONTRACTOR SHALL NOTIFY THE OFFICE WHEN THE STRUCTURAL SYSTEM IS SUBSTANTIALLY COMPLETE.
13. STRUCTURAL INVESTIGATION:
 1. A SUBSTANCE INVESTIGATION SHALL BE COMPLETED AT THE SITE BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
 2. A SOIL AND SHALE SOILS REPORT SHALL BE SUBMITTED TO ACCURATELY AND ACCORDING TO THE SOILS REPORTING AND TESTING PROCEDURE AND THE COUNTY RECOMMENDATIONS.

STEEL PILING

1. PILE SPACING:

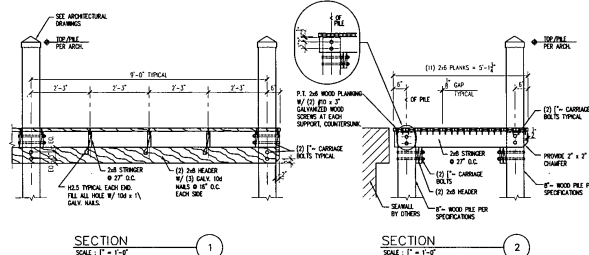
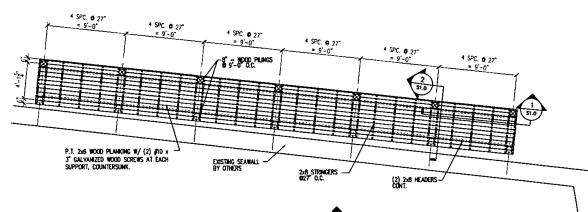
TOP	8 FEET
BOTTOM	10 FEET
2. PILE SPACING:

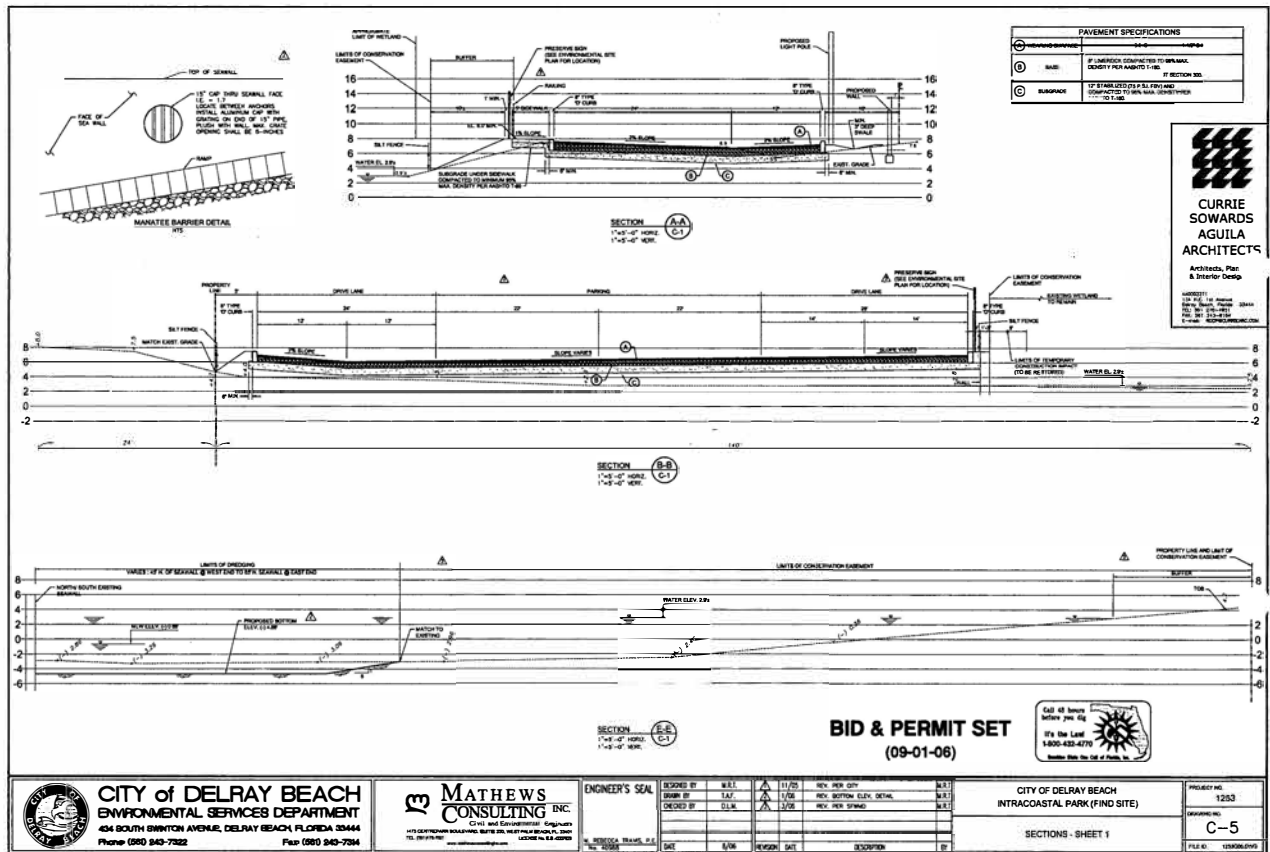
TOP	8 FEET
BOTTOM	10 FEET
3. CONTRACTOR SHALL HAVE AT LEAST FIVE (5) YEARS EXPERIENCE IN INSTALLING STEEL PILES.
4. PILE INSTALLER SHALL HAVE AT LEAST FIVE (5) YEARS EXPERIENCE IN INSTALLING STEEL PILES.
5. ALL STEEL PILES SHALL BE TREATED PER A.P.A. SPECIFICATION C1 AND C2 TO A MINIMUM OF 12 HOURS IN ORDER TO PREVENT CORROSION. THE TREATMENT SHALL BE DONE BY THE CONTRACTOR AND SHALL BE PROTECTED WITH A SERRATED STEEL HOOD TO PREVENT DAMAGE DURING DRIVING.
6. DOCUMENT ALL DRIVING STRATEGIES WITH PHOTOGRAPHS OR VIDEOS PRIOR TO BEGINNING PILE INSTALLATION. RECORD DRIVING DATA FOR EACH PILE AND DOCUMENT THE PILE DRIVING RESULTS. RECORD DRIVING DATA FOR EACH PILE AND DOCUMENT THE PILE DRIVING RESULTS.
7. ALL PILES SHALL BE DRIVEN WITH LEASE THAT SHALL BE THE PILE DRIVEY INTO POSITION AND SECURED TO THE PILING. THE SET OF COPIES SHALL BE:
 - (1) "GENERAL SPECIFICATION FOR STEEL PILE" AISC 333
 - (2) "NATIONAL BRIDGE SPECIFICATION FOR WOOD CONSTRUCTION" WITH CHANGE C1, C2, AND C3.
8. WOOD TYPE SHALL BE EQUAL TO OR BETTER THAN SOUTHERN PINE #2 WITH MINIMUM DESIGN VALUES:

F _c	1100 PSI
F _v	110 PSI
E	1,800,000 PSI
9. PILES SHALL BE DRIVEN TO THE REQUIRED BLOW COUNT AS DETERMINED BY THE "GENERAL SPECIFICATION FOR WOOD BRIDGES" BY NATIONAL BRIDGE OR COMPARABLE CORRELATION WITH FOUR APPROVED BY GEOTECHNICAL ENGINEER.
10. THE INSTALLATION OF ALL PILES SHALL BE MONITORED AND RECORDED BY A QUALIFIED STEEL LABORER. SOME INSTALLATION REPORT TO INDICATE THE POSITION AT THE END OF PILE DRIVING OPERATIONS. WALKIE TALKIE OF POSITIONAL PILE LAYOUT AS REQUIRED, AND ANY BRIDGE CONNECTIONS DETERMINED DURING PILE DRIVING.

CONCRETE

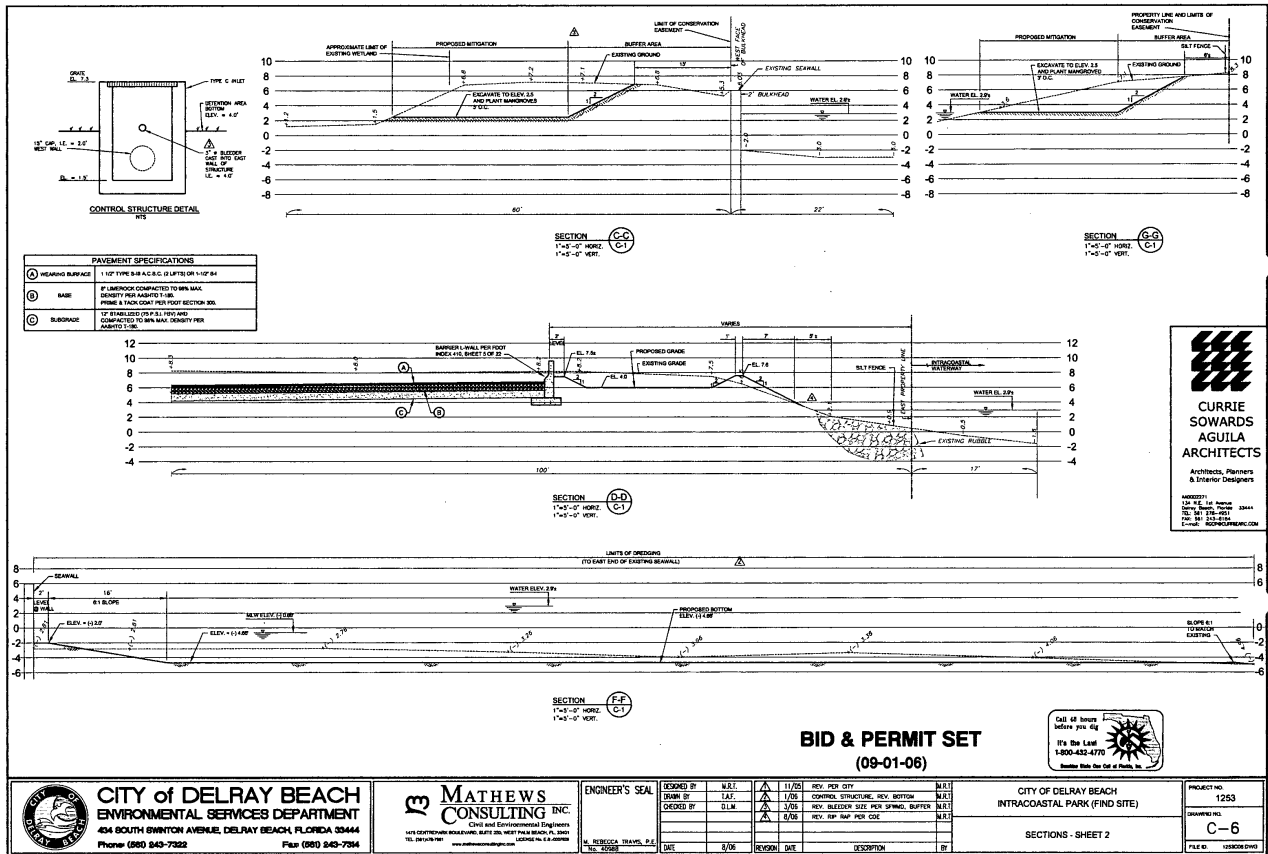
1. PRECASTED LAMBS SHALL BE DESIGNER'S PRECAST TREATED AND SHALL BEAR THE GRADE STAMP OF THE MANUFACTURER'S ASSOCIATION.
2. ALL LAMBS SHALL BE SHOWN, DIMENSIONS, AND TIES FROM SHOP.
3. ALL LAMBS SHALL BE PRECASTED REINFORCED CONCRETE PER NO. 2 GRADE OF STEEL WITH THE MAXIMUM MAXIMUM CONTAINMENT, UNLESS NOTED OTHERWISE ON THE PLANS.
4. ALL LAMBS IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE PRECASTED TREATED.
5. PRECASTED LAMBS SHALL COMPLY WITH APCA C1 FOR LAMBS AND APCA C2 FOR JOINTS. ALL JOINTS SHALL BE TIED FOR REINFORCEMENT FOR JOINTS. ALL JOINTS SHALL BE TIED FOR REINFORCEMENT FOR JOINTS.
6. JOINTS SHALL BE TIED FOR REINFORCEMENT FOR JOINTS. ALL JOINTS SHALL BE TIED FOR REINFORCEMENT FOR JOINTS.
7. METAL BRACING SHALL BE PROVIDED TO SUPPORT OVER LIFT AND DEAD LOAD. METAL BRACING SHALL BE PROVIDED TO SUPPORT OVER LIFT AND DEAD LOAD. METAL BRACING SHALL BE PROVIDED TO SUPPORT OVER LIFT AND DEAD LOAD.
8. SEE DETAIL FOR BRACING REQUIREMENTS.
9. SEE DETAIL FOR BRACING REQUIREMENTS.
10. SEE DETAIL FOR BRACING REQUIREMENTS.
11. MANUFACTURER'S TIE COMPANY, INC. WWW.FLEXCON. PHONE NUMBER 360-340-1111.
12. TIE IS A MANUFACTURED COMPOSITE MATERIAL THAT CONSISTS OF APPROXIMATELY 1000 FIBER FIBERS OF OVER 1000000 FIBERS IN WEIGHT WITH THE REINFORCEMENT OF THE BRIDGE. TIE IS MANUFACTURED BY FLEXCON. PHONE NUMBER 360-340-1111.
13. TIE SHALL BE PROVIDED BY A STAMP OR NON-REMOVABLE LABEL, SPACED AT REGULAR INTERVALS ALONG EACH PILE. THE FOLLOWING INFORMATION:
 - (1) EC-C1 LABEL NUMBER EC-C1-100-000
 - (2) MANUFACTURER NAME OR TRADEMARK AND PRODUCT DESCRIPTION
 - (3) NAME OF THE QUALITY CONTROL AGENCY (PQS CORPORATION (408-0421)) OR OTHER MANUFACTURER
 - (4) DATE OF MANUFACTURE
14. THE DESIGN AND INSTALLATION OF TIE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS FOR WOOD CONSTRUCTION.
15. TIE SHALL BE DRIVEN SHALL BE DRIVEN AND INSTALLED TO THE REQUIRED DETENTION UNDER TIE DESIGN LONG TO LESS THAN OR EQUAL TO 10 LAMBS.
16. TIE DESIGN SHALL BE CAPABLE TO RESIST ADEQUATE DRAGGAGE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
17. THE MINIMUM HEIGHT OF THE CONNECTION ASSEMBLY SHALL BE 42 INCHES FROM THE DECK FINISH. THE MINIMUM SPACING BETWEEN THE TIE SHALL BE THREE (3) INCHES. COORDINATE WITH ARCHITECTURAL DRAWINGS.





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DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 31 OF 43

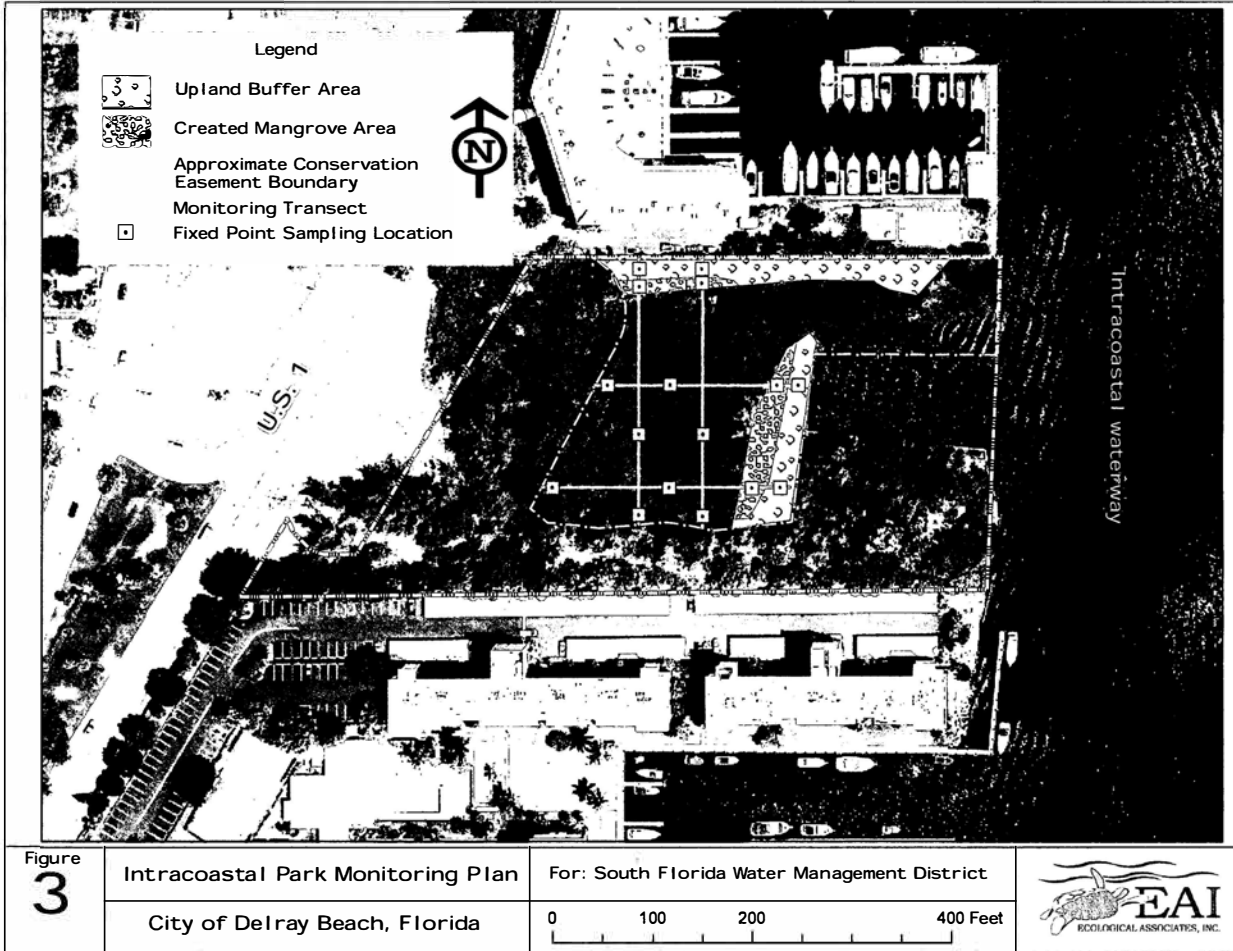


CURRIE SOWARDS AGUILA ARCHITECTS
 ARCHITECTS, PLANNERS & INTERIOR DESIGNERS
 ADDRESS: 1311 N.E. 1st Avenue, Suite 1000, Delray Beach, FL 33484
 TEL: 561-271-1111 FAX: 561-271-1112
 E-MAIL: INFO@CSAARCH.COM

BID & PERMIT SET
(09-01-06)



CITY OF DELRAY BEACH ENVIRONMENTAL SERVICES DEPARTMENT 404 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444 Phone (561) 843-7322 Fax (561) 843-7394	MATHEWS CONSULTING INC. Civil and Environmental Engineers 1411 CENTENNIAL OAKLAND AVENUE, SUITE 100, WEST PALM BEACH, FL 33411 TEL: 561-834-7841 www.mathewsconsulting.com LICENSE NO. 12-000000	ENGINEER'S SEAL M. REBECCA TRAVIS, P.E. TEL: 561-834-7841	DESIGNED BY: M.A.T. 11/05 REV. PER CITY CHECKED BY: D.L.M. 1/06 CONTROL STRUCTURE REV. BOTTOM M.R.T. 3/05 REV. BLEEDER SIZE PER SPONGE BUFFER M.R.T. 6/05 REV. 15M TAP PER CODE M.R.T.	CITY OF DELRAY BEACH INTRACOASTAL PARK (FIND SITE) PROJECT NO. 1253 DRAWING NO. C-6 FILE NO. 125308.DWG
		SECTION C-C 1"=3'-0" HORIZ. 1"=3'-0" VERT.	SECTION G-G 1"=3'-0" HORIZ. 1"=3'-0" VERT.	SECTION D-D 1"=3'-0" HORIZ. 1"=3'-0" VERT.

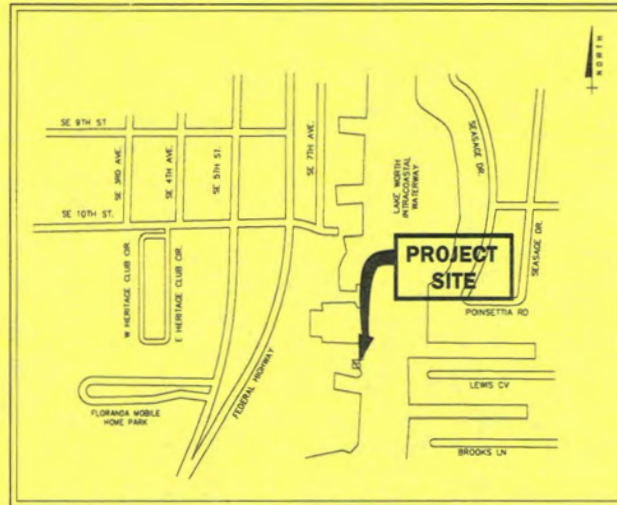


CITY OF DELRAY BEACH MANGROVE PARK BOAT RAMP MODIFICATIONS

CITY PROJECT NO. 10 - 106
CITY BID No. _____

DRAWING LIST

DRAWING	TITLE
GENERAL	
G-1	TITLE SHEET, LOCATION MAP & DRAWING LIST
G-2	SYMBOLS, LEGEND AND SURVEY NOTES
G-3	GENERAL NOTES AND INFORMATION
CIVIL	
C-1	EXISTING SITE PLAN
C-2	PROPOSED SITE PLAN
STRUCTURAL	
S-1	EXISTING/ DEMOLITION PLAN
S-2	RAMP SECTIONS - DEMOLITION
S-3	PROPOSED RAMP PLAN
S-4	PROPOSED RAMP SECTIONS - SHEET 1
S-5	PROPOSED RAMP SECTIONS - SHEET 2
S-6	PROPOSED RAMP SECTIONS - SHEET 3
S-7	PROPOSED RAMP SECTIONS - SHEET 4
S-8	CORNER CAP SECTIONS & DETAILS
S-9	EXISTING DAY DOCK PLAN & SECTION - DEMOLITION
S-10	PROPOSED DAY DOCK PLAN & SECTION - SHEET 1
S-11	PROPOSED DAY DOCK PLAN & SECTION - SHEET 2
S-12	DOCK DETAILS



PROJECT LOCATION MAP
N.T.S.

CITY OFFICIALS

MAYOR	NELSON S. "WOODIE" MCDUFFIE
VICE MAYOR	ADAM FRANKEL
DEPUTY VICE MAYOR	ANGELETA GRAY
COMMISSIONER	FRED FETZER
COMMISSIONER	GARY ELIOPOULOS
CITY MANAGER	DAVID T. HARDEN
DIRECTOR OF ENVIRONMENTAL SERVICES DEPARTMENT	RICHARD C. HASKO, P.E.
CITY ENGINEER	RANDAL L. KREJCAREK, P.E.



US Army Corps
of Engineers.

File # SAJ-2005-08610 (NW-DLR)

Drawing 1 of 9

60% DESIGN



CITY of DELRAY BEACH
ENVIRONMENTAL SERVICES DEPARTMENT
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MATHEWS CONSULTING

CIVIL ENGINEERS
477 S. Rosemary Avenue, Suite 330, West Palm Beach, Florida 33401
Phone: 561-666-4170 Fax: 561-666-2179
www.matthewsconsulting.com EB-0007929

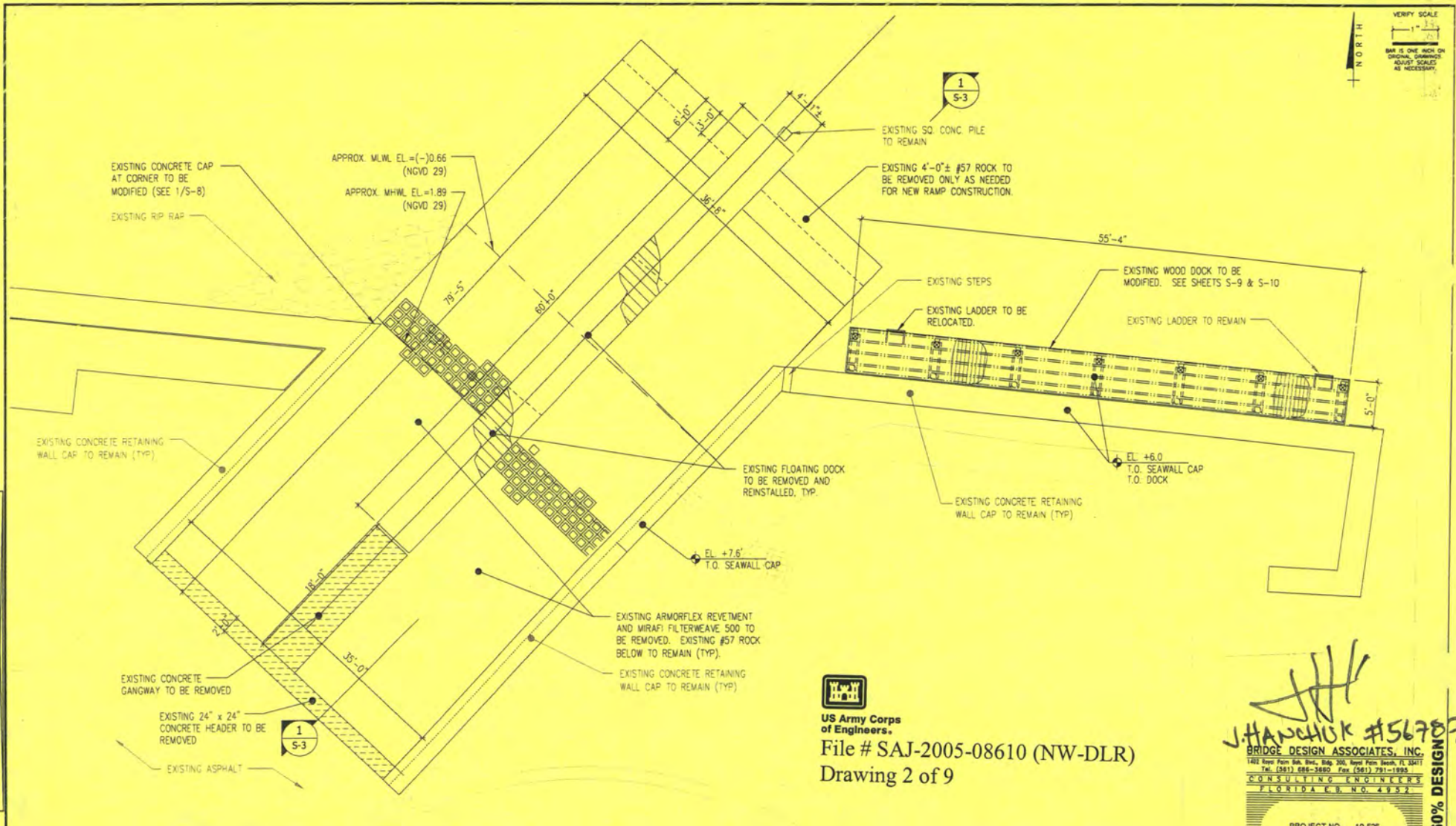
ENGINEER'S SEAL

CITY OF DELRAY BEACH
MANGROVE PARK BOAT RAMP
MODIFICATIONS

PROJECT NO	10 - 106
DRAWING NO	G-1
FILE ID	1542901 DWG

DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 35 OF 43

Date: 11/22/05 10:22 AM 11/22/05
 User: j...
 Plot: 1542901.dwg
 Plot Date: 11/22/05 10:22 AM
 Plot Time: 11/22/05 10:22 AM
 Plot User: j...



US Army Corps of Engineers.

File # SAJ-2005-08610 (NW-DLR)

Drawing 2 of 9

J. HANCOCK #156787

BRIDGE DESIGN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 FLORIDA C.E. NO. 4932

PROJECT NO. 10-525

CITY OF DELRAY BEACH
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ENGINEER'S SEAL
 FOR THE CITY OF DELRAY BEACH

DESIGNED BY	J.C.H.				
DRAWN BY	C.A.				
CHECKED BY	J.C.H.				
DATE	JUNE, 2010	REVISION	DATE	DESCRIPTION	BY

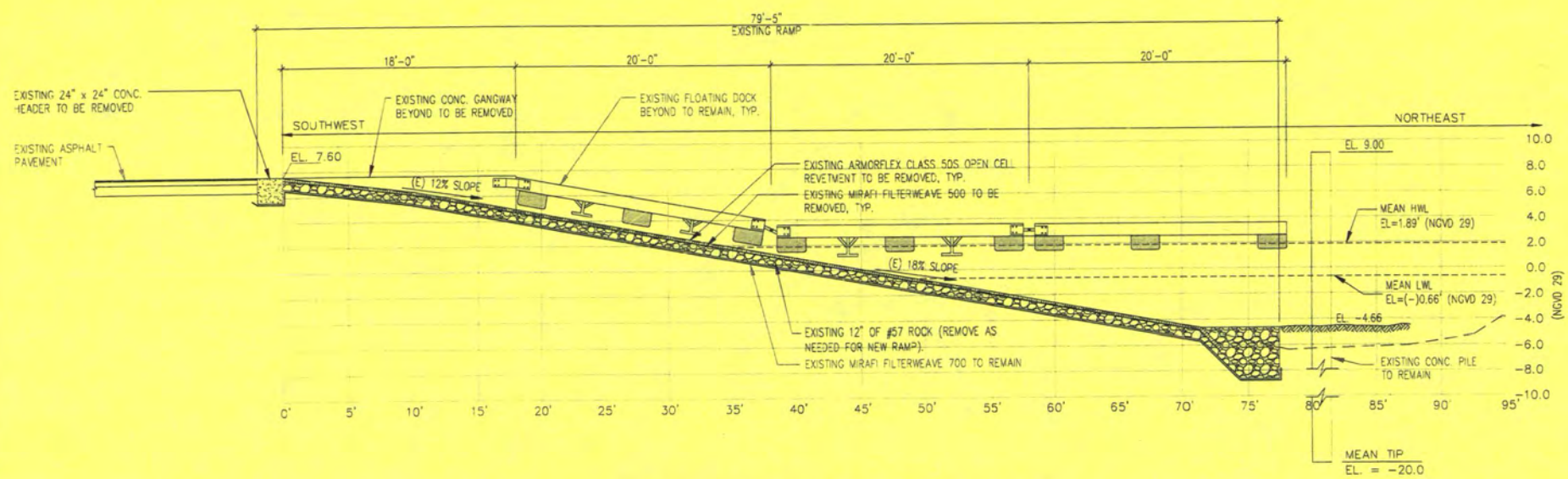
CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP
 MODIFICATIONS
 EXISTING/DEMOLITION PLAN

PROJECT NO. 10-106
 DRAWING NO. S-1
 FILE ID

AUG 1 1 2010

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 36 OF 43

VERIFY SCALE
 1" = 10'-0"
 BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.



1 EXISTING/DEMOLITION RAMP SECTION
 S-3 Scale: 1/4"=1'-0"



US Army Corps of Engineers
 File # SAJ-2005-08610 (NW-DLR)
 Drawing 3 of 9

J. HANCHUK #56787
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 FLORIDA E.C. NO. 4852
 PROJECT NO. 10-525
60% DESIGN



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MATHEWS CONSULTING
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 Phone: (561) 824-6100 Fax: (561) 824-6100
 www.mathewsconsulting.com

ENGINEER'S SEAL
 FOR THE CITY OF DELRAY BEACH

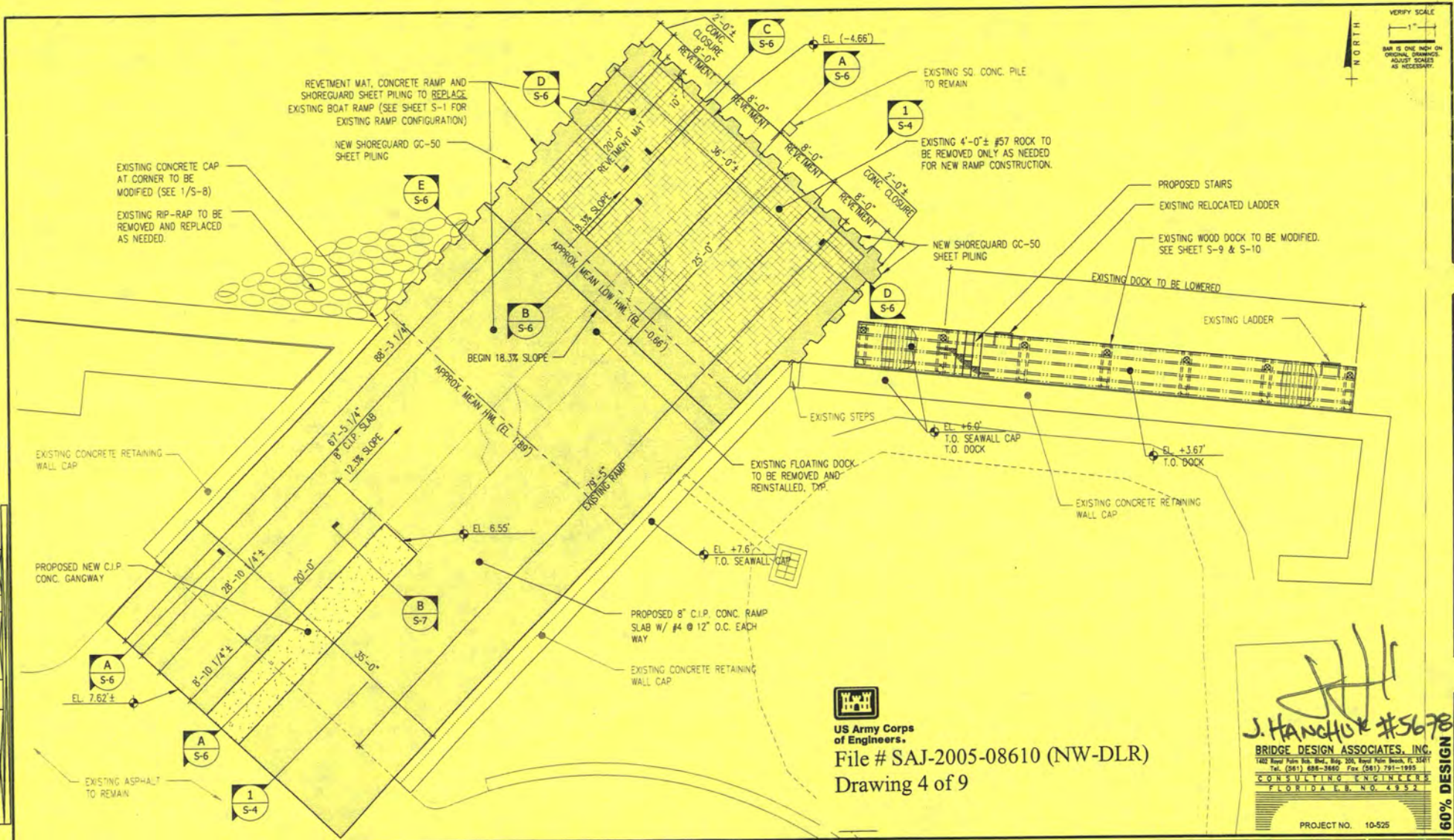
DESIGNED BY	J.C.H.				
DRAWN BY	C.A.				
CHECKED BY	J.C.H.				
DATE	JUNE, 2010	REVISION	DATE	DESCRIPTION	BY

CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP MODIFICATIONS
 RAMP SECTIONS - DEMOLITION

PROJECT NO. 10-106
 DRAWING NO. S-2
 FILE NO.

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DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 37 OF 43



NORTH
 VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL, DIMENSIONS ADJUST SCALES AS NECESSARY



US Army Corps of Engineers

File # SAJ-2005-08610 (NW-DLR)

Drawing 4 of 9

J. HANCHUK #56787
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 FLORIDA REG. NO. 4952

PROJECT NO. 10-525

60% DESIGN

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ENGINEER'S SEAL
 FOR THE CITY OF DELRAY BEACH

DESIGNED BY	J.C.H.				
DRAWN BY	C.A.				
CHECKED BY	J.C.H.				
DATE	JUNE, 2010	REVISION	DATE	DESCRIPTION	BY

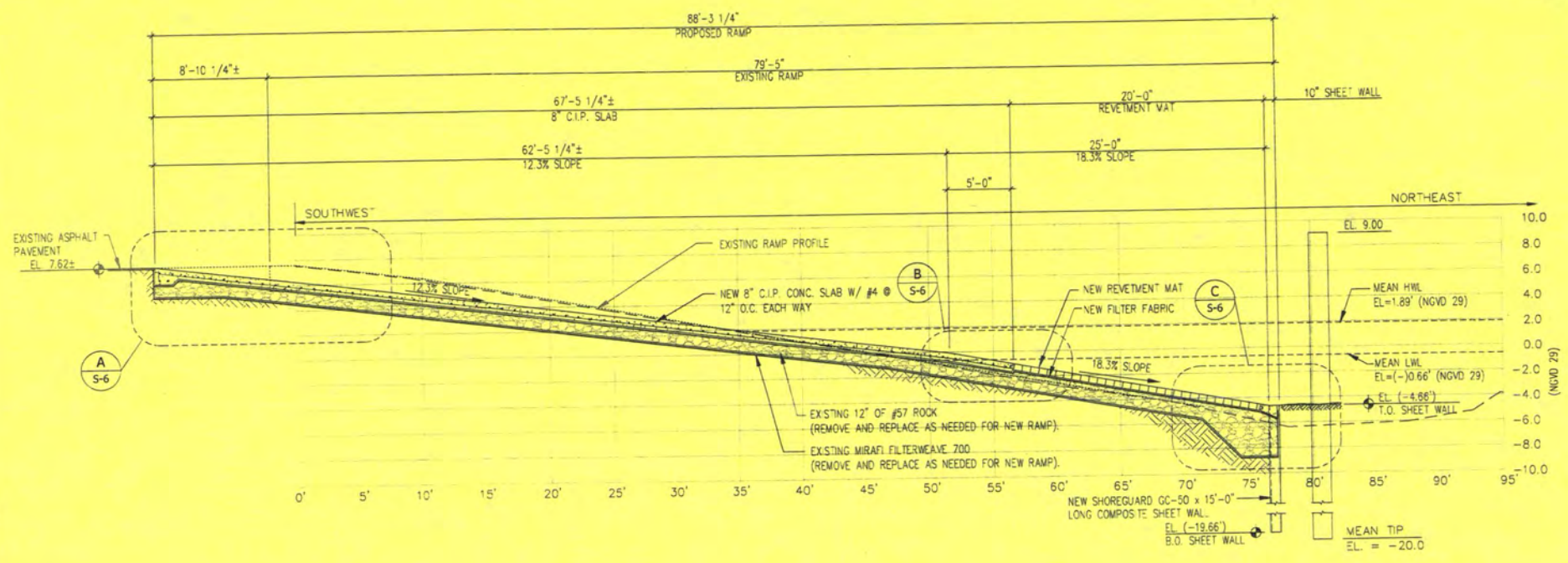
CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP
 MODIFICATIONS
 PROPOSED RAMP PLAN

PROJECT NO. 10-106
 DRAWING NO. S-3
 FILE ID.

AUG 11 2010

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 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 38 OF 43

VERIFY SCALE
 1" = 10'-0"
 THIS IS ONE INCH ON
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 ALWAYS SCALE
 AS NECESSARY.



1 PROPOSED RAMP SECTION
 S-4 Scale: 1/4"=1'-0"



US Army Corps
 of Engineers
 File # SAJ-2005-08610 (NW-DLR)
 Drawing 5 of 9

J. HANCHOUK #56787
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 FLORIDA C.E. NO. 4892
 PROJECT NO. 10-625
60% DESIGN



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ENGINEER'S SEAL
 FOR THE
 CITY OF DELRAY BEACH

DESIGNED BY	J.C.H.				
DRAWN BY	C.A.				
CHECKED BY	J.C.H.				
DATE	JUNE, 2010	REVISION	DATE	DESCRIPTION	BY

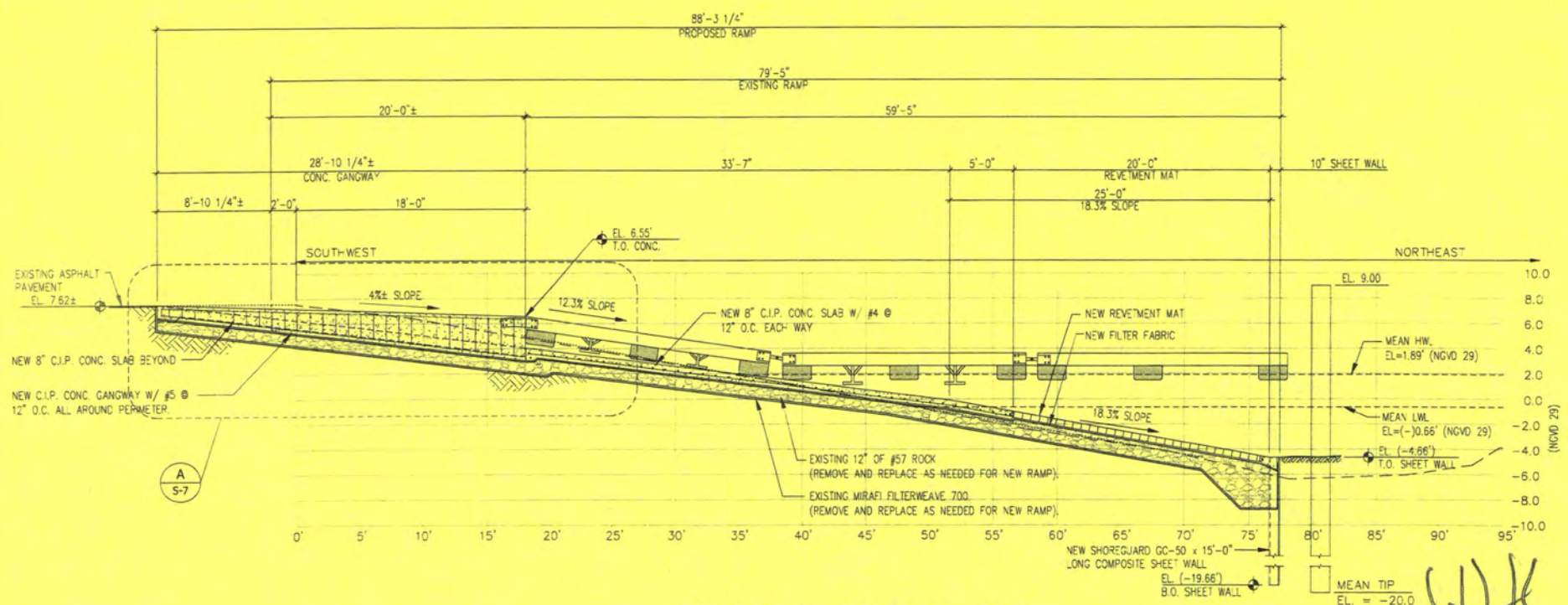
CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP
 MODIFICATIONS
 PROPOSED RAMP SECTIONS - SHEET 1

PROJECT NO.
 10-106
 DRAWING NO.
 S-4
 FILE NO.

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 39 OF 43

VERIFY SCALE

 BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.



2 PROPOSED RAMP SECTION
 S-5 Scale: 1/4"=1'-0"



US Army Corps of Engineers.

File # SAJ-2005-08610 (NW-DLR)
 Drawing 6 of 9

J. Hanchuk #56787
BRIDGE DESIGN ASSOCIATES, INC.
 CONSULTING ENGINEER
 FLORIDA C.E. NO. 4932

60% DESIGN

PROJECT NO. 10-525

CITY OF DELRAY BEACH
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 477 S. Rosemary Avenue, Suite 200, West Palm Beach, Florida 33411
 Phone: 561-854-7170 Fax: 561-854-8775

ENGINEER'S SEAL
 FOR THE CITY OF DELRAY BEACH

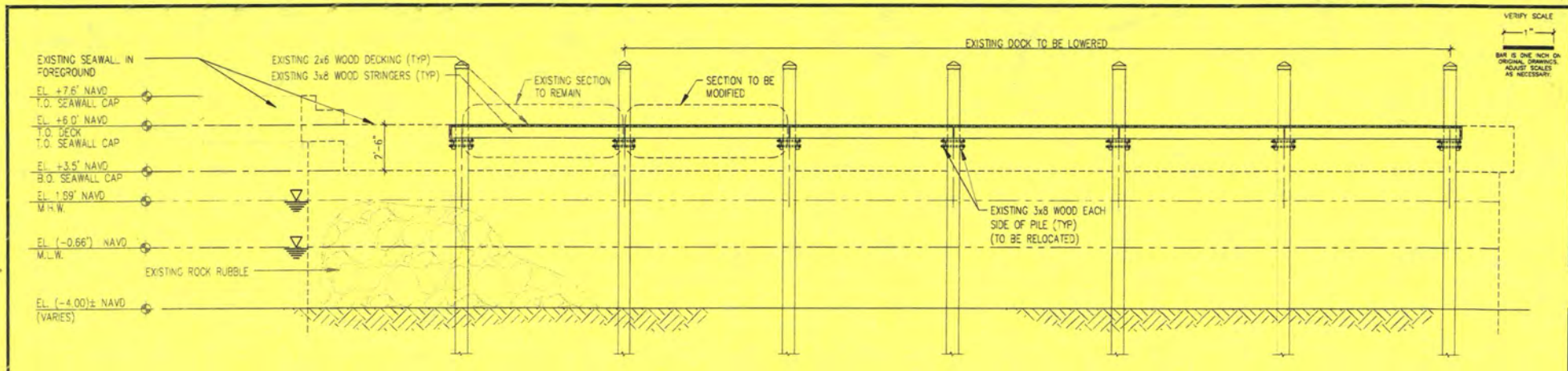
CHECKED BY	J.C.H.	DATE	REVISION	DATE	DESCRIPTION	BY
		JUNE, 2010				

CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP
 MODIFICATIONS
 PROPOSED RAMP SECTIONS - SHEET 2

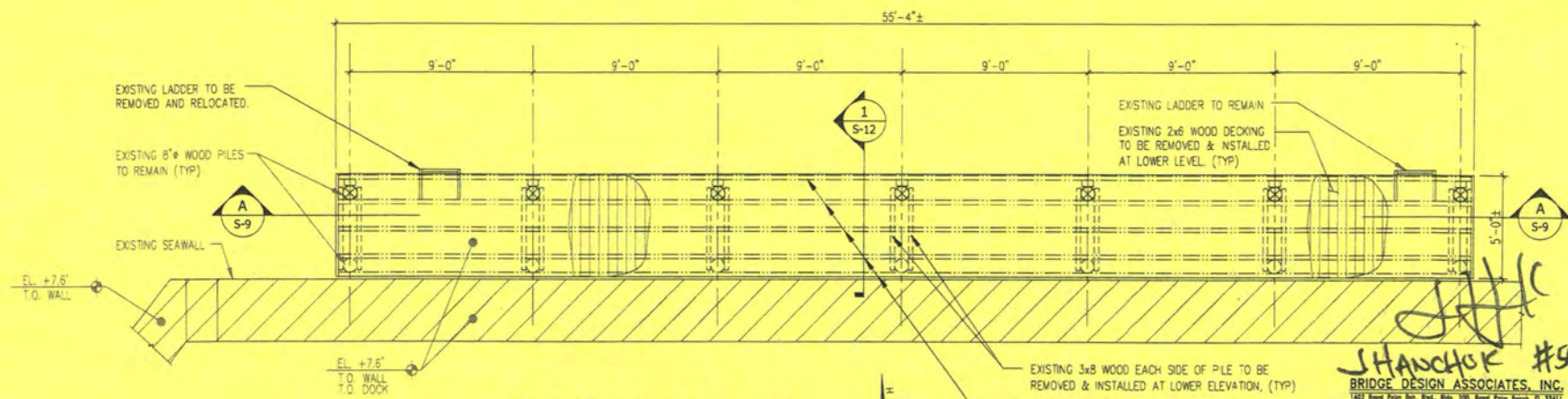
PROJECT NO. 10-106
 DRAWING NO. S-5
 FILE NO.

AUG 1 2010

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 40 OF 43



A EXISTING DOCK SECTION
S-9 Scale: 3/8"=1'-0"



B EXISTING DOCK PLAN
S-9 Scale: 3/8"=1'-0"

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 FLORIDA LICENSE NO. 4932
 PROJECT NO. 10-025
60% DESIGN

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ENGINEER'S SEAL	DESIGNED BY: J.C.H.	DATE: JUNE 20/0
	DRAWN BY: C.A.	REVISION: DATE
	CHECKED BY: J.C.H.	DESCRIPTION
		BY

CITY OF DELRAY BEACH MANGROVE BOAT RAMP MODIFICATIONS	PROJECT NO. 10-106
EXISTING DAY DOCK PLAN & SECTION - DEMOLITION	DRAWING NO. S-9
	FILE NO.

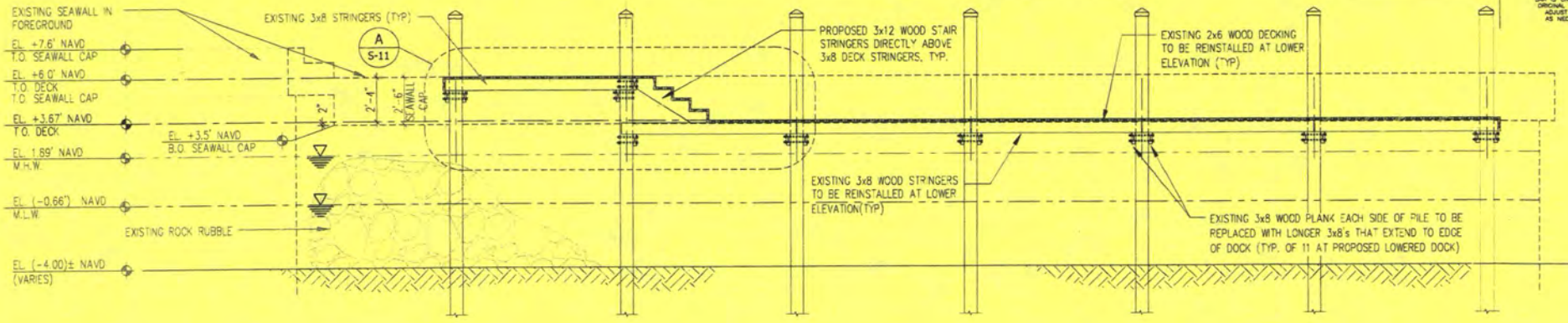
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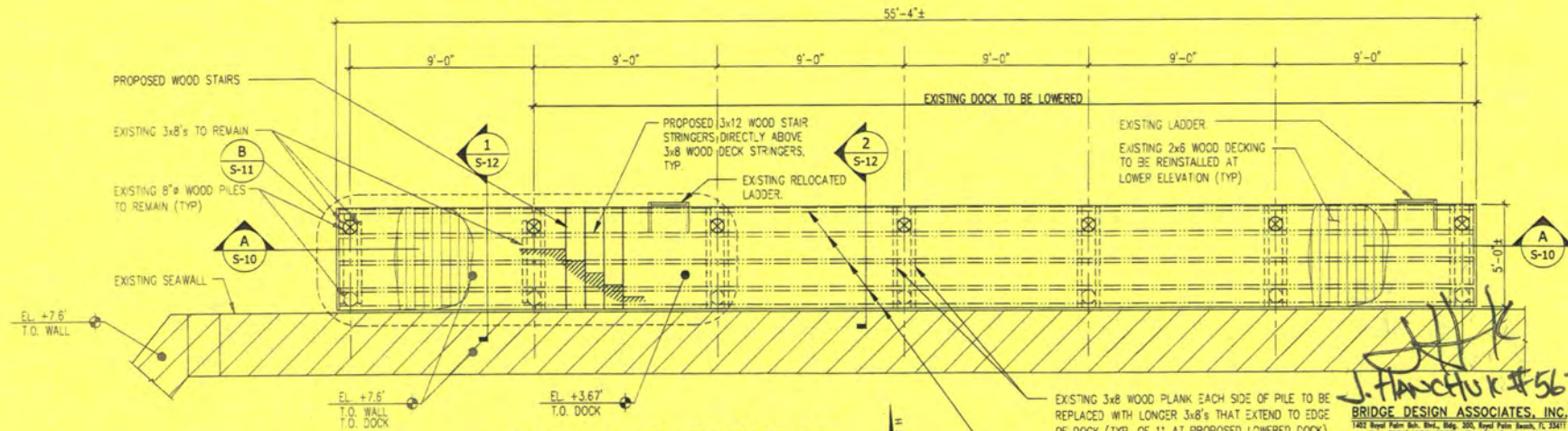
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 File # SAI-2005-08610 (NW-DLR)
 Drawing 7 of 9

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 41 OF 43

VERIFY SCALE
1" = 1'-0"
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A PROPOSED DOCK SECTION
S-10 Scale: 3/8"=1'-0"



B PROPOSED DOCK PLAN
S-10 Scale: 3/8"=1'-0"

J. HANCOCK #56787
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CORNSULTRNG ENGINERS
FLORIDA LICENSE NO. 43532
PROJECT NO. 10-525

60% DESIGN



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ENGINEER'S SEAL	DESIGNED BY: J.C.R.	PROJECT NO.:	10-106
	DRAWN BY: C.A.	DRAWING NO.:	S-10
	CHECKED BY: J.C.R.	FILE NO.:	
FOR THE CITY OF DELRAY BEACH	DATE: JUNE, 2010	REVISION:	
	DESCRIPTION:	BY:	

CITY OF DELRAY BEACH
MANGROVE BOAT RAMP
MODIFICATIONS
PROPOSED DAY DOCK PLAN & SECTION
SHEET 1

AUG 11 2010

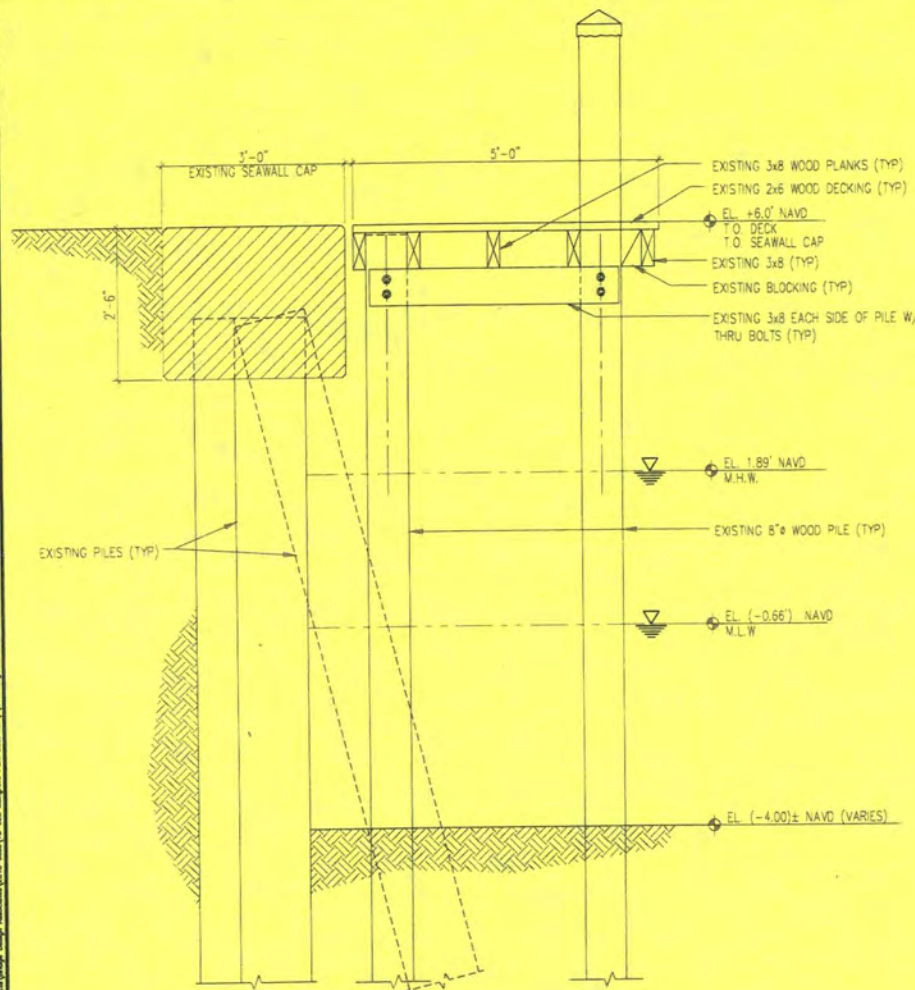


US Army Corps of Engineers.

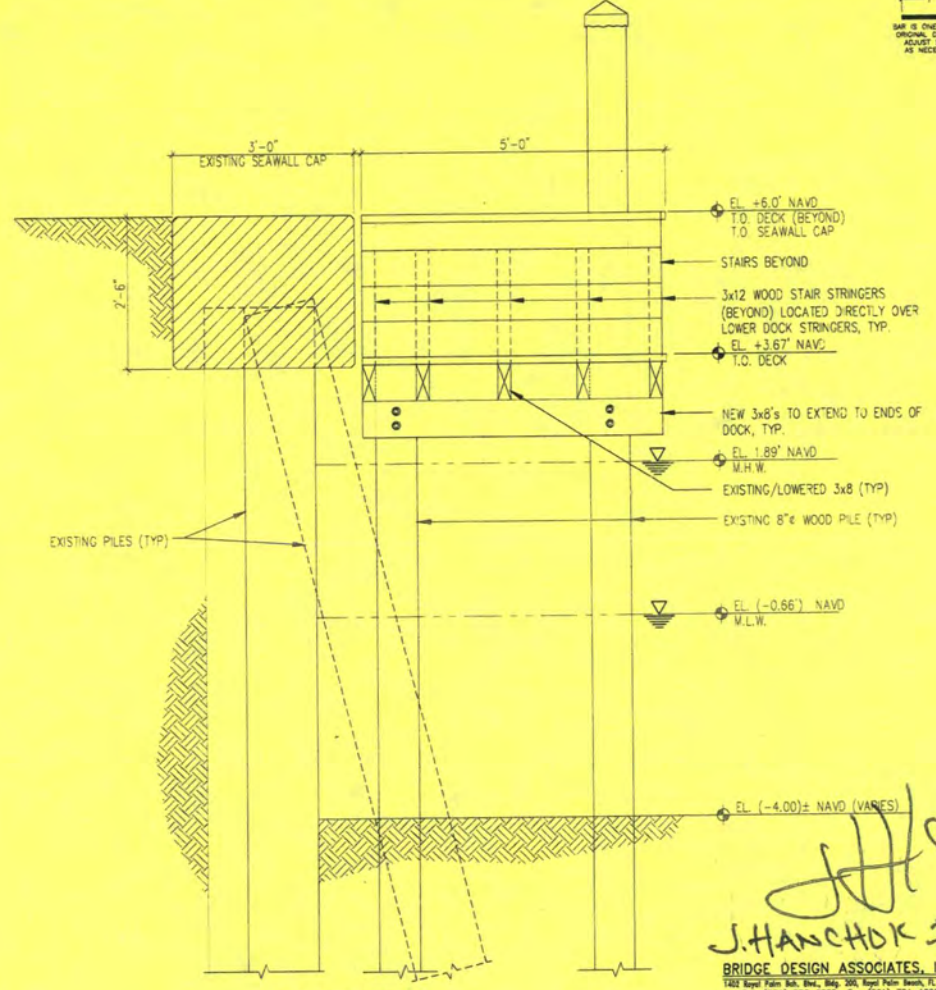
File # SAJ-2005-08610 (NW-DLR)
Drawing 8 of 9

DACW17-9-25-0131
CITY OF DELRAY BEACH
EXHIBIT "B"
PG 42 OF 43

VERIFY SCALE
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1 SECTION
 S-12 Scale: 1"=1'-0"



2 SECTION
 S-12 Scale: 1"=1'-0"

J. HANCHOK #56787

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PROJECT NO. 10-525

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ENGINEER'S SEAL

DESIGNED BY	J.C.H.				
DRAWN BY	C.A.				
CHECKED BY	J.C.H.				
DATE	JUNE, 2010	REVISION	DATE	DESCRIPTION	BY

CITY OF DELRAY BEACH
 MANGROVE BOAT RAMP
 MODIFICATIONS

DOCK DETAILS

PROJECT NO. 10-106

DRAWING NO. S-12

FILED:

AUG 11 2010



US Army Corps of Engineers

File # SAJ-2005-08610 (NW-DLR)

Drawing 9 of 9

DACW17-9-25-0131
 CITY OF DELRAY BEACH
 EXHIBIT "B"
 PG 43 OF 43