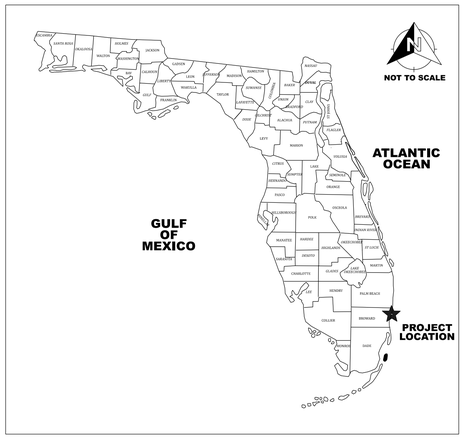
PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

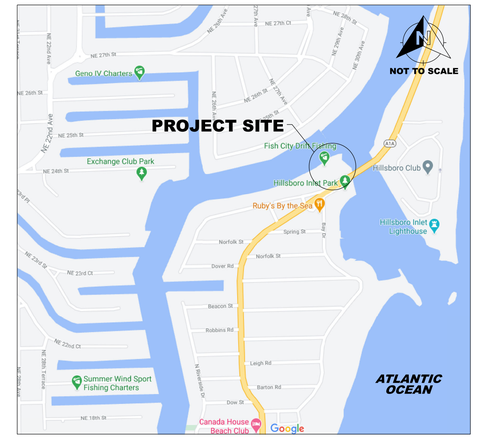
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH
BROWARD COUNTY, FLORIDA
JUNE 2025



LOCATION MAP OF FLORIDA

AERIAL PHOTOGRAPH



VICINITY MAP

PREPARED BY:

SEA DIVERSIFIED

SEA DIVERSIFIED, INC.
160 CONGRESS PARK DRIVE, #114
DELRAY BEACH, FLORIDA 33445
PH 561-243-4920

PREPARED FOR:

pompano beach
Florida's Warmest Welcome

CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

REX HARDIN	MAYOR AT LARGE
ALISON FOURNIER	VICE MAYOR, DISTRICT 3
AUDREY FESIK	COMMISSIONER, DISTRICT 1
RHONDA SIGERSON-EATON	COMMISSIONER, DISTRICT 2
BEVERLY PERKINS	COMMISSIONER, DISTRICT 4
DARLENE SMITH	COMMISSIONER, DISTRICT 5

SHEET INDEX

NO.	SHEET	SHEET TITLE
1	C-1	COVER SHEET
2	A-1	AERIAL
3	B-1	BATHYMETRY
4	EX-1	EXISTING CONDITIONS
5	D-1	DEMOLITION PLAN - EXISTING TREE MITIGATION
6	D-2	DEMOLITION PHOTO EXHIBITS
7	P-1	SITE PLAN
8	P-2	PLAN DETAIL - EAST
9	P-3	PLAN DETAIL - WEST
10	BH-1	BULKHEAD PLAN DETAILS - EAST
11	BH-2	BULKHEAD PLAN DETAILS - WEST
12	S-1	TYPICAL DOCK DETAILS
13	S-2	TYPICAL BULKHEAD DETAILS
14	S-3	TYPICAL SECTION DETAILS
15	UP-1	UPLAND SITE PLAN
16	UP-2	UPLAND PLAN DETAIL - EAST
17	UP-3	UPLAND PLAN DETAIL - WEST
18	UP-4	GRADING PLAN
19	U-1	LANDSCAPE PLAN
20	L-1	POTABLE WATER & FIRE PROTECTION
21	M-1	STANDARD DETAILS
22	M-2	STANDARD CITY DETAILS
23	M-3	STANDARD CITY DETAILS
24	G-1	GEOTECHNICAL
25	N-1	NOTES & SPECIFICATIONS
26	N-2	NOTES & SPECIFICATIONS
27-30	E-1 - E-4	ELECTRICAL - LIGHTING DETAILS

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: COVER

PREPARED FOR: pompano beach Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	N.T.S.
SHEET:	C-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

PLAN SET ISSUED FOR
BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
AERIAL

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41164
FOR THE FIRM SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:

SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

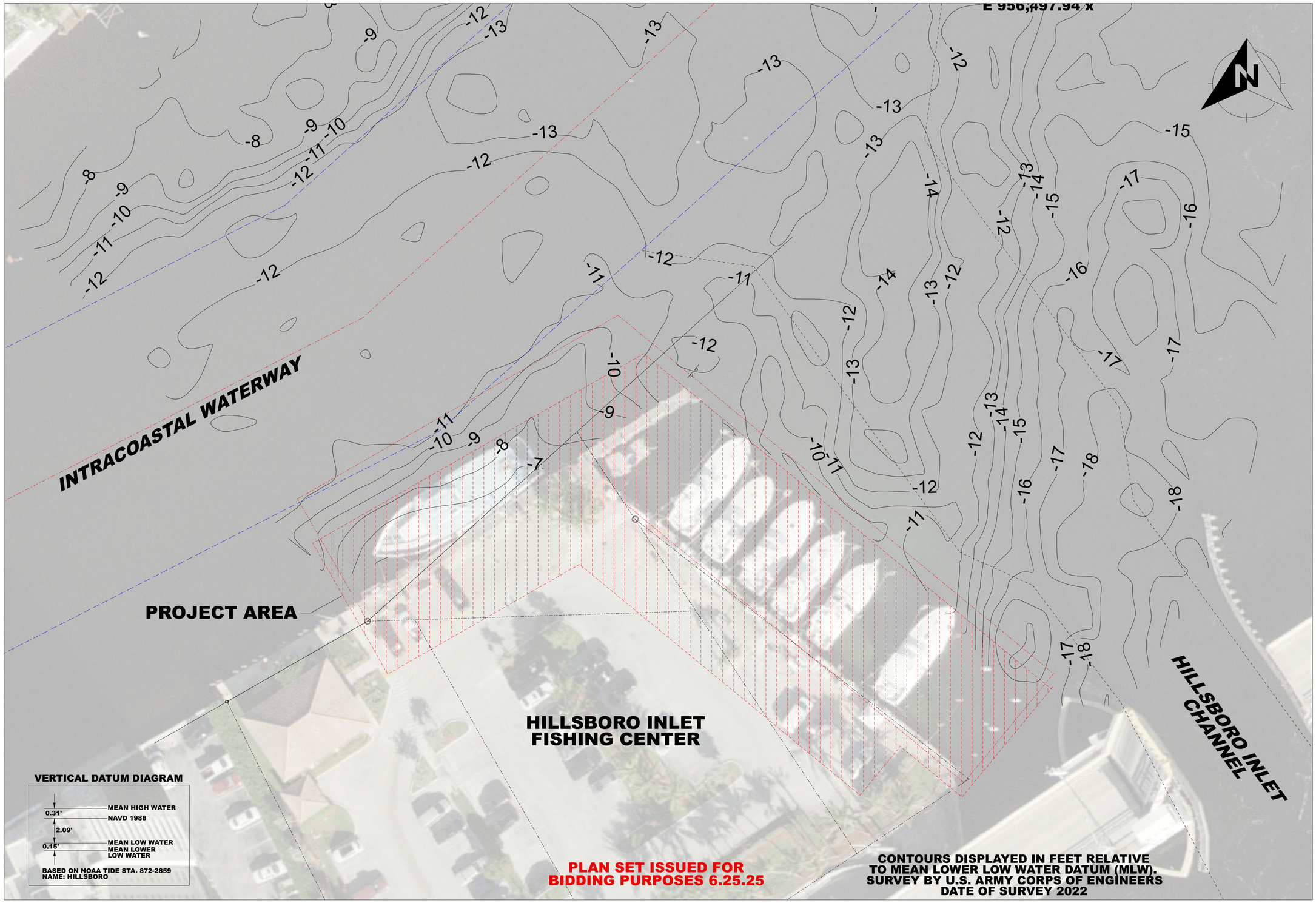
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=100'
SHEET:	

A-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
BATHYMETRY

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
EXPIRATION DATE: 02/28/2027
C.A. LICENSE NUMBER 25937

PREPARED BY:

SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

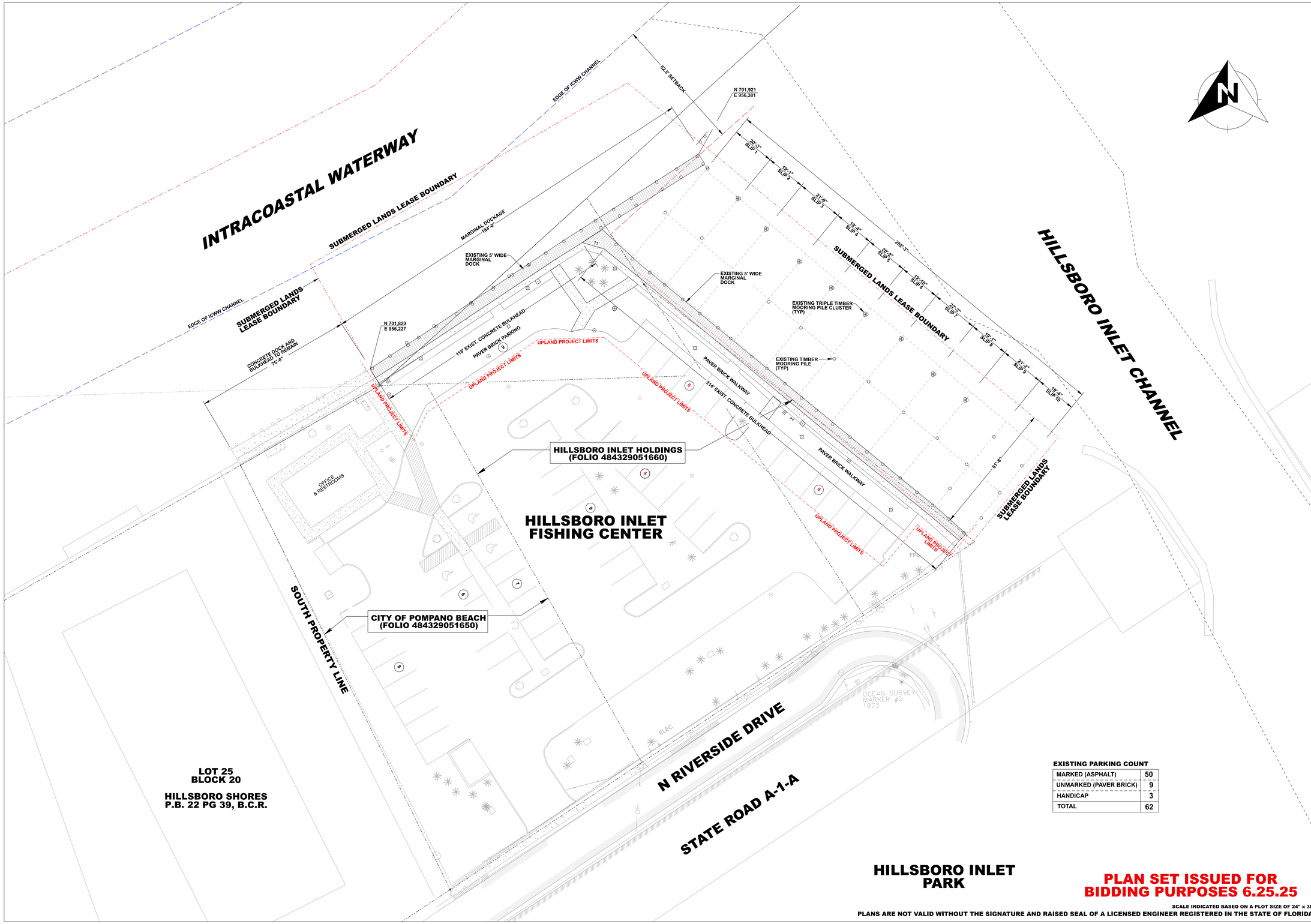
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=20'-0"
SHEET:	

B-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



EXISTING PARKING COUNT

MARKED (ASPHALT)	50
UNMARKED (PAVER BRICK)	9
HANDICAP	3
TOTAL	62

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

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REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
EXISTING CONDITIONS

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41164
FOR THE FIRM SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

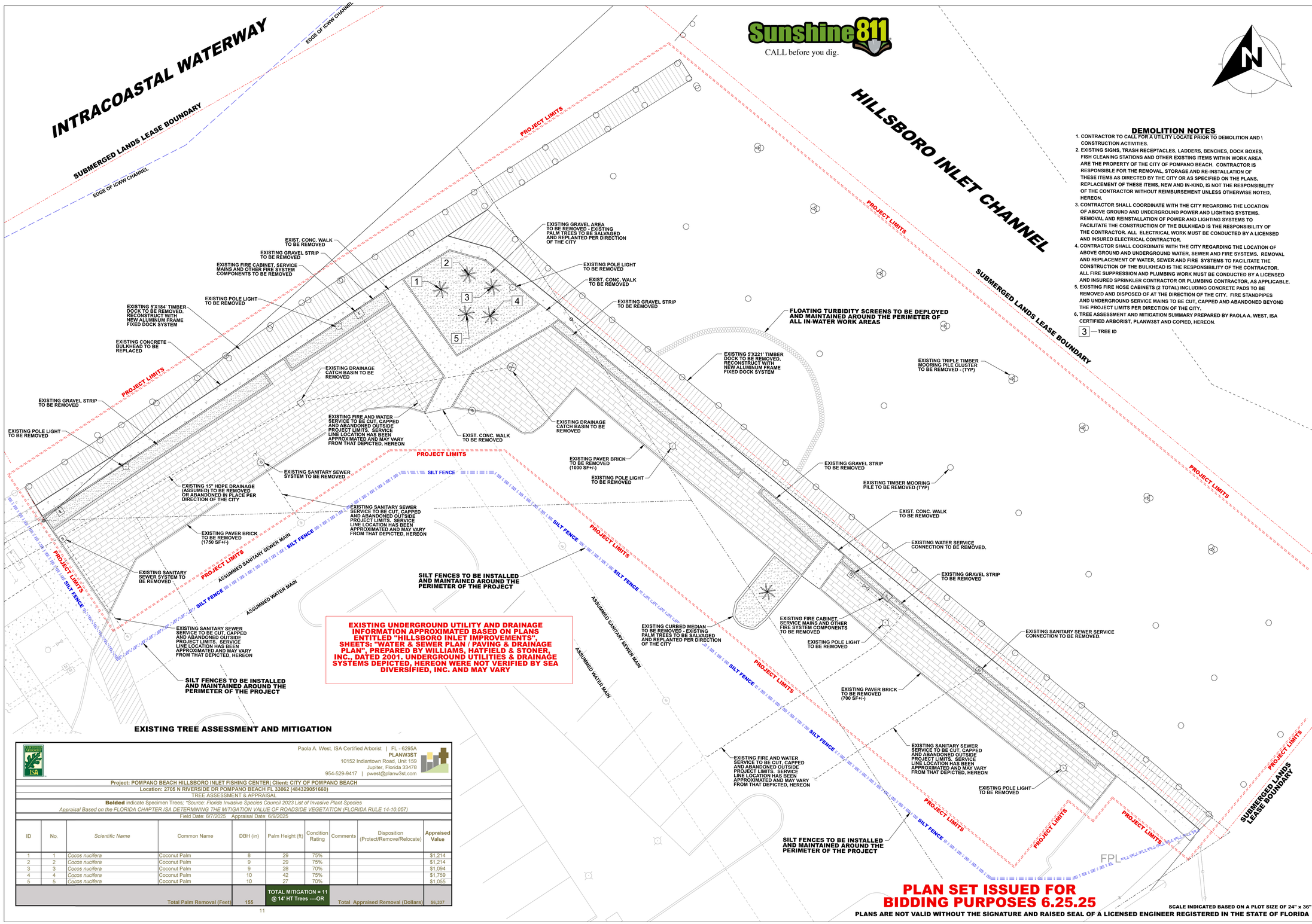
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=20'-0"
SHEET:	EX-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

22-2990.sh.4.EX-1.EXISTING.6.25.25.dgn 6/30/2025 4:13:35 PM SEA DIVERSIFIED INC.



DEMOLITION NOTES

1. CONTRACTOR TO CALL FOR A UTILITY LOCATE PRIOR TO DEMOLITION AND \ CONSTRUCTION ACTIVITIES.
2. EXISTING SIGNS, TRASH RECEPTACLES, LADDERS, BENCHES, DOCK BOXES, FISH CLEANING STATIONS AND OTHER EXISTING ITEMS WITHIN WORK AREA ARE THE PROPERTY OF THE CITY OF POMPANO BEACH. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF THESE ITEMS AS DIRECTED BY THE CITY OR AS SPECIFIED ON THE PLANS. REPLACEMENT OF THESE ITEMS, NEW AND IN-KIND, IS NOT THE RESPONSIBILITY OF THE CONTRACTOR WITHOUT REIMBURSEMENT UNLESS OTHERWISE NOTED, HEREON.
3. CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING THE LOCATION OF ABOVE GROUND AND UNDERGROUND POWER AND LIGHTING SYSTEMS. REMOVAL AND REINSTALLATION OF POWER AND LIGHTING SYSTEMS TO FACILITATE THE CONSTRUCTION OF THE BULKHEAD IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL ELECTRICAL WORK MUST BE CONDUCTED BY A LICENSED AND INSURED ELECTRICAL CONTRACTOR.
4. CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING THE LOCATION OF ABOVE GROUND AND UNDERGROUND WATER, SEWER AND FIRE SYSTEMS. REMOVAL AND REPLACEMENT OF WATER, SEWER AND FIRE SYSTEMS TO FACILITATE THE CONSTRUCTION OF THE BULKHEAD IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL FIRE SUPPRESSION AND PLUMBING WORK MUST BE CONDUCTED BY A LICENSED AND INSURED SPRINKLER CONTRACTOR OR PLUMBING CONTRACTOR, AS APPLICABLE.
5. EXISTING FIRE HOSE CABINETS (2 TOTAL) INCLUDING CONCRETE PADS TO BE REMOVED AND DISPOSED OF AT THE DIRECTION OF THE CITY. FIRE STANDPIPES AND UNDERGROUND SERVICE MAINS TO BE CUT, CAPPED AND ABANDONED BEYOND THE PROJECT LIMITS PER DIRECTION OF THE CITY.
6. TREE ASSESSMENT AND MITIGATION SUMMARY PREPARED BY PAOLA A. WEST, ISA CERTIFIED ARBORIST, PLANW3ST AND COPIED, HEREON.

3 — TREE ID

EXISTING TREE ASSESSMENT AND MITIGATION

Paola A. West, ISA Certified Arborist | FL - 6295A
PLANW3ST
10152 Indiantown Road, Unit 159
Jupiter, Florida 33478
954-529-9417 | pwest@planw3st.com

Project: POMPANO BEACH HILLSBORO INLET FISHING CENTER| Client: CITY OF POMPANO BEACH
Location: 2705 N RIVERSIDE DR POMPANO BEACH FL 33062 (484329051660)
TREE ASSESSMENT & APPRAISAL

Bolded indicate Specimen Trees; **Source: Florida Invasive Species Council 2023 List of Invasive Plant Species*
Appraisal Based on the FLORIDA CHAPTER ISA DETERMINING THE MITIGATION VALUE OF ROADSIDE VEGETATION (FLORIDA RULE 14-10.057)
Field Date: 6/7/2025 Appraisal Date: 6/9/2025

ID	No.	*Scientific Name*	Common Name	DBH (in)	Palm Height (ft)	Condition Rating	Comments	Disposition (Protect/Remove/Relocate)	Appraised Value
1	1	*Cocos nucifera*	Coconut Palm	8	29	75%			$1,214
2	2	*Cocos nucifera*	Coconut Palm	9	29	75%			$1,214
3	3	*Cocos nucifera*	Coconut Palm	9	28	70%			$1,094
4	4	*Cocos nucifera*	Coconut Palm	10	42	75%			$1,759
5	5	*Cocos nucifera*	Coconut Palm	10	27	70%			$1,055
			Total Palm Removal (Feet)	155	TOTAL MITIGATION = 11 @ 14' HT Trees ----OR			Total Appraised Removal (Dollars)	$6,337

11

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SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: DEMOLITION PLAN EXISTING TREE MITIGATION

PREPARED FOR: pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
SEA DIVERSIFIED, INC. FIRM #6776
C.A. LICENSE NUMBER 29937

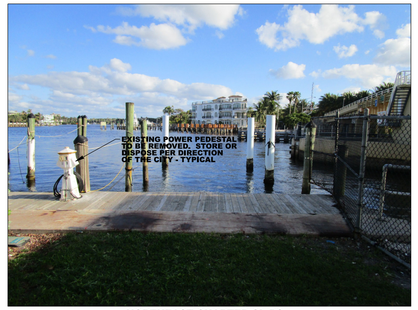
PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	D-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

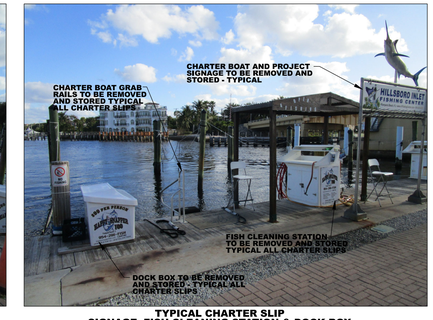
NORTHEAST PROJECT LIMITS
VIEW EAST



NORTHEAST CHARTER SLIPS
VIEW NORTH

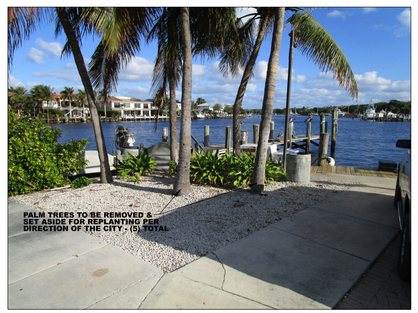
NORTH MARGINAL DOCK & PROMENADE
VIEW WEST

NORTH FIRE CABINET TO BE REMOVED



TYPICAL CHARTER SLIP
SIGNAGE, FISH CLEANING STATION & DOCK BOX

NORTHWEST TIMBER PIER
VIEW NORTH



NORTHWEST LANDSCAPE AREA
VIEW NORTH

WEST MARGINAL DOCK ALONG ICWW
VIEW SOUTH

WEST MARGINAL DOCK ALONG ICWW
VIEW NORTH

WEST FIRE CABINET TO BE REMOVED

SOUTHWEST PROJECT LIMITS
VIEW SOUTH

SOUTHWEST PROJECT LIMITS
VIEW WEST

SOUTHWEST PROJECT LIMITS
VIEW EAST

MARINA OFFICE TO REMAIN

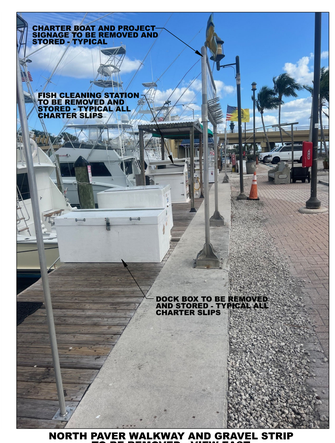
ASPHALT ROADWAY TO REMAIN

WEST MARGINAL DOCK AND BULKHEAD
VIEW NORTH

PAVER BRICK PARKING TO BE REMOVED
VIEW NORTH

SOUTHWEST CONCRETE DOCK AND BULKHEAD
TO REMAIN - VIEW SOUTH

NORTHWEST BULKHEAD AND DOCK TERMINUS
VIEW NORTH



NORTH PAVER WALKWAY AND GRAVEL STRIP
TO BE REMOVED - VIEW EAST

FACILITY SIGNAGE

PLAN SET ISSUED FOR PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

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REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER
BULKHEAD & MARGINAL DOCK
RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
DEMOLITION PHOTO
EXHIBITS

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
100 NE 3RD AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
SEA DIVERSIFIED APPLICATIONS, INC.
C.A. LICENSE NUMBER 25937

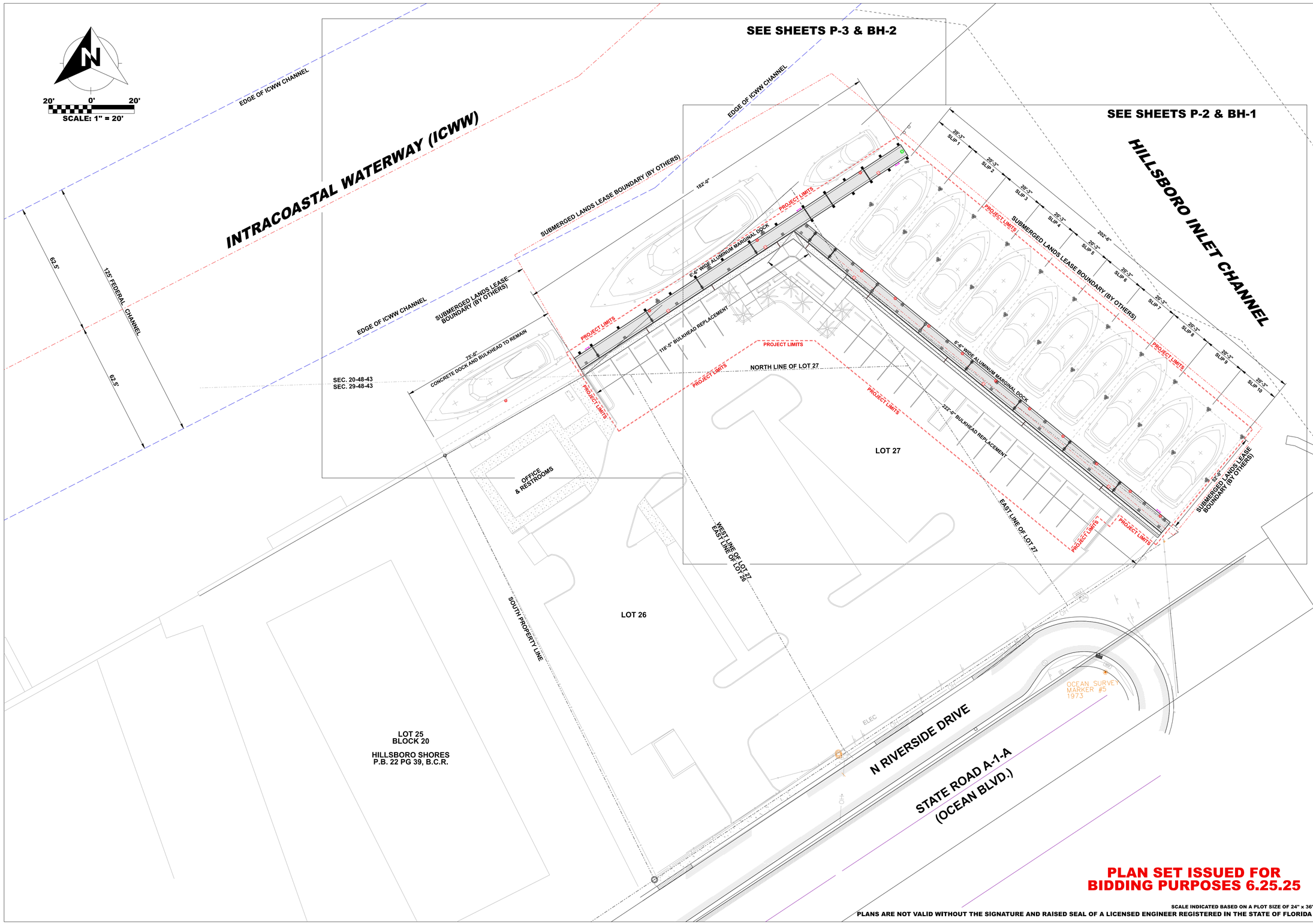
PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	N.T.S.
SHEET:	

D-2

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

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REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: **SITE PLAN**

PREPARED FOR: pompano beach. Florida's Warmest Welcome

CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:

WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY: SEA DIVERSIFIED, INC.
Surveying & Engineering Applications

160 Cypress Park Drive, Suite 114
Delray Beach, Florida 33445

TEL: (561) 243-4920

WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

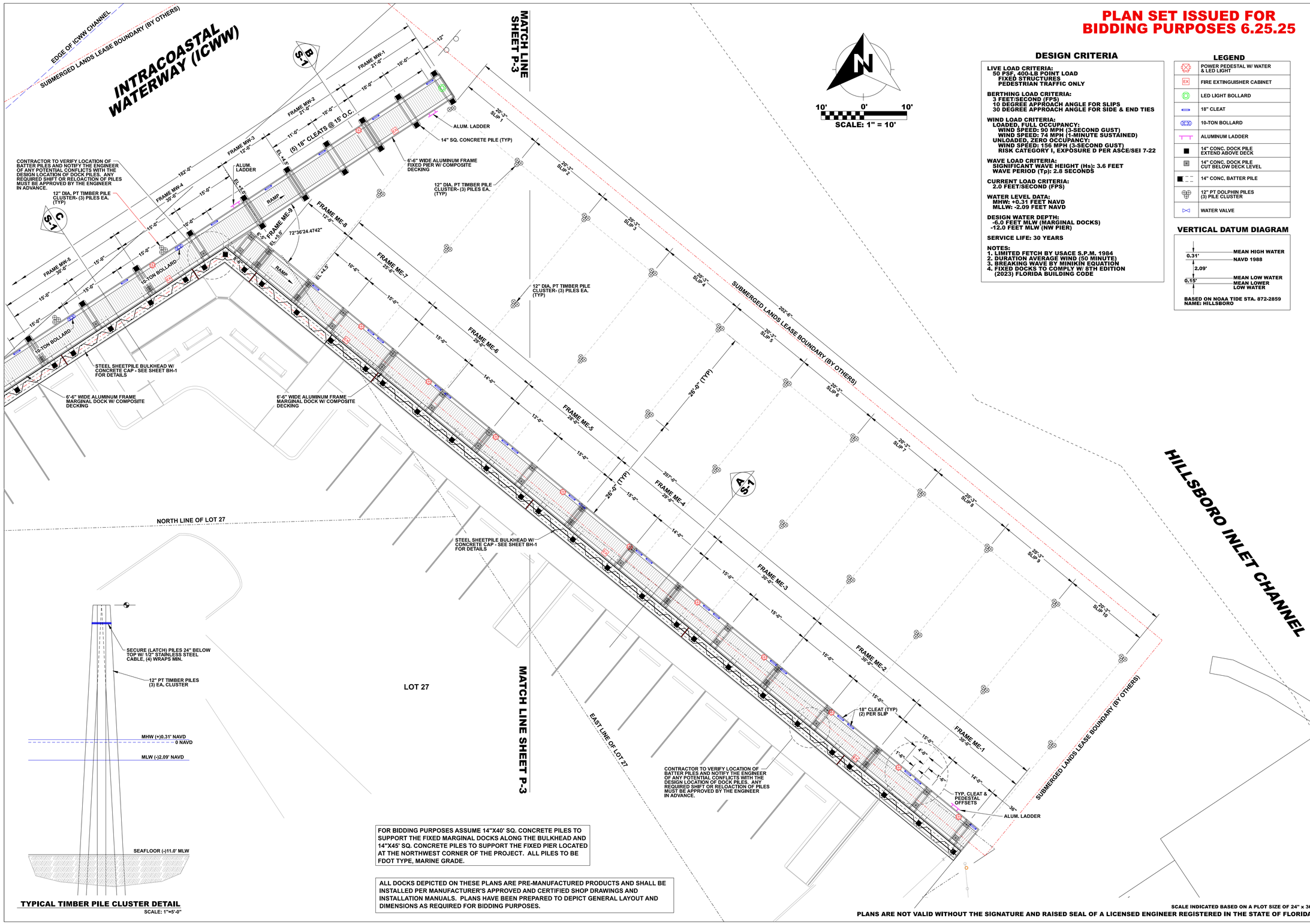
DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=20'-0"
SHEET:	P-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

22-2990.sh.8.P-1.Plan.6.25.25.dgn 7/17/2025 3:28:14 PM SEA DIVERSIFIED INC.

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25



TYPICAL TIMBER PILE CLUSTER DETAIL
SCALE: 1"=5'-0"

DESIGN CRITERIA

LIVE LOAD CRITERIA:
50 PSF, 400-LB POINT LOAD
FIXED STRUCTURES
PEDESTRIAN TRAFFIC ONLY

BERTHING LOAD CRITERIA:
3 FEET/SECOND (FPS)
10 DEGREE APPROACH ANGLE FOR SLIPS
30 DEGREE APPROACH ANGLE FOR SIDE & END TIES

WIND LOAD CRITERIA:
LOADED, FULL OCCUPANCY:
WIND SPEED: 90 MPH (3-SECOND GUST)
WIND SPEED: 74 MPH (1-MINUTE SUSTAINED)
UNLOADED, ZERO OCCUPANCY:
WIND SPEED: 156 MPH (3-SECOND GUST)
RISK CATEGORY I, EXPOSURE D PER ASCE/SEI 7-22

WAVE LOAD CRITERIA:
SIGNIFICANT WAVE HEIGHT (Hs): 3.6 FEET
WAVE PERIOD (Tp): 2.8 SECONDS

CURRENT LOAD CRITERIA:
2.0 FEET/SECOND (FPS)

WATER LEVEL DATA:
MHW: +0.31 FEET NAVD
MLLW: -2.09 FEET NAVD

DESIGN WATER DEPTH:
-5.0 FEET MLW (MARGINAL DOCKS)
-12.0 FEET MLW (NW PIER)

SERVICE LIFE: 30 YEARS

NOTES:
1. LIMITED FETCH BY USACE S.P.M. 1984
2. DURATION AVERAGE WIND (50 MINUTE)
3. BREAKING WAVE BY MINIKIN EQUATION
4. FIXED DOCKS TO COMPLY W/ 6TH EDITION (2023) FLORIDA BUILDING CODE

LEGEND

	POWER PEDESTAL W/ WATER & LED LIGHT
FX	FIRE EXTINGUISHER CABINET
	LED LIGHT BOLLARD
	18" CLEAT
	10-TON BOLLARD
	ALUMINUM LADDER
	14" CONC. DOCK PILE EXTEND ABOVE DECK
	14" CONC. DOCK PILE CUT BELOW DECK LEVEL
	14" CONC. BATTER PILE
	12" PT DOLPHIN PILES (3) PILE CLUSTER
	WATER VALVE

VERTICAL DATUM DIAGRAM

BASED ON NOAA TIDE STA. 872-2859 NAME: HILLSBORO

FOR BIDDING PURPOSES ASSUME 14"X40' SQ. CONCRETE PILES TO SUPPORT THE FIXED MARGINAL DOCKS ALONG THE BULKHEAD AND 14"X45' SQ. CONCRETE PILES TO SUPPORT THE FIXED PIER LOCATED AT THE NORTHWEST CORNER OF THE PROJECT. ALL PILES TO BE FDOT TYPE, MARINE GRADE.

ALL DOCKS DEPICTED ON THESE PLANS ARE PRE-MANUFACTURED PRODUCTS AND SHALL BE INSTALLED PER MANUFACTURER'S APPROVED AND CERTIFIED SHOP DRAWINGS AND INSTALLATION MANUALS. PLANS HAVE BEEN PREPARED TO DEPICT GENERAL LAYOUT AND DIMENSIONS AS REQUIRED FOR BIDDING PURPOSES.

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

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REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: DOCK PLAN DETAIL - EAST

PREPARED FOR: pompano beach. Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

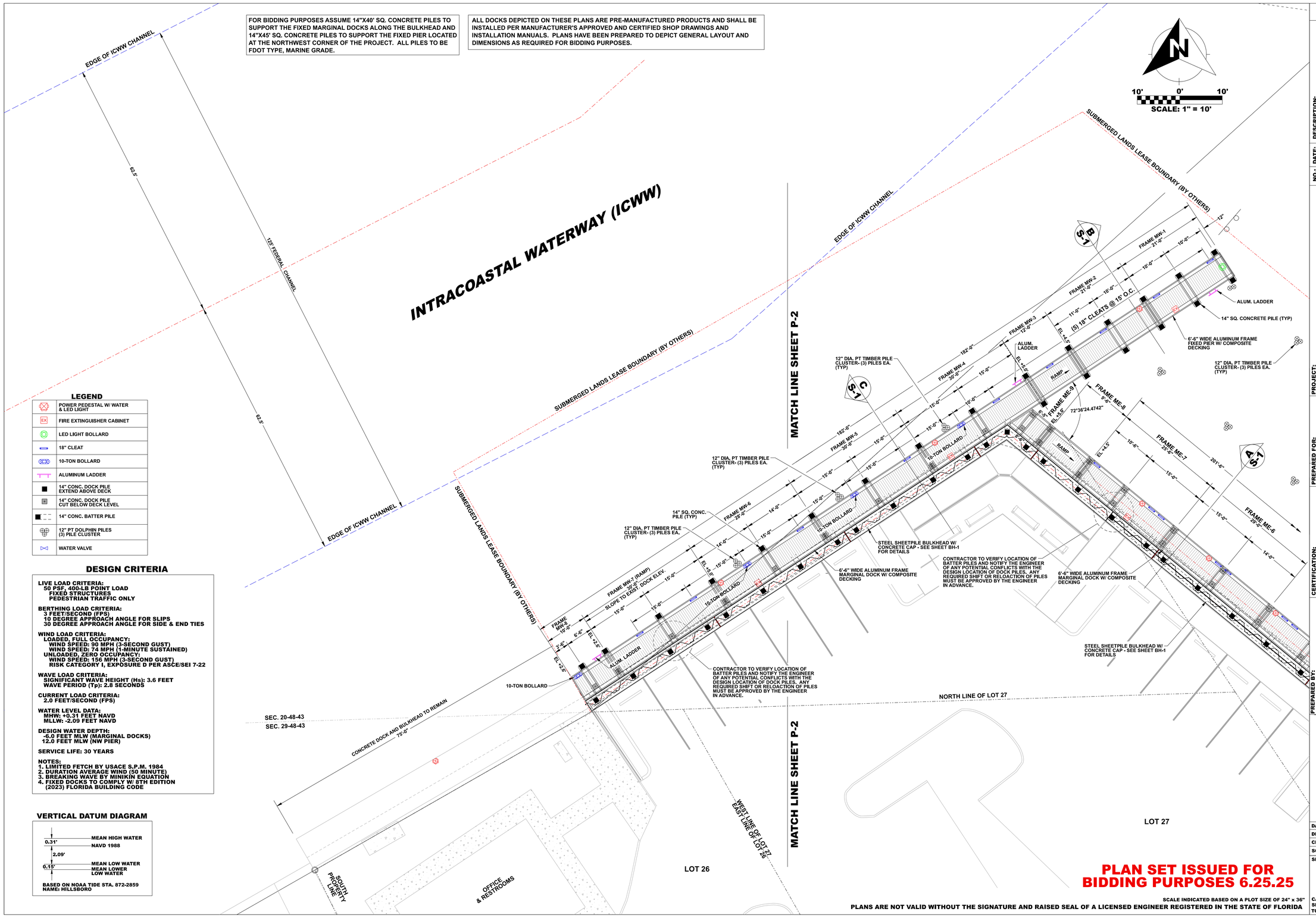
DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"
SHEET:	P-2

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

FOR BIDDING PURPOSES ASSUME 14"X40' SQ. CONCRETE PILES TO SUPPORT THE FIXED MARGINAL DOCKS ALONG THE BULKHEAD AND 14"X45' SQ. CONCRETE PILES TO SUPPORT THE FIXED PIER LOCATED AT THE NORTHWEST CORNER OF THE PROJECT. ALL PILES TO BE FDOT TYPE, MARINE GRADE.

ALL DOCKS DEPICTED ON THESE PLANS ARE PRE-MANUFACTURED PRODUCTS AND SHALL BE INSTALLED PER MANUFACTURER'S APPROVED AND CERTIFIED SHOP DRAWINGS AND INSTALLATION MANUALS. PLANS HAVE BEEN PREPARED TO DEPICT GENERAL LAYOUT AND DIMENSIONS AS REQUIRED FOR BIDDING PURPOSES.



LEGEND

	POWER PEDESTAL W/ WATER & LED LIGHT
EX	FIRE EXTINGUISHER CABINET
	LED LIGHT BOLLARD
	18" CLEAT
	10-TON BOLLARD
	ALUMINUM LADDER
	14" CONC. DOCK PILE EXTEND ABOVE DECK
	14" CONC. DOCK PILE CUT BELOW DECK LEVEL
	14" CONC. BATTER PILE
	12" PT DOLPHIN PILES (3) PILE CLUSTER
	WATER VALVE

DESIGN CRITERIA

LIVE LOAD CRITERIA:
50 PSF, 400-LB POINT LOAD
FIXED STRUCTURES
PEDESTRIAN TRAFFIC ONLY

BERTHING LOAD CRITERIA:
3 FEET/SECOND (FPS)
10 DEGREE APPROACH ANGLE FOR SLIPS
30 DEGREE APPROACH ANGLE FOR SIDE & END TIES

WIND LOAD CRITERIA:
LOADED, FULL OCCUPANCY:
WIND SPEED: 90 MPH (3-SECOND GUST)
WIND SPEED: 74 MPH (1-MINUTE SUSTAINED)
UNLOADED, ZERO OCCUPANCY:
WIND SPEED: 156 MPH (3-SECOND GUST)
RISK CATEGORY I, EXPOSURE D PER ASCE/SEI 7-22

WAVE LOAD CRITERIA:
SIGNIFICANT WAVE HEIGHT (Hs): 3.6 FEET
WAVE PERIOD (Tp): 2.8 SECONDS

CURRENT LOAD CRITERIA:
2.0 FEET/SECOND (FPS)

WATER LEVEL DATA:
MHW: +0.31 FEET NAVD
MLLW: -2.09 FEET NAVD

DESIGN WATER DEPTH:
-6.0 FEET MLW (MARGINAL DOCKS)
12.0 FEET MLW (NW PIER)

SERVICE LIFE: 30 YEARS

NOTES:
1. LIMITED FETCH BY USACE S.P.M. 1984
2. DURATION AVERAGE WIND (50 MINUTE)
3. BREAKING WAVE BY MINIKIN EQUATION
4. FIXED DOCKS TO COMPLY W/ 8TH EDITION (2023) FLORIDA BUILDING CODE

VERTICAL DATUM DIAGRAM

	MEAN HIGH WATER
0.31'	NAVD 1988
2.09'	
0.15'	MEAN LOW WATER
	MEAN LOWER LOW WATER

BASED ON NOAA TIDE STA. 872-2859
NAME: HILLSBORO

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
DOCK PLAN DETAIL - WEST

PREPARED FOR:
pompano beach. Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41584
SEA DIVERSIFIED, INCORPORATED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"
SHEET:	

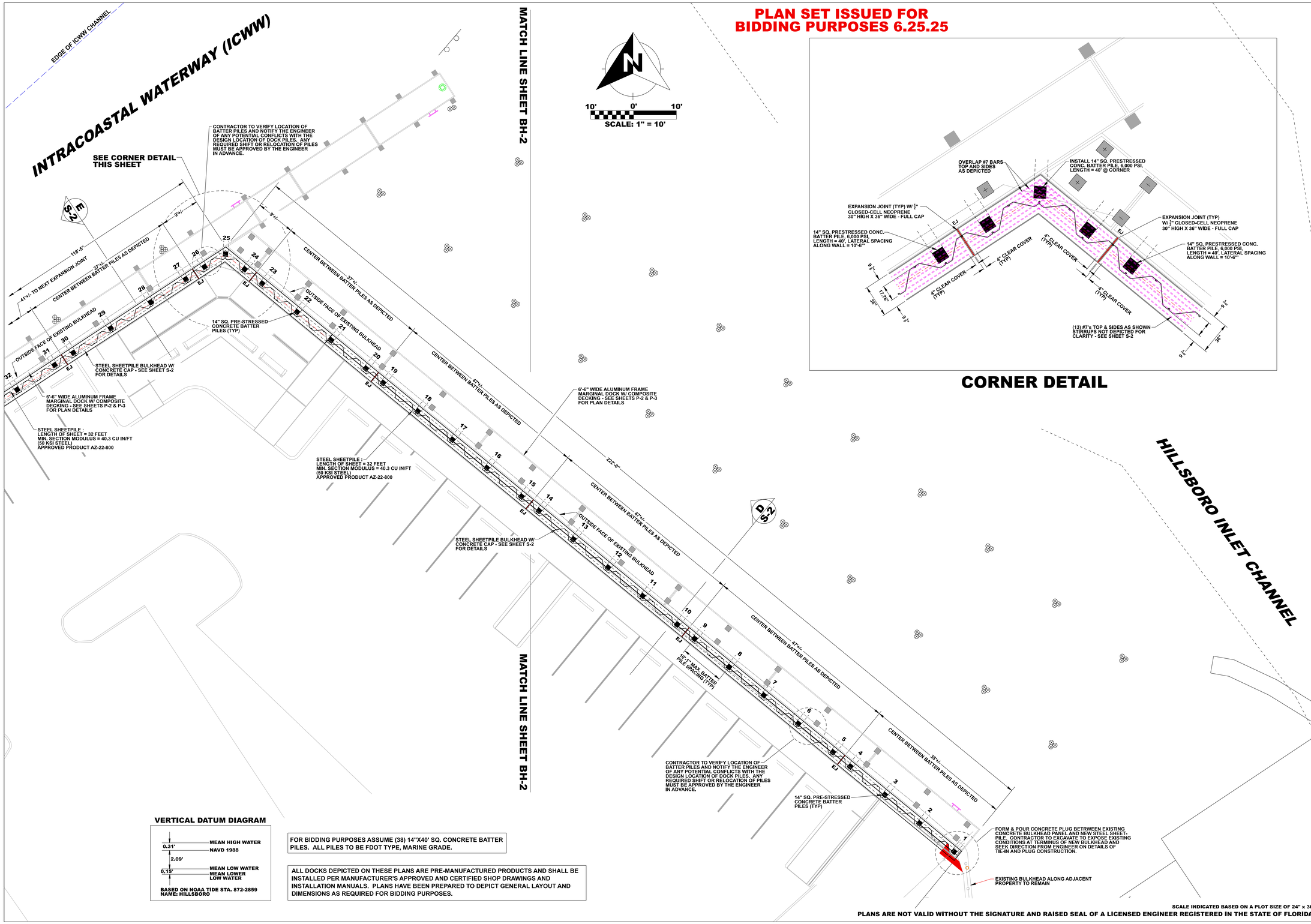
P-3

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

22-2990.sh.10.P-3.Plan Details.6.25.25.dgn 7/17/2025 3:31:06 PM SEA DIVERSIFIED INC.

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25



CORNER DETAIL

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

SDI P.N. 22-2990

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
BULKHEAD PLAN DETAIL - EAST

PREPARED FOR:
pompano beach. Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:

SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

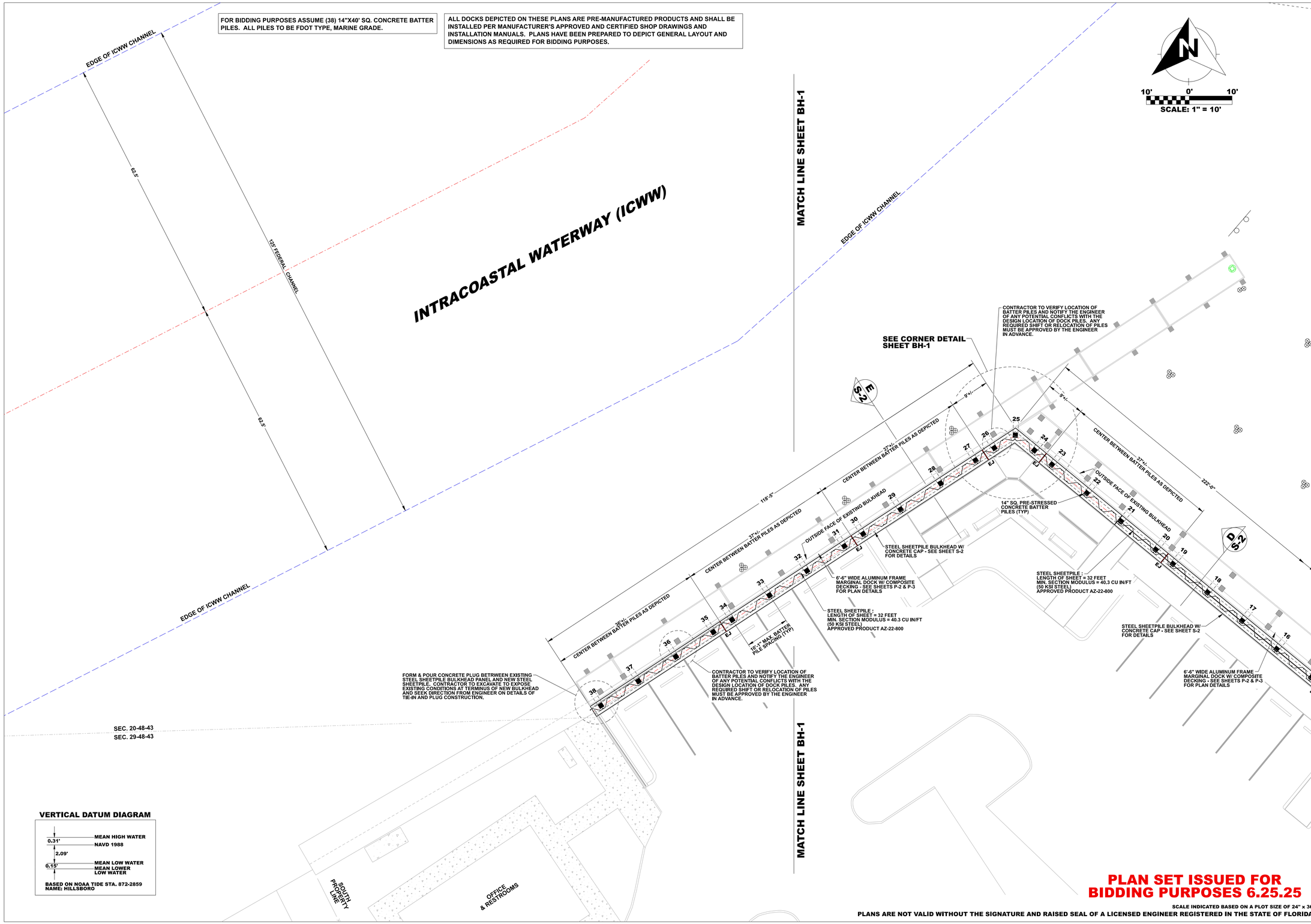
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"
SHEET:	BH-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

FOR BIDDING PURPOSES ASSUME (38) 14"X40' SQ. CONCRETE BATTER PILES. ALL PILES TO BE FDOT TYPE, MARINE GRADE.

ALL DOCKS DEPICTED ON THESE PLANS ARE PRE-MANUFACTURED PRODUCTS AND SHALL BE INSTALLED PER MANUFACTURER'S APPROVED AND CERTIFIED SHOP DRAWINGS AND INSTALLATION MANUALS. PLANS HAVE BEEN PREPARED TO DEPICT GENERAL LAYOUT AND DIMENSIONS AS REQUIRED FOR BIDDING PURPOSES.



VERTICAL DATUM DIAGRAM

	MEAN HIGH WATER
0.31'	NAVD 1988
2.09'	
	MEAN LOW WATER
0.15'	MEAN LOWER LOW WATER

BASED ON NOAA TIDE STA. 872-2859
NAME: HILLSBORO

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

SDI P.N. 22-2990

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER
BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
BULKHEAD PLAN DETAIL - WEST

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

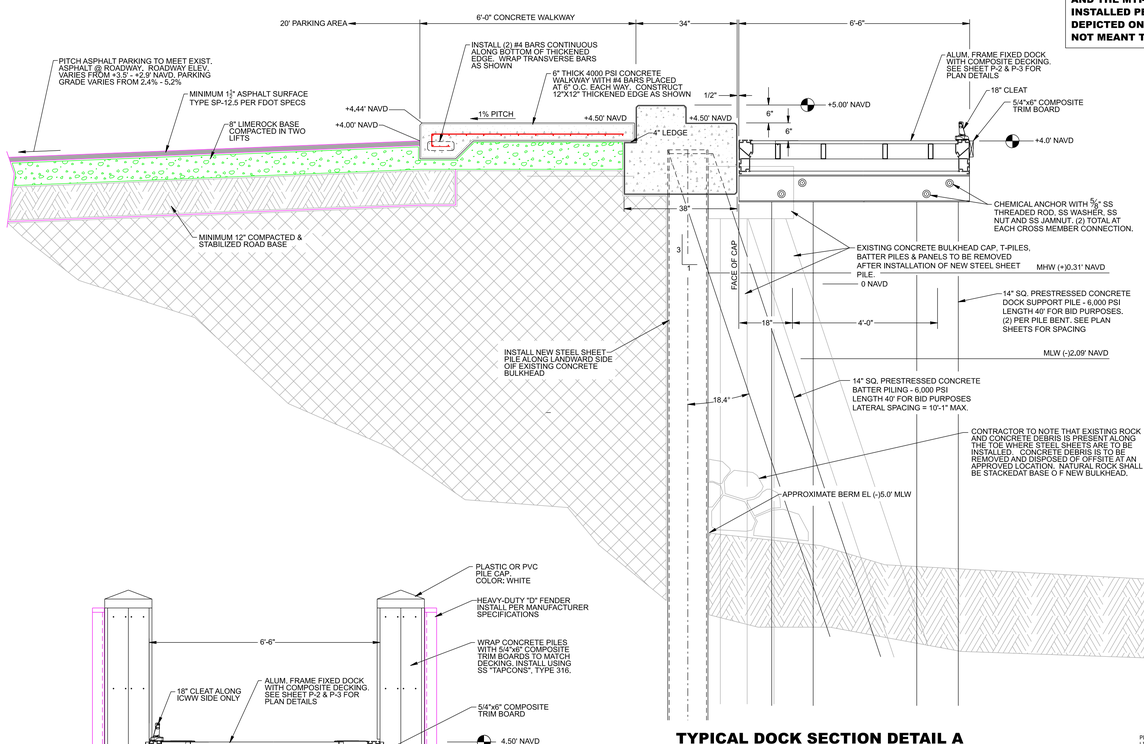
DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"
SHEET:	

BH-2

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

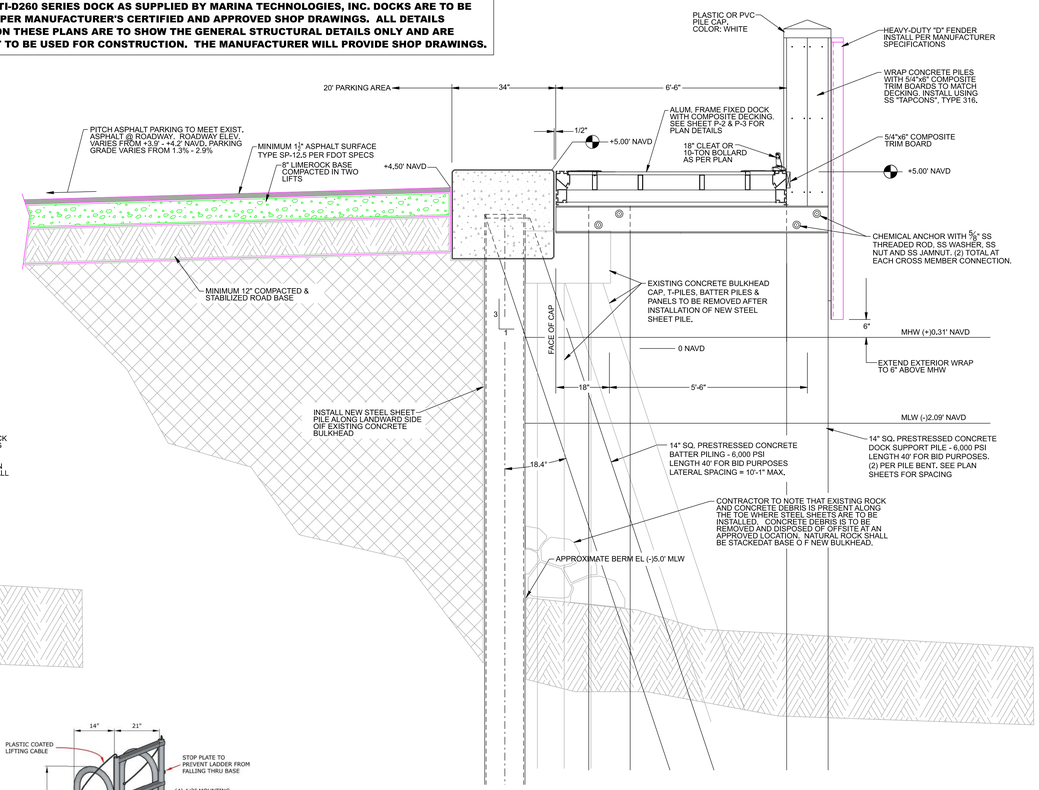
PLAN SET ISSUED FOR BIDDING PURPOSES 5.6.25

DOCK STRUCTURES ARE PRE-MANUFACTURED ALUMINUM PRODUCTS WITH COMPOSITE DECKING. ALUMINUM FRAMES ARE TO BE HEAVY-DUTY WITH DOUBLE TRACK EXTERNAL EXTRUSIONS FOR CLEAT / BOLLARD AND OTHER MARINA COMPONENT EASE OF INSTALLATION AND ADJUSTMENT. PRE-APPROVED SYSTEMS INCLUDE THE 950 SERIES DOCK AS SUPPLIED BY GOLDEN MARINE SYSTEMS AND THE MTI-D260 SERIES DOCK AS SUPPLIED BY MARINA TECHNOLOGIES, INC. DOCKS ARE TO BE INSTALLED PER MANUFACTURER'S CERTIFIED AND APPROVED SHOP DRAWINGS. ALL DETAILS DEPICTED ON THESE PLANS ARE TO SHOW THE GENERAL STRUCTURAL DETAILS ONLY AND ARE NOT MEANT TO BE USED FOR CONSTRUCTION. THE MANUFACTURER WILL PROVIDE SHOP DRAWINGS.



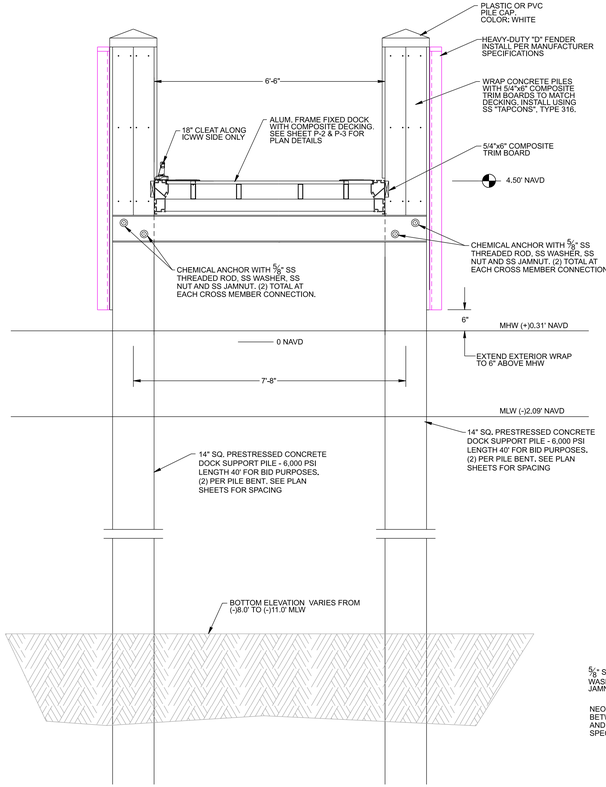
TYPICAL DOCK SECTION DETAIL A ALONG HILLSBORO INLET SIDE OF PROPERTY

SCALE: 1"=2'-0"



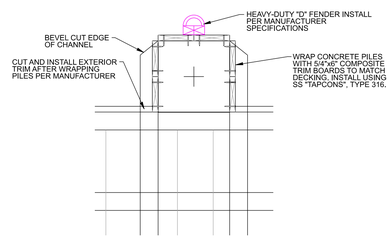
TYPICAL DOCK SECTION DETAIL C ALONG ICWW SIDE OF PROPERTY

SCALE: 1"=2'-0"



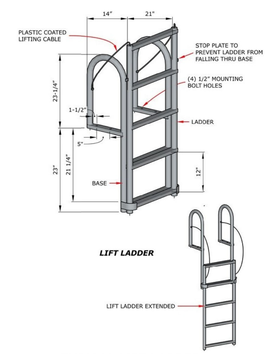
TYPICAL DOCK SECTION DETAIL B ALONG ICWW SIDE OF PROPERTY

SCALE: 1"=2'-0"



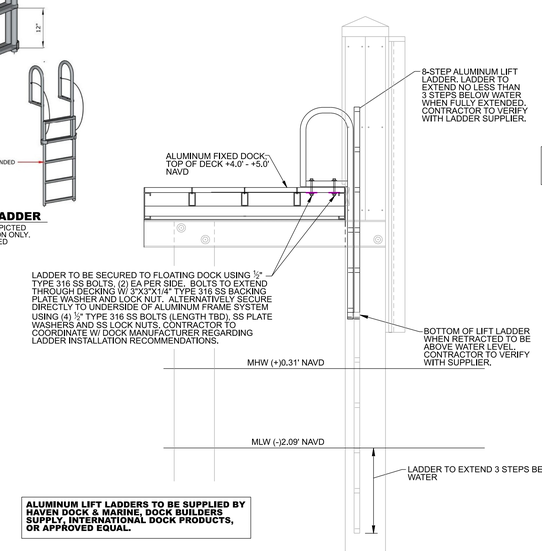
PILE WRAP DETAIL

SCALE: 1" = 1'-0"



TYPICAL LIFT LADDER

NOTE: 5-STEP LADDER DEPICTED FOR TYPICAL ILLUSTRATION ONLY. 8-STEP LADDERS REQUIRED



ALUMINUM LIFT LADDERS TO BE SUPPLIED BY HAVEN DOCK & MARINE, DOCK BUILDERS SUPPLY, INTERNATIONAL DOCK PRODUCTS, OR APPROVED EQUAL.

TYPICAL LADDER DETAIL

N.T.S.

NOTE: ALL CONCRETE PILES TO BE FDOT TYPE, MARINE GRADE

DESIGN CRITERIA

LIVE LOAD CRITERIA:
50 PSF, 400-LB POINT LOAD
FIXED STRUCTURES
PEDESTRIAN TRAFFIC ONLY

BERTHING LOAD CRITERIA:
3 FEET/SECOND (FPS)
10 DEGREE APPROACH ANGLE FOR SLIPS
30 DEGREE APPROACH ANGLE FOR SIDE & END TIES

WIND LOAD CRITERIA:
LOADED, FULL OCCUPANCY:
WIND SPEED: 90 MPH (3-SECOND GUST)
WIND SPEED: 74 MPH (1-MINUTE SUSTAINED)
UNLOADED, ZERO OCCUPANCY:
WIND SPEED: 150 MPH (3-SECOND GUST)
RISK CATEGORY I, EXPOSURE D PER ASCE/SEI 7-22 (FIXED STRUCTURES & BOAT LIFTS)

WAVE LOAD CRITERIA:
SIGNIFICANT WAVE HEIGHT (Hs): 3.6 FEET
WAVE PERIOD (Tp): 2.8 SECONDS

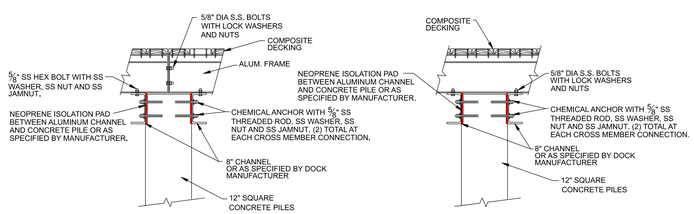
CURRENT LOAD CRITERIA:
2.0 FEET/SECOND (FPS)

WATER LEVEL DATA:
MHW: +0.31 FEET NAVD
MLW: -2.09 FEET NAVD

DESIGN WATER DEPTH:
-6.0 FEET MLW (MARGINAL DOCKS)
-12.0 FEET MLW (NW PIER)

SERVICE LIFE: 30 YEARS

NOTES:
1. LIMITED FETCH BY USACE S.P.M. 1984
2. DURATION AVERAGE WIND (50 MINUTE)
3. BREAKING WAVE BY MINIKIN EQUATION
4. FIXED DOCKS AND BOAT LIFTS TO COMPLY W/ 8TH EDITION (2023) FLORIDA BUILDING CODE



NOTE: CONTRACTOR TO INSTALL 1/8" NEOPRENE BUFFER PAD BETWEEN ALL ALUMINUM TO CONCRETE CONNECTIONS

ALUMINUM FRAME JOINT AND MID-SPAN CONNECTION DETAILS

N.T.S.

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: TYPICAL DOCK DETAILS

PREPARED FOR: pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	AS SHOWN
SHEET:	S-1

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

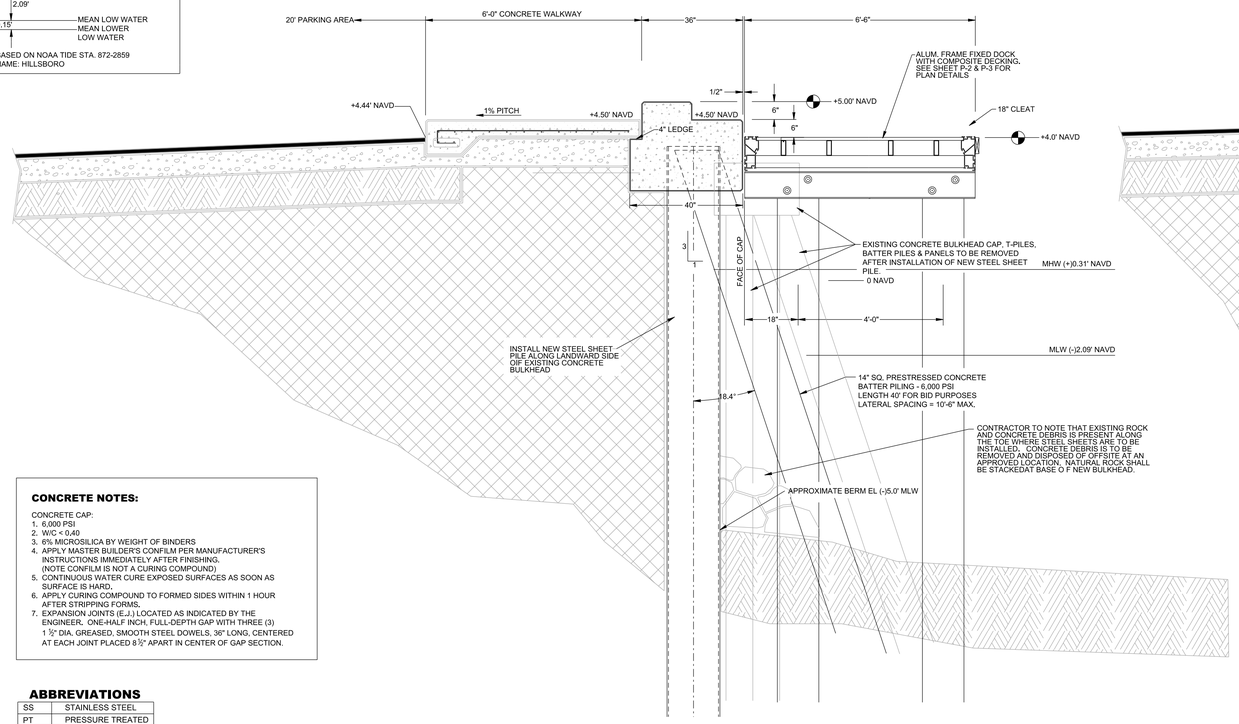
CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

VERTICAL DATUM DIAGRAM

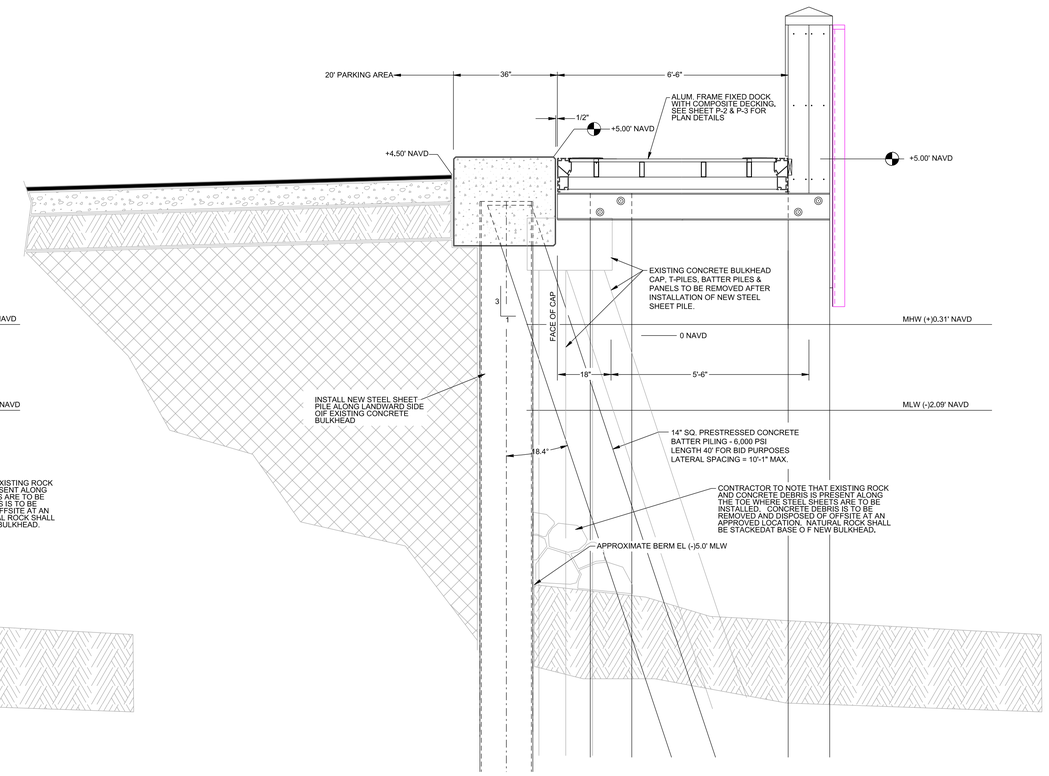
0.31'	MEAN HIGH WATER
	NAVD 1988
2.09'	
0.15'	MEAN LOW WATER
	MEAN LOWER LOW WATER

BASED ON NOAA TIDE STA. 872-2859
NAME: HILLSBORO



TYPICAL BULKHEAD SECTION DETAIL D ALONG HILLSBORO INLET SIDE OF PROPERTY

SCALE: 1"=2'-0"



TYPICAL BULKHEAD SECTION DETAIL E ALONG ICWW SIDE OF PROPERTY

SCALE: 1"=2'-0"

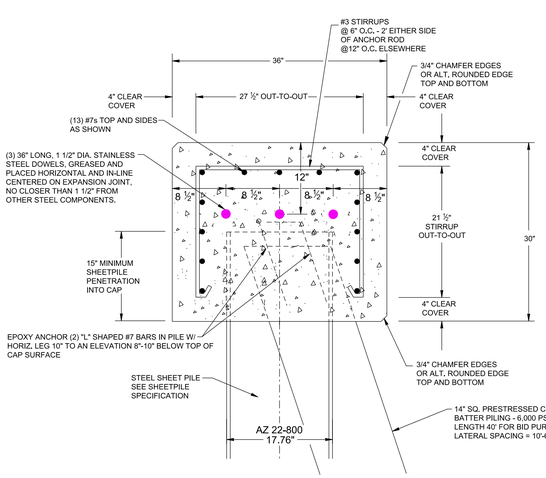
CONCRETE NOTES:

CONCRETE CAP:
1. 6,000 PSI
2. W/C < 0.40
3. 6% MICROSILICA BY WEIGHT OF BINDERS
4. APPLY MASTER BUILDER'S CONFILM PER MANUFACTURER'S INSTRUCTIONS IMMEDIATELY AFTER FINISHING. (NOTE CONFILM IS NOT A CURING COMPOUND)
5. CONTINUOUS WATER CURE EXPOSED SURFACES AS SOON AS SURFACE IS HARD.
6. APPLY CURING COMPOUND TO FORMED SIDES WITHIN 1 HOUR AFTER STRIPPING FORMS.
7. EXPANSION JOINTS (E.J.) LOCATED AS INDICATED BY THE ENGINEER. ONE-HALF INCH, FULL-DEPTH GAP WITH THREE (3) 1 ½" DIA. GREASED, SMOOTH STEEL DOWELS, 36" LONG, CENTERED AT EACH JOINT PLACED 8½" APART IN CENTER OF GAP SECTION.

ABBREVIATIONS

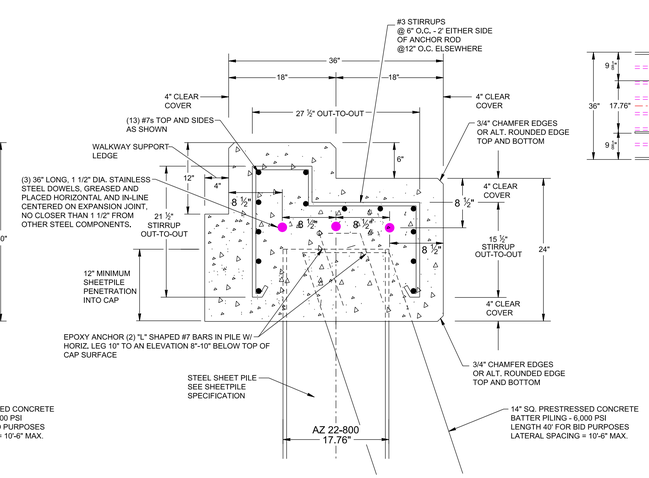
SS	STAINLESS STEEL
PT	PRESSURE TREATED
TYP	TYPICAL
MIN	MINIMUM
DIA	DIAMETER

NOTE: ALL CONCRETE PILES TO BE FDOT TYPE, MARINE GRADE



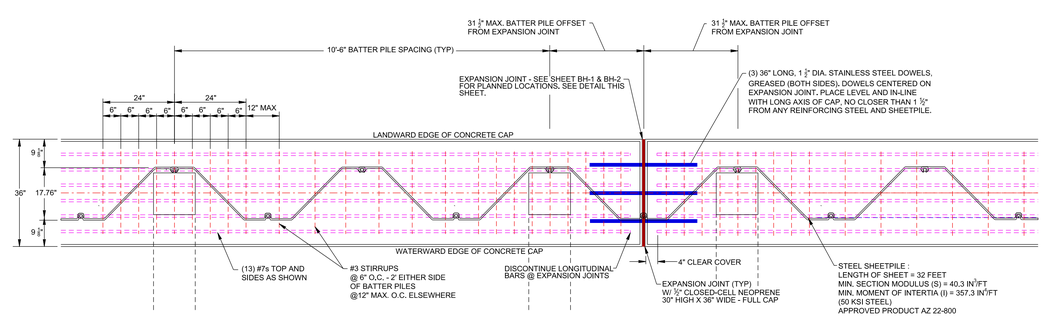
TYPICAL ICWW CAP SECTION DETAIL E

NOT TO SCALE



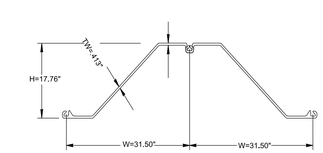
TYPICAL INLET CAP SECTION DETAIL D

NOT TO SCALE



TYPICAL CAP PLAN DETAIL

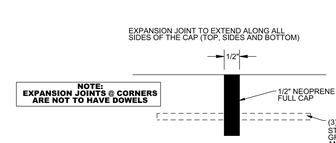
SCALE: 1"=2'-0"



STEEL SHEETPILE DETAIL

TYPICAL OR EQUIVALENT — NOT TO SCALE

STEEL SHEETPILE :
LENGTH OF SHEET = 32.0 FEET
MIN. SECTION MODULUS (S) = 40.3 IN³/FT - 50 KSI STEEL
MIN. MOMENT OF INTERTIA (I) = 357.3 IN⁴/FT
APPROVED PRODUCT AZ 22-800 OR EQUIVALENT
HOT-ROLLED SHEET ONLY- CAP WIDTH EQUALS 36"
SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING STEEL SHEETPILE.



EXPANSION JOINT DETAIL

NOT TO SCALE

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: TYPICAL BULKHEAD DETAILS

PREPARED FOR: pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

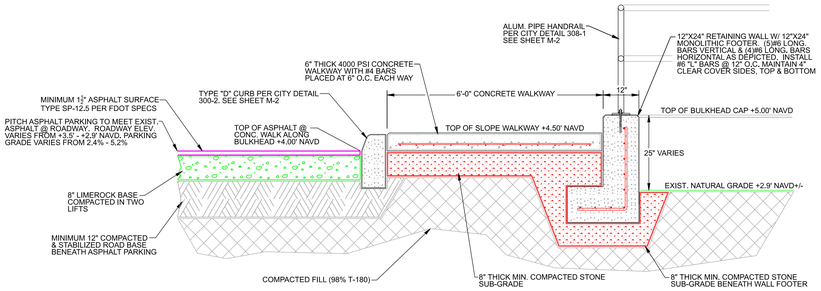
CERTIFICATION: WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
SEA DIVERSIFIED, INC. (FORMERLY NAMED), INC.
C.A. LICENSE NUMBER 25937

PREPARED BY: SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	AS SHOWN
SHEET:	S-2

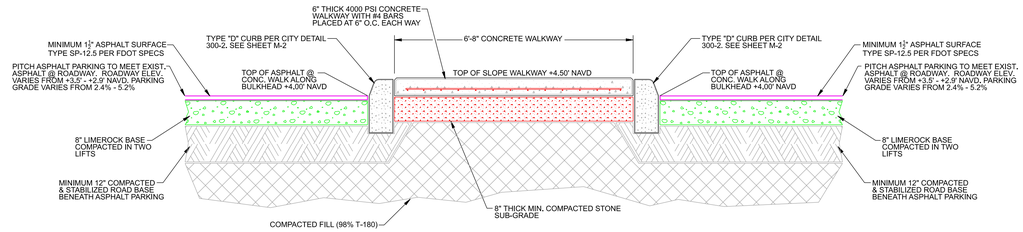
CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



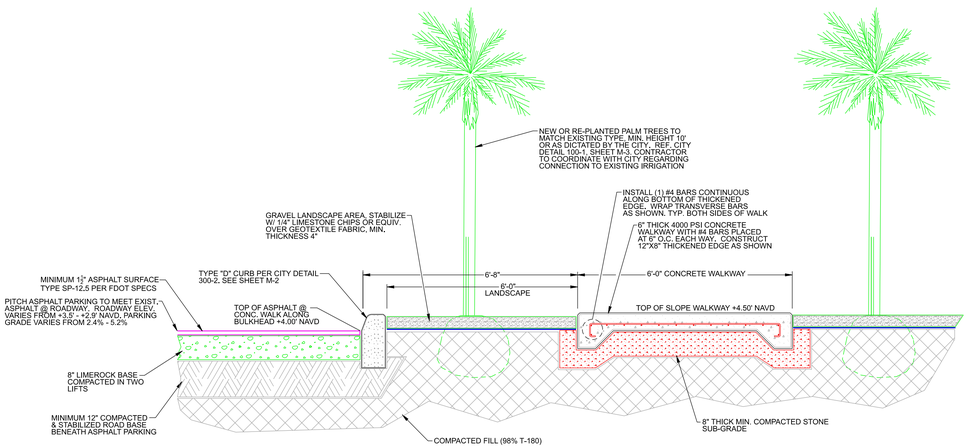
TYPICAL WALKWAY SECTION DETAIL F @ NORTH - EAST ACCESS

SCALE: 1"=2'-0"



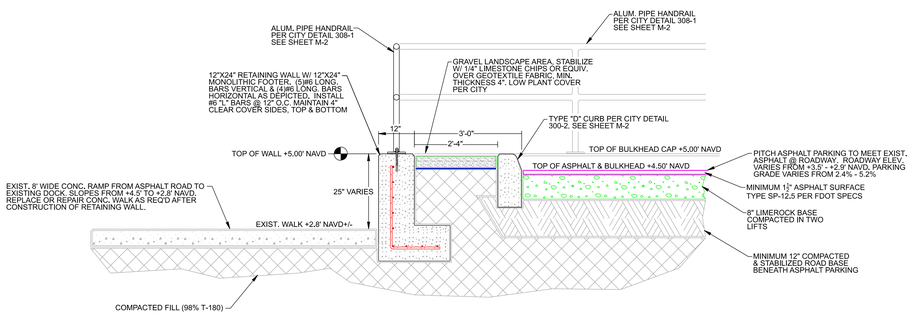
TYPICAL WALKWAY SECTION DETAIL G @ NORTH - CENTRAL ACCESS

SCALE: 1"=2'-0"



TYPICAL ACCESS WALKWAY SECTION DETAIL H @ NORTHWEST CORNER OF PROJECT

SCALE: 1"=2'-0"

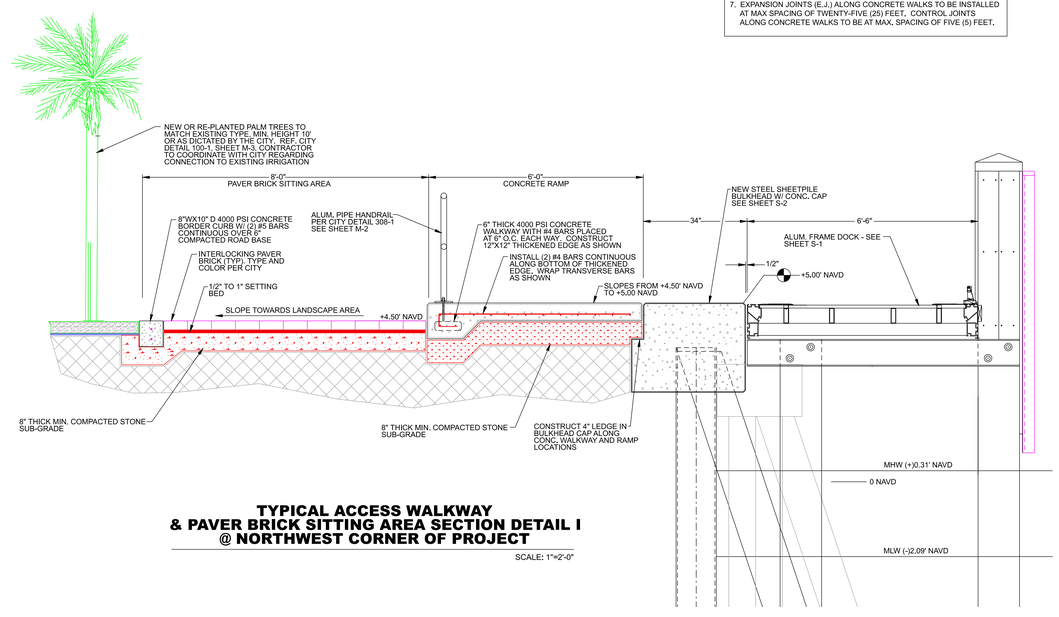


TYPICAL RETAINING WALL SECTION DETAIL J @ SOUTH TERMINUS OF PROJECT

SCALE: 1"=2'-0"

CONCRETE NOTES:

CONCRETE CAP:
1. 6,000 PSI
2. W/C < 0.40
3. 6% MICROSILICA BY WEIGHT OF BINDERS
4. APPLY MASTER BUILDER'S CONFILM PER MANUFACTURER'S INSTRUCTIONS IMMEDIATELY AFTER FINISHING. (NOTE CONFILM IS NOT A CURING COMPOUND)
5. CONTINUOUS WATER CURE EXPOSED SURFACES AS SOON AS SURFACE IS HARD.
6. APPLY CURING COMPOUND TO FORMED SIDES WITHIN 1 HOUR AFTER STRIPPING FORMS.
7. EXPANSION JOINTS (E.J.) ALONG CONCRETE WALKS TO BE INSTALLED AT MAX SPACING OF TWENTY-FIVE (25) FEET. CONTROL JOINTS ALONG CONCRETE WALKS TO BE AT MAX. SPACING OF FIVE (5) FEET.



TYPICAL ACCESS WALKWAY & PAVER BRICK SITTING AREA SECTION DETAIL I @ NORTHWEST CORNER OF PROJECT

SCALE: 1"=2'-0"

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: TYPICAL SECTION DETAILS

PREPARED FOR: pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	AS SHOWN
SHEET:	S-3
CADD ID:	
SHEET NO.:	
TOTAL NUMBER OF SHEETS:	

SDI P.N. 22-2990

PROPOSED PARKING COUNT

EXISTING MARKED (ASPHALT)	35
NEW MARKED (ASPHALT)	21
EXISTING HANDICAP	3
TOTAL	59

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

SDI P.N. 22-2990

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
UPLAND SITE PLAN

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41164
KAREN M. FIGUEROA (LICENSED), INC.
C.A. LICENSE NUMBER 29937

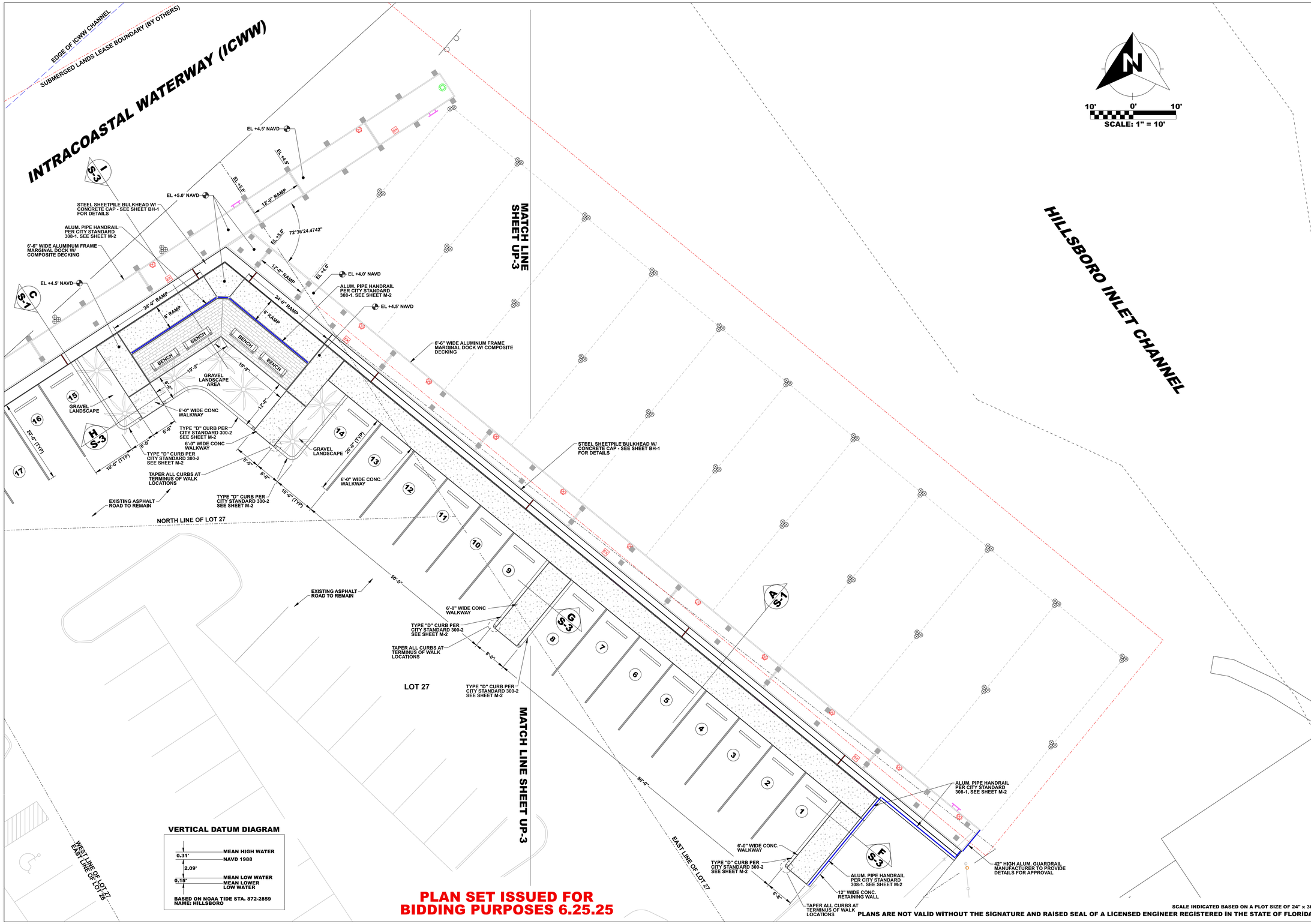
PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Cypress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=20'-0"
SHEET:	

UP-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:



PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: **HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION**

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: **UPLAND PLAN DETAIL - EAST**

PREPARED FOR: pompano beach. Florida's Warmest Welcome

CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:

WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 2593

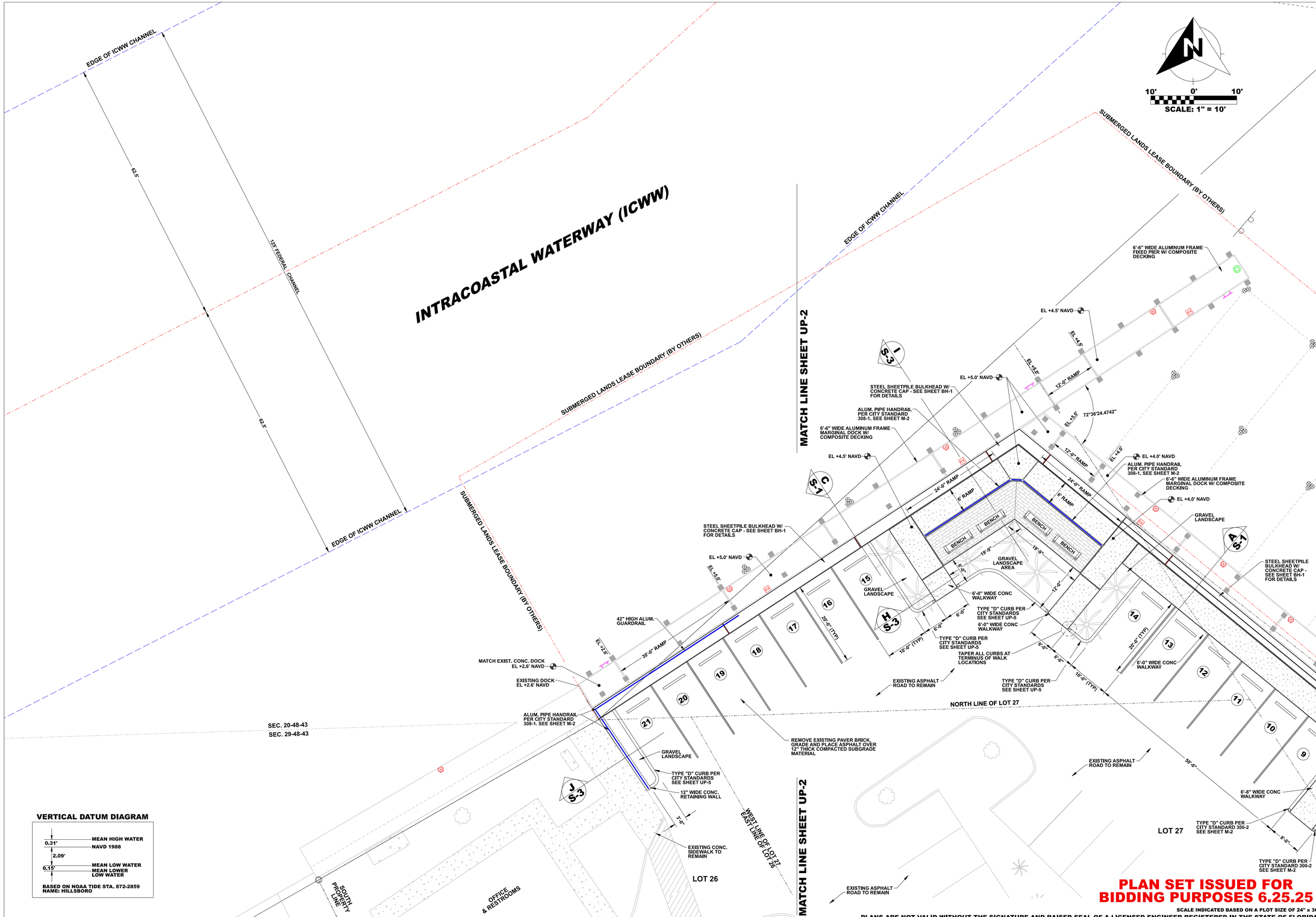
PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"

SHEET: **UP-2**

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
UPLAND PLAN DETAIL - WEST

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
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DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'-0"
SHEET:	

UP-3

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

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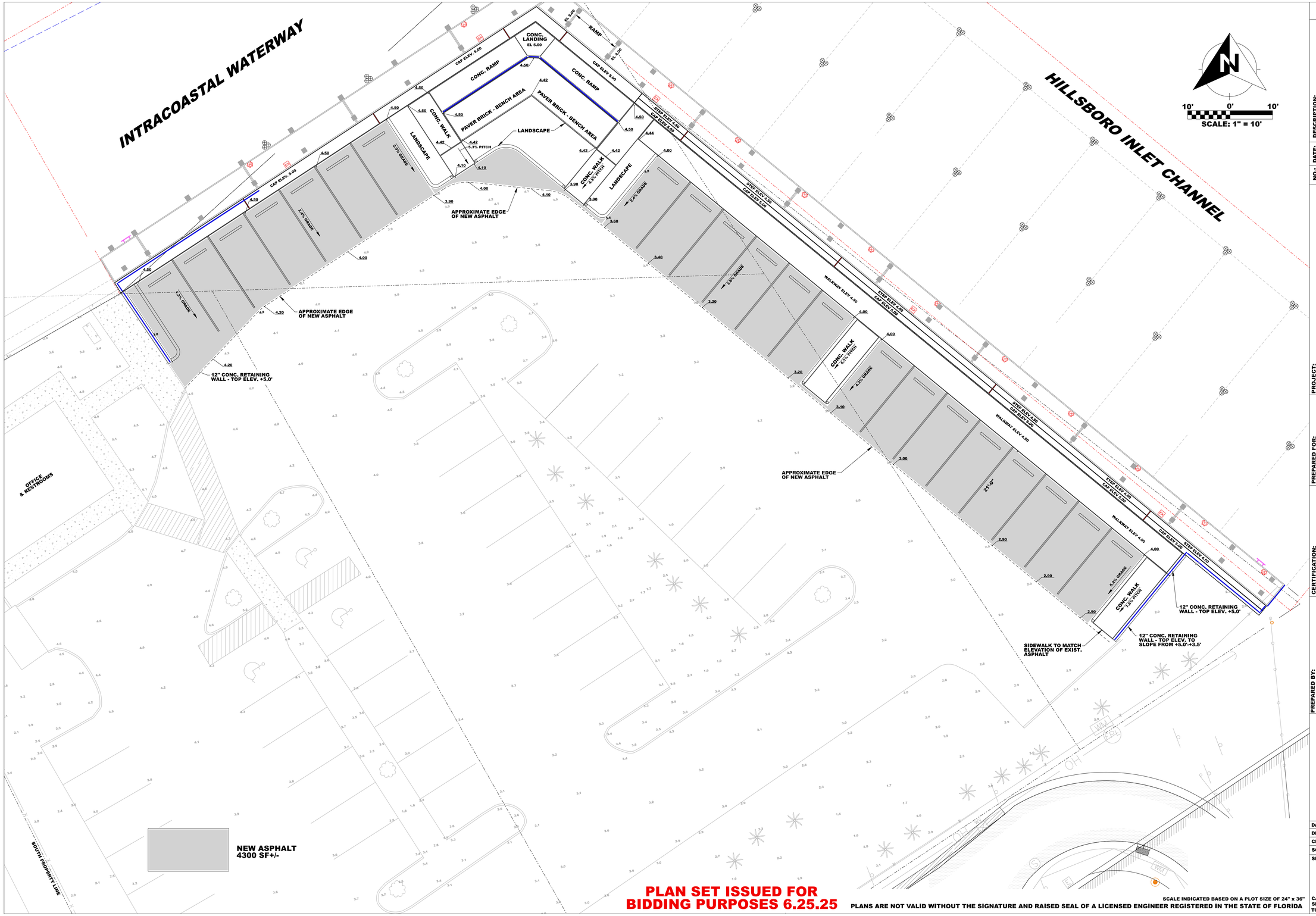


PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
SITE GRADING PLAN

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR. P.E.
FLORIDA REGISTRATION NUMBER 41164
FOR: SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

SEA DIVERSIFIED

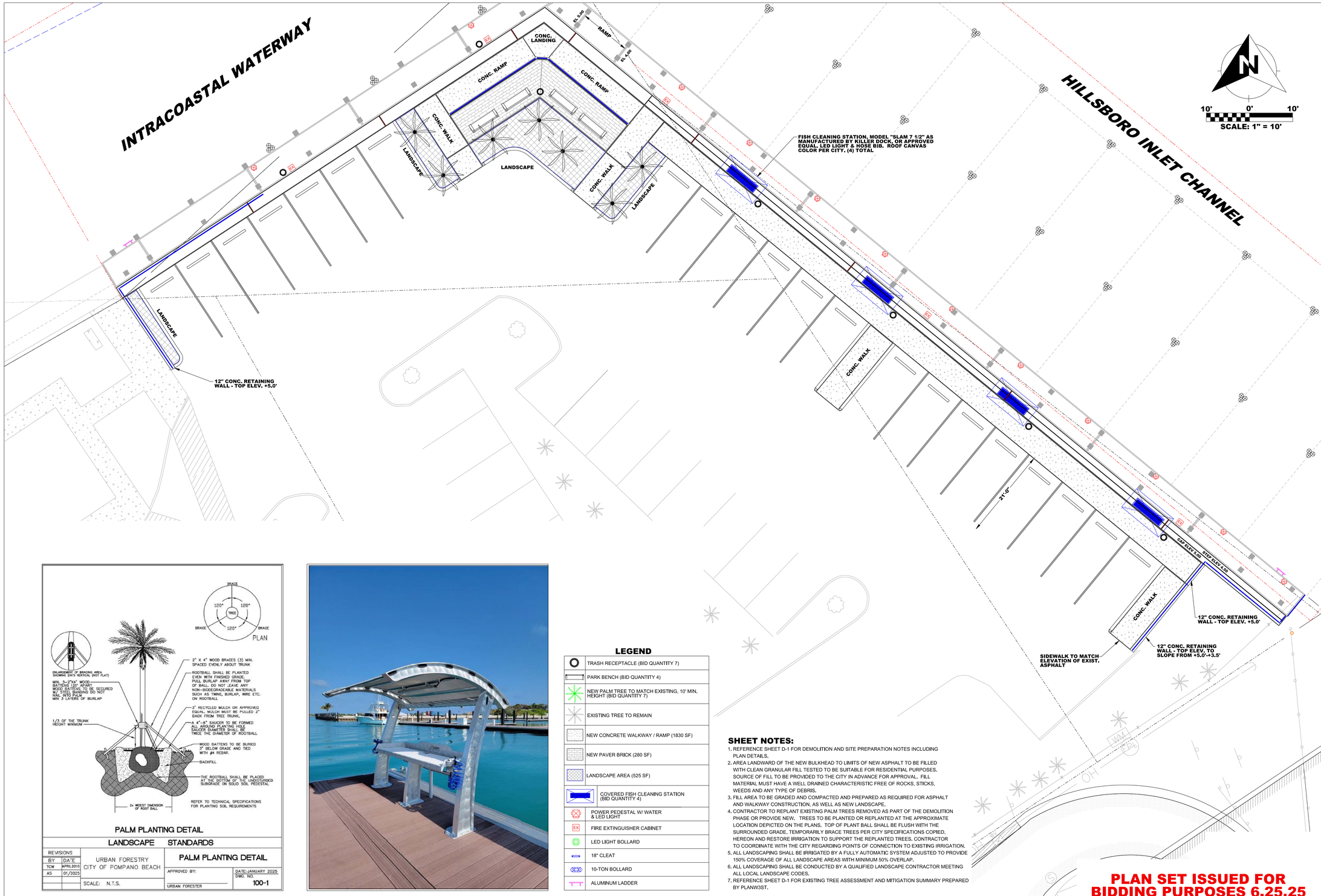
DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	

UP-4

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

22-2990.sh.18.UP-4.Grading Plan.6.25.25.dgn 7/17/2025 4:00:17 PM SEA DIVERSIFIED INC.



PALM PLANTING DETAIL

LANDSCAPE STANDARDS

REVISIONS			
BY	DATE	URBAN FORESTRY CITY OF POMPANO BEACH	PALM PLANTING DETAIL
TCW	APRIL2010		
AS	01/2025		APPROVED BY: / DATE:JANUARY 2025
		SCALE: N.T.S.	URBAN FORESTER / DWG. NO. 100-1

LEGEND

	TRASH RECEPTACLE (BID QUANTITY 7)
	PARK BENCH (BID QUANTITY 4)
	NEW PALM TREE TO MATCH EXISTING, 10' MIN. HEIGHT (BID QUANTITY 7)
	EXISTING TREE TO REMAIN
	NEW CONCRETE WALKWAY / RAMP (1830 SF)
	NEW PAVER BRICK (280 SF)
	LANDSCAPE AREA (525 SF)
	COVERED FISH CLEANING STATION (BID QUANTITY 4)
	POWER PEDESTAL W/ WATER & LED LIGHT
EX	FIRE EXTINGUISHER CABINET
	LED LIGHT BOLLARD
	18" CLEAT
	10-TON BOLLARD
	ALUMINUM LADDER

SHEET NOTES:

1. REFERENCE SHEET D-1 FOR DEMOLITION AND SITE PREPARATION NOTES INCLUDING PLAN DETAILS.
2. AREA LANDWARD OF THE NEW BULKHEAD TO LIMITS OF NEW ASPHALT TO BE FILLED WITH CLEAN GRANULAR FILL. TESTED TO BE SUITABLE FOR RESIDENTIAL PURPOSES. SOURCE OF FILL TO BE PROVIDED TO THE CITY IN ADVANCE FOR APPROVAL. FILL MATERIAL MUST HAVE A WELL DRAINED CHARACTERISTIC FREE OF ROCKS, STICKS, WEEDS AND ANY TYPE OF DEBRIS.
3. FILL AREA TO BE GRADED AND COMPACTED AND PREPARED AS REQUIRED FOR ASPHALT AND WALKWAY CONSTRUCTION, AS WELL AS NEW LANDSCAPE.
4. CONTRACTOR TO REPLANT EXISTING PALM TREES REMOVED AS PART OF THE DEMOLITION PHASE OR PROVIDE NEW. TREES TO BE PLANTED OR REPLANTED AT THE APPROXIMATE LOCATION DEPICTED ON THE PLANS. TOP OF PLANT BALL SHALL BE FLUSH WITH THE SURROUNDED GRADE, TEMPORARILY BRACE TREES PER CITY SPECIFICATIONS COPIED, HEREON AND RESTORE IRRIGATION TO SUPPORT THE REPLANTED TREES. CONTRACTOR TO COORDINATE WITH THE CITY REGARDING POINTS OF CONNECTION TO EXISTING IRRIGATION.
5. ALL LANDSCAPING SHALL BE IRRIGATED BY A FULLY AUTOMATIC SYSTEM ADJUSTED TO PROVIDE 150% COVERAGE OF ALL LANDSCAPE AREAS WITH MINIMUM 50% OVERLAP.
6. ALL LANDSCAPING SHALL BE CONDUCTED BY A QUALIFIED LANDSCAPE CONTRACTOR MEETING ALL LOCAL LANDSCAPE CODES.
7. REFERENCE SHEET D-1 FOR EXISTING TREE ASSESSMENT AND MITIGATION SUMMARY PREPARED BY PLANW3ST.

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: LANDSCAPE & MARINA AMENITY PLAN

PREPARED FOR: pompano beach. Florida's Warmest Welcome

CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:

WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER #51184
SEA DIVERSIFIED, INC. (FORMERLY WTS, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:

SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

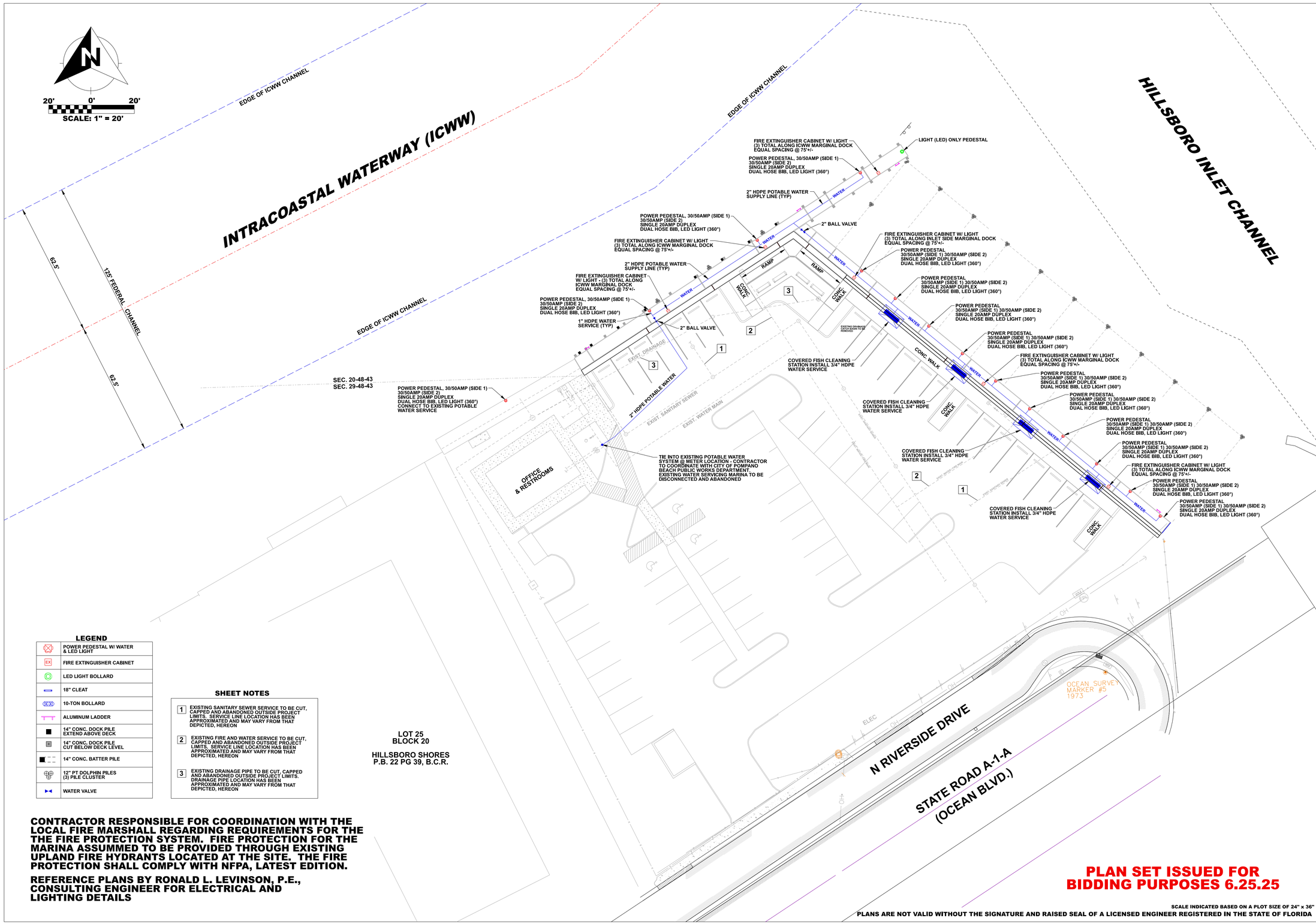
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	L-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

22-2990.sh.19.L-1.Landscape Plan.6.25.25.dgn 7/18/2025 4:08:20 PM SEA DIVERSIFIED INC.



LEGEND

	POWER PEDESTAL W/ WATER & LED LIGHT
	FIRE EXTINGUISHER CABINET
	LED LIGHT BOLLARD
	18" CLEAT
	10-TON BOLLARD
	ALUMINUM LADDER
	14" CONC. DOCK PILE EXTEND ABOVE DECK
	14" CONC. DOCK PILE CUT BELOW DECK LEVEL
	14" CONC. BATTER PILE
	12" PT DOLPHIN PILES (3) PILE CLUSTER
	WATER VALVE

SHEET NOTES

1. EXISTING SANITARY SEWER SERVICE TO BE CUT, CAPPED AND ABANDONED OUTSIDE PROJECT LIMITS. SERVICE LINE LOCATION HAS BEEN APPROXIMATED AND MAY VARY FROM THAT DEPICTED, HEREON
2. EXISTING FIRE AND WATER SERVICE TO BE CUT, CAPPED AND ABANDONED OUTSIDE PROJECT LIMITS. SERVICE LINE LOCATION HAS BEEN APPROXIMATED AND MAY VARY FROM THAT DEPICTED, HEREON
3. EXISTING DRAINAGE PIPE TO BE CUT, CAPPED AND ABANDONED OUTSIDE PROJECT LIMITS. DRAINAGE PIPE LOCATION HAS BEEN APPROXIMATED AND MAY VARY FROM THAT DEPICTED, HEREON

LOT 25
BLOCK 20

HILLSBORO SHORES
P.B. 22 PG 39, B.C.R.

CONTRACTOR RESPONSIBLE FOR COORDINATION WITH THE LOCAL FIRE MARSHALL REGARDING REQUIREMENTS FOR THE THE FIRE PROTECTION SYSTEM. FIRE PROTECTION FOR THE MARINA ASSUMMED TO BE PROVIDED THROUGH EXISTING UPLAND FIRE HYDRANTS LOCATED AT THE SITE. THE FIRE PROTECTION SHALL COMPLY WITH NFPA, LATEST EDITION.

REFERENCE PLANS BY RONALD L. LEVINSON, P.E., CONSULTING ENGINEER FOR ELECTRICAL AND LIGHTING DETAILS

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: POTABLE WATER SYSTEM & FIRE PROTECTION

PREPARED FOR: pompano beach. Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

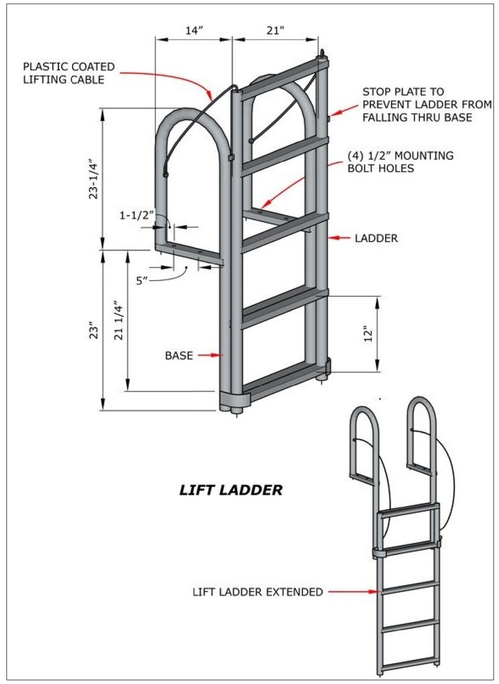
CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 29937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Cypress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=20'-0"
SHEET:	U-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

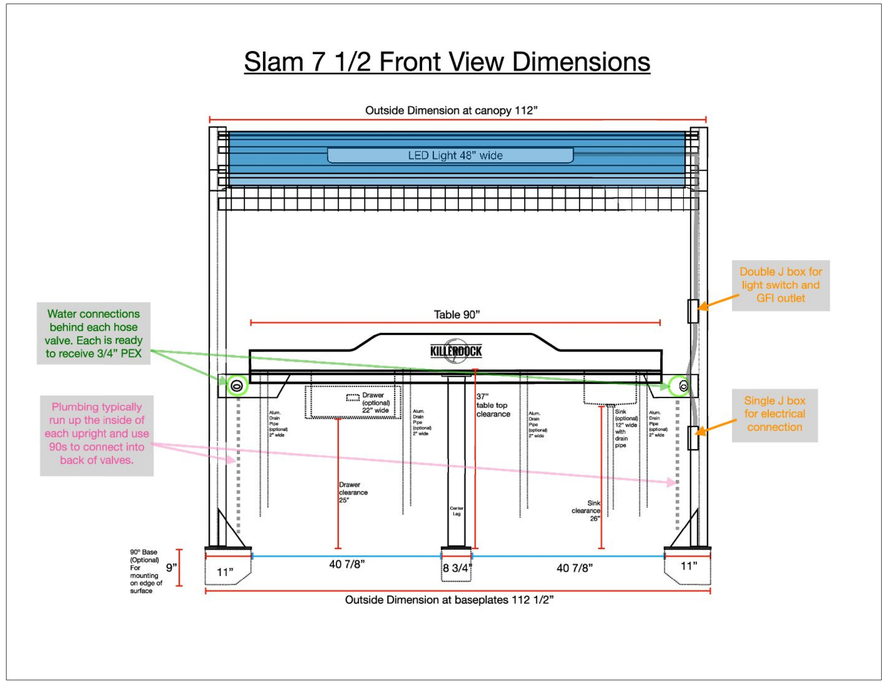


TYPICAL LADDER DETAIL

(AS SUPPLIED BY INTERNATIONAL DOCK PRODUCTS, DOCK BUILDERS SUPPLY, OR EQUIVALENT)

TYPICAL FISH CLEANING STATION

(MODEL "SLAM 7 1/2" AS SUPPLIED BY KILLER DOCK OR APPROVED EQUAL)

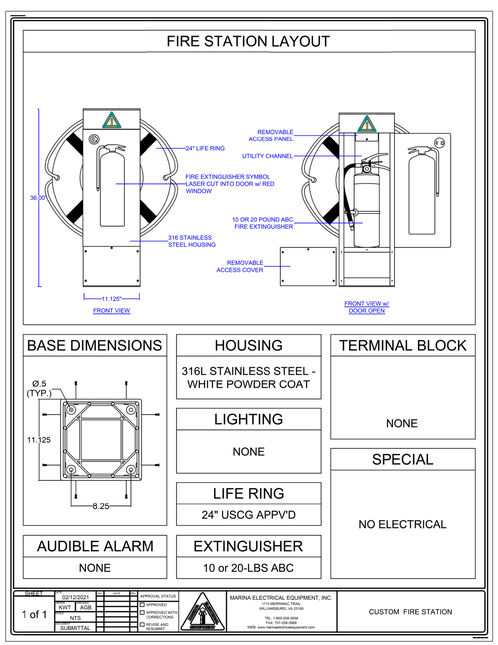


TYPICAL FISH CLEANING STATION DETAILS

(MODEL "SLAM 7 1/2" AS SUPPLIED BY KILLER DOCK OR APPROVED EQUIVALENT)

TYPICAL FIRE EXTNGUISHER CABINET

(AS SUPPLIED BY MARINA ELECTRICAL EQUIPMENT, EATON CORPORATION OR EQUIVALENT)



TYPICAL FIRE EXTINGUISHER CABINET DETAIL (ALTERNATE WITHOUT LIGHT & ALARM)

(AS SUPPLIED BY MARINA ELECTRICAL EQUIPMENT, EATON CORPORATION OR EQUIVALENT)

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

SDI P.N. 22-2990

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: STANDARD DETAILS

PREPARED FOR: pompano beach. Florida's Warmest Welcome

CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:

WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
FLORIDA BUSINESS CERTIFICATE OF AUTHORIZATION NUMBER 29937
C.A. LICENSE NUMBER 29937

PREPARED BY:

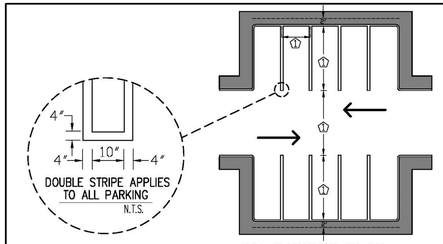
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

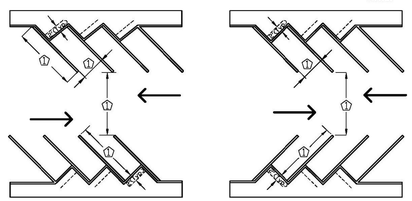
SEA DIVERSIFIED

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	M-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

22-2990.sh.21.M-1.TYPICAL DETAILS.6.25.25.dgn 7/18/2025 12:38:10 PM SEA DIVERSIFIED INC.



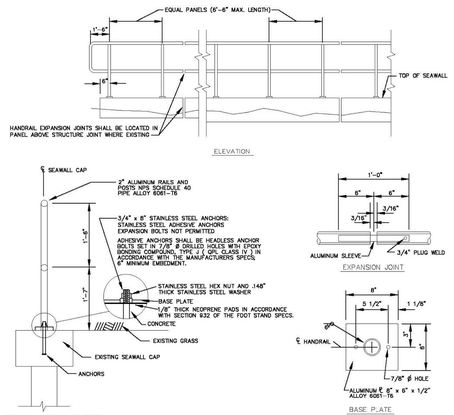


NOTES

1. INDICATED DIMENSION BY LOCAL ZONING ORDINANCE.
2. CURBING APPLIES TO ALL PARKING.
3. EACH SPACE SHALL BE DESIGNATED BY FOUR 4 INCH WIDE VISIBLE STRIPING CONSISTING OF WHITE PAINT OR AS APPROVED BY THE CITY.

ENGINEERING STANDARDS 2019

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	STANDARD PARKING SPACES
		SCALE: N.T.S.	DATE: December 2014 DWG. NO. 300-3



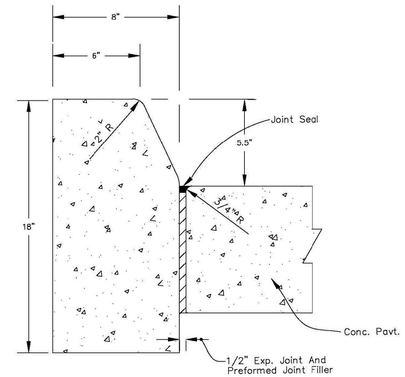
PIPE HAND RAIL NOTES

1. ALL FIXED JOINTS TO BE EITHER WELDED ALL AROUND AND GROUND SMOOTH; OR, COMMERCIALLY DESIGNED FIXED JOINT SYSTEMS (SLEEVED, BRAZED, FUSED, BONDED OR SHRINK FITTED) SPECIFIED ON THE PLANS OR APPROVED BY THE ENGINEER. MECHANICAL JOINTS OTHER THAN EXPANSION JOINTS ARE NOT PERMITTED UNLESS SPECIFIED ON THE PLANS OR APPROVED IN WRITING BY THE ENGINEER. POSTS SHALL BE CONNECTED TO BASE BY WELD ONLY. WELD FILLER TO BE ALLOY ER5356, ER5556 OR ER5183.
2. ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH ASTM A36 OR A307, NUTS, WASHERS, AND BOLTS TO BE STAINLESS STEEL IN CONFORMANCE WITH ASTM A153. AFTER THE NUTS HAVE BEEN TIGHTENED, THE ANCHOR BOLT THREADS SHALL BE DISTORTED ON THE NUTS AND BOLTS SPOT WELDED AND COATED WITH ZINC COMPOUND.
3. ALUMINUM HANDRAIL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 515 OF THE FDOT STANDARD SPECIFICATIONS. PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING HANDRAIL, INCLUDING MOUNTING HARDWARE, AND SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR PIPE HANDRAIL (ALUMINUM), ML.

ALUMINUM PIPE HANDRAIL

ENGINEERING STANDARDS 2019

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	ALUMINUM PIPE HANDRAIL
S.S.	1/31/12	SCALE: N.T.S.	DATE: MAY 2001 DWG. NO. 308-1



TYPE "D" CURB

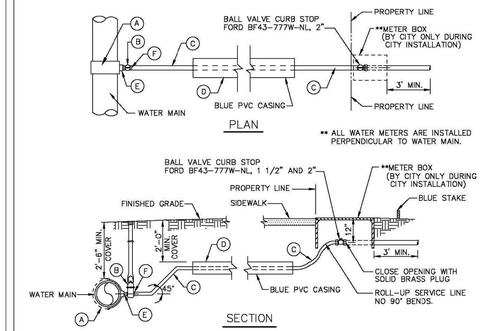
NOTE

FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY.

CONCRETE CURB DETAIL

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	CONCRETE CURB
S.S.	01-2014		
S.S.	08-2015		
S.S.	07-2016	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 300-2

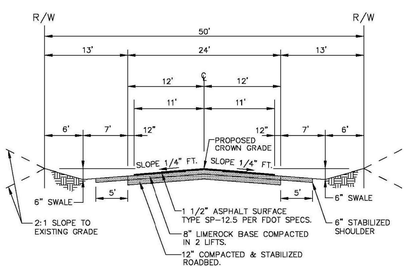


(A) 2" TAPPING SADDLE IRON PIPE THREADED FORD FC-202 OR EQUAL.
(B) 2" RESILIENT SEATED GATE VALVE CLOW F61-03 MUELLER A-23-60-8 2" OPERATING NUT BOXED TO GRADE – C.I. BOX
(C) 2" POLYETHYLENE BLUE
(D) 2 1/2" SCH. 40
(E) 2" X 3" BRASS NIPPLE
(F) 2" MIP COUPLING C-84-77 – PACK JOINT – CTS

TYPICAL 1 1/2" AND 2" WATER SERVICE

ENGINEERING STANDARDS 2025

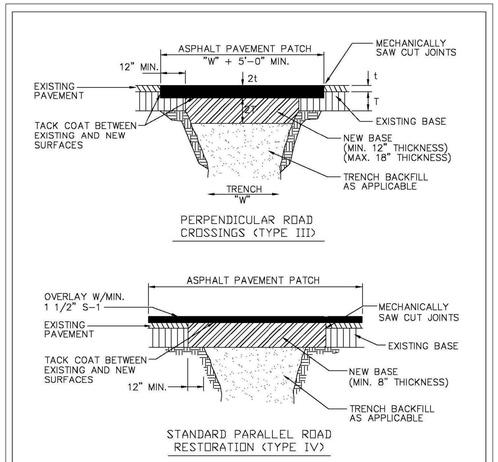
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL 2" WATER SERVICE
S.S.	05-2011		
S.S.	05-2012		
S.S.	11-2018	SCALE: N.T.S.	DATE: APRIL 2022 DWG. NO. 107-2
A.S.	08-2021		



TYPICAL ROADWAY SECTION

ENGINEERING STANDARDS 2025

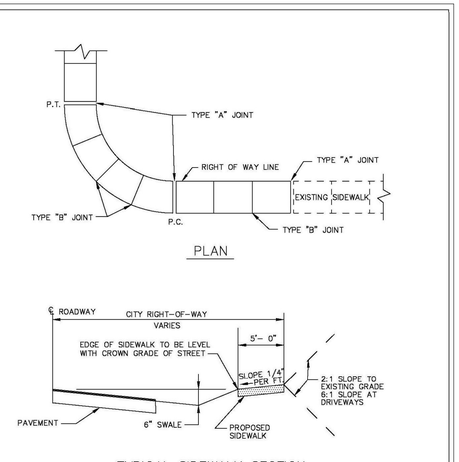
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL ROADWAY SECTION
S.S.	JUNE 2005		
S.S.	JAN. 2018	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 305-1



SURFACE RESTORATION

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SURFACE RESTORATION
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 306-2



SIDEWALK DETAILS

ENGINEERING STANDARDS 2025

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SIDEWALK DETAILS
		SCALE: N.T.S.	DATE: JUNE 2022 DWG. NO. 301-1

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: STANDARD CITY DETAILS

PREPARED FOR: pompano beach — Florida's Warmest Welcome — CITY OF POMPANO BEACH, 1201 NE 5TH AVENUE, POMPANO BEACH, FLORIDA 33060

CERTIFICATION: WILLIAM T. SADLER JR. P.E. FLORIDA REGISTRATION NUMBER 41184 SEA DIVERSIFIED, INC. C.A. LICENSE NUMBER 25937

PREPARED BY: SEA DIVERSIFIED, INC. Surveying & Engineering Applications — 160 Congress Park Drive, Suite 114, Delray Beach, Florida 33445 — TEL: (561) 243-4920 — WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	M-2
CADD ID:	
SHEET NO.:	
TOTAL NUMBER OF SHEETS:	

SDI P.N. 22-2990

PROTECTION OF POTABLE WATER SUPPLY NOTES

A. GENERAL

IN ADDITION TO THESE REQUIREMENTS, ALL POTABLE WATER MAINS CONSTRUCTED IN THE VICINITY OF STORM SEWERS, SANITARY SEWERS OR FORCE MAINS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF FLORIDA ADMINISTRATIVE CODE CHAPTER 62-555, GREAT LAKES-UPPER MISSISSIPPI RIVER BOARD OF STATE SANITARY ENGINEERS (GLUMRB) "RECOMMENDED STANDARDS FOR WATER WORKS", AND GLUMRB "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES".

B. DEFINITIONS

FOR THE PURPOSES OF THIS SPECIFICATION, THE WORDS "OTHER PIPE" OR "OTHER PIPES" SHALL MEAN SANITARY SEWER MAIN, SEWAGE FORCE MAIN, STORMWATER MAIN OR ANY COMBINATION THEREOF.

C. CROSS CONNECTIONS PROHIBITED

THERE SHALL BE NO PHYSICAL CONNECTIONS BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND ANY OTHER PIPE OR APPURTENANCE THERETO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER, POLLUTED WATER, OR ANY OTHER WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORMWATER MANHOLE.

D. RELATION OF OTHER PIPES TO POTABLE WATER MAINS

1. HORIZONTAL SEPARATION

A. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM WATER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C.

B. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

C. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER NOT REGULATED UNDER CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

D. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".

2. VERTICAL SEPARATION

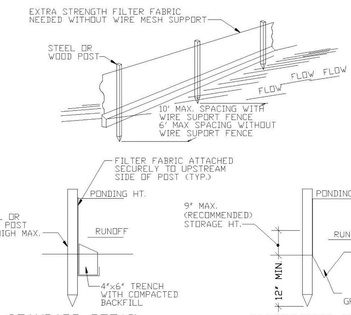
A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES, ABOVE OR BELOW THE OUTSIDE THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OR CHAPTER 62-610, F.A.C.

WHERE THE HORIZONTAL CAN BEING LOCATED LESS THAT THE REQUIRED MINIMUM DISTANCES FROM JOINTS IN THE OTHER PIPELINE OR THE HORIZONTAL IS LESS THAT THREE FEET FROM ANOTHER PIPELINE OR THE UNDER GROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE BETWEEN THE OTHER PIPELINE, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR RECOMMENDED SOLUTIONS TO MEET THE FLORIDA OF DEPARMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS PER CHAPTER 62-555, F.A.C.

PROTECTION OF POTABLE WATER SUPPLY NOTES



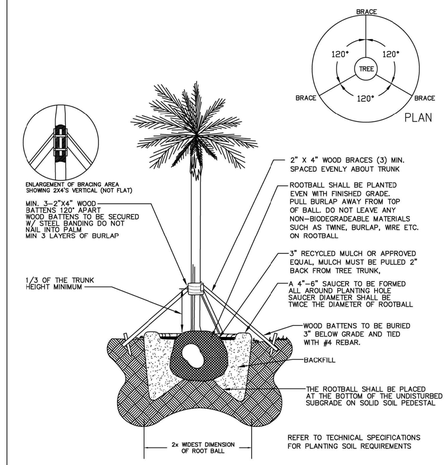
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL

SILT FENCE

EROSION CONTROL GENERAL NOTES

1. SILT FENCE AND TURBIDITY BARRIERS MUST REMAIN IN PLACE AND BE MAINTAINED AT ALL LOCATIONS SHOWN IN THE DRAWINGS UNTIL CONSTRUCTION ID COMPLETED AND SOILS ARE STABILIZED AND VEGETATION HAS BEEN.
2. CPMTRACTOR SHALL SUBMIT SCHEDULE FOR THE INSTALLATION, INSPECTION AND MAINTENANCE THE EROSION CONTROLS FEATURES AS SHOWN IN THE DRAWINGS OR AS DIRECTED BY THE DESIGN ENGINEER. THE SCHEDULE SHALL SPECIFICALLY SHALL SPECIFICALLY INDICATE THE SEQUENCE OF CLEARING, EARTH WORK OPERATIONS, AND WHEN THE EROSION CONTROL FEATURE WILL BE INSTALLED, INSPECTED, AND MAINTAINED. IT SHALL ALSO INCLUDE METHODS TO PREVENT POLLUTION OF STREAM, LAKES, TIDAL WATERS, CANALS, AND IMPOUNDMENTS. ESTABLISHED.



PALM PLANTING DETAIL

LANDSCAPE STANDARDS

REVISIONS			
BY	DATE	URBAN FORESTRY CITY OF POMPANO BEACH	PALM PLANTING DETAIL
TCW	APRIL 2010		APPROVED BY: — DATE: JANUARY 2025
AS	01/2025	SCALE: N.T.S.	URBAN FORESTER — DWG. NO. 100-1

ENGINEERING STANDARDS 2025

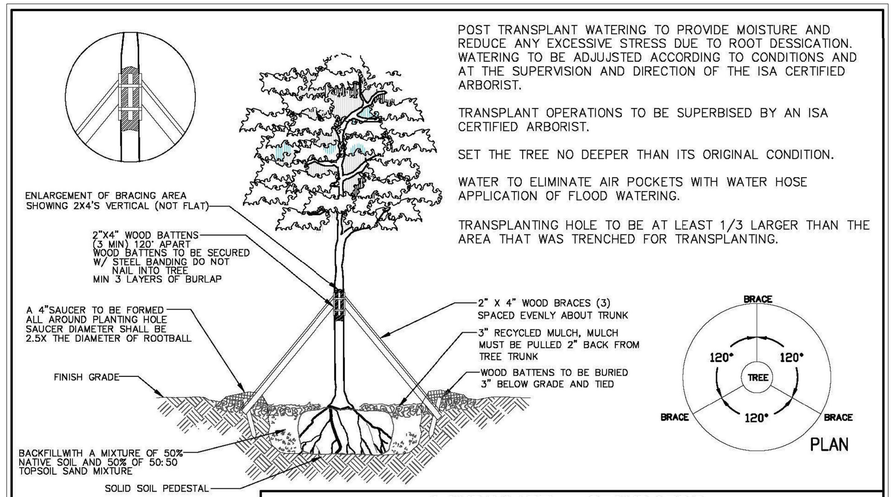
REVISIONS			
BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	GENERAL WATER SUPPLY NOTES
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 514-2

ENGINEERING STANDARDS 2025

REVISIONS			
BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	GENERAL WATER SUPPLY NOTES
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 514-3

ENGINEERING STANDARDS 2019

REVISIONS			
BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SILT FENCE
		SCALE: N.T.S.	DATE: MAY 2007 DWG. NO. 509-1



POST TRANSPLANT WATERING TO PROVIDE MOISTURE AND REDUCE ANY EXCESSIVE STRESS DUE TO ROOT DESSICATION. WATERING TO BE ADJUJSTED ACCORDING TO CONDITIONS AND AT THE SUPERVISION AND DIRECTION OF THE ISA CERTIFIED ARBORIST.

TRANSPLANT OPERATIONS TO BE SUPERBISED BY AN ISA CERTIFIED ARBORIST.

SET THE TREE NO DEEPER THAN ITS ORIGINAL CONDITION.

WATER TO ELIMINATE AIR POCKETS WITH WATER HOSE APPLICATION OF FLOOD WATERING.

TRANSPLANTING HOLE TO BE AT LEAST 1/3 LARGER THAN THE AREA THAT WAS TRENCHED FOR TRANSPLANTING.

REFER TO TECHNICAL SPECIFICATIONS FOR PLANTING SOIL REQUIREMENTS

LANDSCAPE STANDARDS

REVISIONS			
BY	DATE	URBAN FORESTRY CITY OF POMPANO BEACH	TREE RELOCATION DETAIL
TCW	APRIL 2010		APPROVED BY: — DATE: AUGUST 2010
		SCALE: N.T.S.	URBAN FORESTER — DWG. NO. 106-1

TREE RELOCATION PROCEDURAL SPECIFICATION

Tree, Palm, Shrub and other Plant Transplanting/Relocating Detail – Recommended Notes:

The American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Transplanting) ANSI A300(Part 6)–2005 must be adhered to in its entirety for all relocating/transplanting of trees and shrubs. ANSI A300 (Part 6)–2005 includes the following:

60– Transplanting Standards
61 – Normative References
62 – Definitions
63 – Transplanting Practices

The transplanting objectives shall be established prior to beginning the operation. These objectives may be presented in a report format for permitting purposes.

A feasibility and suitability assessment shall be conducted prior to recommending transplanting. Specifications for transplanting should be based on the assessment. See the Checklist in Annex A of ANSI A300 (Part6)–2005. This assessment may be presented in a report format for permitting purposes.

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION

CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: CITY STANDARD DETAILS

PREPARED FOR: pompano beach — Florida's Warmest Welcome — CITY OF POMPANO BEACH, 1201 NE 5TH AVENUE, POMPANO BEACH, FLORIDA 33060

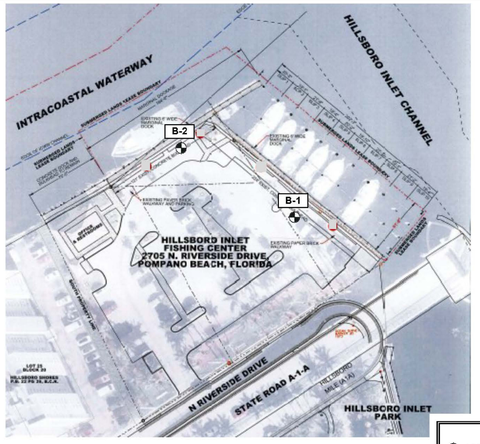
CERTIFICATION: WILLIAM T. SADLER JR. P.E. FLORIDA REGISTRATION NUMBER 41184 FOR THE FIRM SEA DIVERSIFIED, INC. C.A. LICENSE NUMBER 26937

PREPARED BY: SEA DIVERSIFIED, INC. — Surveying & Engineering Applications — 160 Congress Park Drive, Suite 114, Delray Beach, Florida 33445 — TEL: (561) 243-4920 — WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	1"=10'
SHEET:	M-3

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



- LEGEND -
APPROX. TEST LOCATION

NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967	Sea Diversified, Inc. **Hillsboro Inlet Fishing Center** 2705 N. Riverside Drive Pompano Beach, Florida PROJECT NO. 18786.5	APPROXIMATE TEST LOCATION PLAN	GEOTECHNICAL EXPLORATION *— Not to Scale —*	FIG. 1

GEOTECHNICAL INVESTIGATION CONDUCTED BY NUTTING ENGINEERS OF FLORIDA, INC. DATE OF GEOTECHNICAL ENGINEERING REPORT DECEMBER 2024. REFERENCE NUTTING ENGINEERS ORDER NUMBER 18786.5. DATA PRESENTED, HEREON, WAS EXTRACTED FROM THE NUTTING ENGINEERS GEOTECHNICAL ENGINEERING REPORT AND IS FOR INFORMATION PURPOSES ONLY. CONTRACTOR TO REFER TO THE ACTUAL UES ENGINEERING REPORT FOR DETAILED INFORMATION PERTAINING TO THE GEOTECHNICAL INVESTIGATION.

Nutting Engineers — 1310 Neptune Drive, Boynton Beach Fl., 33426, Telephone: 561-736-4900, Fax: 561-737-9975

BORING NUMBER B-1
PAGE 1 OF 2

PROJECT NUMBER 18786.5
CLIENT Sea Diversified, Inc. PROJECT NAME Hillsboro Inlet Fishing Center
PROJECT LOCATION 2705 N. Riverside Drive, Pompano Beach, Florida

DATE STARTED 12/17/24 COMPLETED 12/17/24 SURFACE ELEVATION REFERENCE Approx. @ Road Crown
DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:
LOGGED BY T. Simmons CHECKED BY C. Owcarek ▽ AT TIME OF DRILLING 2.5 ft
APPROXIMATE LOCATION OF BORING As located on the approximate test location plan

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ (10 20 30 40) PL MC LL (20 40 60 80) ☐ FINES CONTENT (%) ☐ (20 40 60 80)
0		ASPHALT 1.5", basecourse 8"				
		Brown fine SAND	SS 1	17-14-11-9	25	
		Tan fine SAND	SS 2	5-4-3-5	7	
5			SS 3	5-5-4-4	9	
		Gray fine SAND, little shell	SS 4	3-2-2-2	4	
		Gray to brown fine SAND, some root				
		Gray fine SAND, trace root	SS 5	1-2-1-1	3	
10						
		Lt. brown fine SAND, trace root	SS 6	2-3-3-4	6	
15		Gray fine SAND				
20			SS 7	2-2-3-4	5	
25		Lt. gray fine SAND, little sandstone fragments	SS 8	4-5-7-8	12	
30			SS 9	5-5-8-8	13	
35			SS 10	7-12-12-12	24	

(Continued Next Page)

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers — 1310 Neptune Drive, Boynton Beach Fl., 33426, Telephone: 561-736-4900, Fax: 561-737-9975

BORING NUMBER B-1
PAGE 2 OF 2

PROJECT NUMBER 18786.5
CLIENT Sea Diversified, Inc. PROJECT NAME Hillsboro Inlet Fishing Center
PROJECT LOCATION 2705 N. Riverside Drive, Pompano Beach, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ (10 20 30 40) PL MC LL (20 40 60 80) ☐ FINES CONTENT (%) ☐ (20 40 60 80)
35		Lt. gray fine SAND, little sandstone fragments *(continued)*				
		Lt. gray SANDSTONE and SAND	SS 11	6-9-10-9	19	
40			SS 12	6-11-50/2"	100+	>>▲
		Bottom of hole at 44.2 feet.				

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers — 1310 Neptune Drive, Boynton Beach Fl., 33426, Telephone: 561-736-4900, Fax: 561-737-9975

BORING NUMBER B-2
PAGE 1 OF 2

PROJECT NUMBER 18786.5
CLIENT Sea Diversified, Inc. PROJECT NAME Hillsboro Inlet Fishing Center
PROJECT LOCATION 2705 N. Riverside Drive, Pompano Beach, Florida

DATE STARTED 12/17/24 COMPLETED 12/17/24 SURFACE ELEVATION REFERENCE Approx. @ Road Crown
DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:
LOGGED BY T. Simmons CHECKED BY C. Owcarek ▽ AT TIME OF DRILLING 2.0 ft
APPROXIMATE LOCATION OF BORING As located on the approximate test location plan

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ (10 20 30 40) PL MC LL (20 40 60 80) ☐ FINES CONTENT (%) ☐ (20 40 60 80)
0		ASPHALT 2", basecourse 10"				
		Gray to brown fine SAND, little limestone fragments, trace shell	AU 1			
			AU 2			
5		Tan fine SAND	SS 3	2-3-3-4	6	
		Lt. gray fine SAND	SS 4	3-2-2-7	4	
		Gray to brown fine SAND, little concrete fragments				
10		Gray to brown fine SAND and roots	SS 5	1-1-2-2	3	
		Gray fine SAND, little root				
		Gray fine SAND, some shell	SS 6	1-1-2-1	3	
15						
20		Lt. brown fine SAND, little root	SS 7	2-1-1-3	2	
25		Lt. gray fine SAND, little sandstone	SS 8	6-5-6-7	11	
30			SS 9	7-10-9-13	19	
35		Lt. gray fine SAND	SS 10	7-7-8-9	15	

(Continued Next Page)

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers — 1310 Neptune Drive, Boynton Beach Fl., 33426, Telephone: 561-736-4900, Fax: 561-737-9975

BORING NUMBER B-2
PAGE 2 OF 2

PROJECT NUMBER 18786.5
CLIENT Sea Diversified, Inc. PROJECT NAME Hillsboro Inlet Fishing Center
PROJECT LOCATION 2705 N. Riverside Drive, Pompano Beach, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ (10 20 30 40) PL MC LL (20 40 60 80) ☐ FINES CONTENT (%) ☐ (20 40 60 80)
35		Lt. gray fine SAND *(continued)*				
		Gray fine SAND, little sandstone	SS 11	9-13-8-10	21	
40		Gray SANDSTONE, little sand	SS 12	10-5-1-3	6	
45			SS 13	19-50/5"	100+	>>▲
		Bottom of hole at 48.9 feet.				

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT: **HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION**
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE: **GEOTECHNICAL**

PREPARED FOR: pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
100 NE 3RD AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION: CERTIFIED GEOTECHNICAL REPORT BY UES OF ST. PETERSBURG, FLORIDA
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 42164
UES OF ST. PETERSBURG, FLORIDA INC.
C.A. LICENSE NUMBER 25937

PREPARED BY: **SEA DIVERSIFIED, INC.**
Surveying & Engineering Applications
160 Congress Park Drive, Suite 114
Delray Beach, Florida 33445
TEL: (561) 243-4920
WWW.SEADIVERSIFIED.COM

DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	N.T.S.
SHEET:	

G-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

TECHNICAL SPECIFICATIONS
Prepared by Sea Diversified, Inc.
Date:
Prepared to Accompany Plans prepared by Sea Diversified, Inc. dated June 2025.

ARTICLE 1 - PROJECT DESCRIPTION

1. The project includes the replacement of an existing concrete bulkhead a new steel sheetpile bulkhead with concrete king / batter piles and integral concrete cap. The project also includes the replacement of a 5' wide timber dock with a new 6'-6" wide pre-manufactured aluminum frame fixed dock supported by concrete piles. Aluminum frame fixed docks must be supplied by a qualified aluminum dock manufacturer, herein referred to as the MANUFACTURER, with demonstrated experience in the design and fabrication of aluminum frame marine structures of similar type to the project. The extent of the project is shown on plans prepared by Sea Diversified, Inc. (ENGINEER).

   The MANUFACTURER is responsible for the design, fabrication and delivery of fixed docks and associated dock components such as cleats, fendering and applicable hardware and installation components. The CONTRACTOR shall be responsible for the installation of the pre-manufactured aluminum frame structures including all support piling in accordance with MANUFACTURER supplied shop drawings and Installation Manuals. Plans and specifications prepared by the ENGINEER, as pertaining to the installation of pre-manufactured aluminum frame structures show the general extent of work. Installation of aluminum frame structures shall be in strict accordance with shop drawings, Installation Manuals and / or as dictated by the MANUFACTURER.

2. The CONTRACTOR is required to coordinate and cooperate with the MANUFACTURER, CITY staff and consultants pertaining to all components of the project including but not limited to product manufacturing delivery schedules, utility installations and project inspections. Additionally, the CONTRACTOR must note and understand that the project may be conducted while existing charter / dive boat activities are ongoing and such activities must be maintained with little or no disruption.

ARTICLE 2 - GENERAL NOTES

1. All elevations are in feet and referenced to the North American Vertical Datum of 1988 (NAVD 88) or Mean Low Water (MLW), as specifically noted on the plans.
2. Any deviation from these plans, notes or specifications must be approved in writing by the ENGINEER, or else the deviation will be considered construction not in compliance with the plans and specifications.
3. Any discrepancies among the plans, notes, specifications and other bid documents must be resolved in writing by the ENGINEER prior to continuing the work in question.
4. These plans, notes and specifications, along with the other components of the project documents, constitute the only instructions to the CONTRACTOR, unless written addenda are issued.
5. All construction, manufacturing, fabrication and testing of materials shall be performed under the guidelines set forth in applicable local, state and federal codes, and/or under recommendations provided in technical publications of respected professional or industry organizations. Material testing programs, where applicable, shall be presented to the ENGINEER for review and approval prior to construction.
6. All products constructed or manufactured/supplied for the project shall be accompanied by industry acceptable warranties or guarantees.
7. CONTRACTOR must attend a kick-off meeting with the ENGINEER, Representative(s) of the CITY, subcontractors, MANUFACTURER and others requested by the CITY to discuss critical items prior to commencing with construction.

ARTICLE 3 - MOBILIZATION AND DEMOBILIZATION

1. It is understood that the nature of the project will require work over water and access to construction areas are required for material storing, hauling, erection or construction. All facilities, public or private, used for such purposes shall be maintained and repaired to the original form after completion of project activities.
2. The CONTRACTOR shall present a Shipping, Stockpile and Administration Plan (SSAP) to the ENGINEER for approval. The plan shall be specific to the project requirements for the particular materials to be delivered to the site, describing delivery points, stockpile areas, temporary debris/trash storage areas, temporary field office (incl. utilities maintained there), fencing, security and a statement of commitment to maintaining safety on the site.
3. The CONTRACTOR shall note that the MANUFACTURER will have designated and pre-established areas for product delivery, storage, assembly and possibly manufacturing, all or in part. The CONTRACTORâ€™s staging plan must be prepared in coordination with the MANUFACTURERâ€™s staging plan to avoid conflicts during construction.
4. The CLIENT or ENGINEER shall have the right to exercise reasonable alterations or additions to the plan (SSAP).
5. The site surroundings shall be returned to original grade and topping (sod, tree cover, established road, etc.) following "Completion" of the project. "Completion" is defined as completion of an agreed upon list of punchlist items compiled in a planned project walkthrough held at a time the CONTRACTOR considers the project to be "Substantially Complete".
6. It is the CONTRACTOR's responsibility to coordinate, and pay for, necessary utilities to occupy the site and perform the work.

ARTICLE 4 - SITE MAINTENANCE AND SAFETY

1. The CONTRACTOR shall maintain a clean and neat site, void of loose debris, trash, remnant parts or materials.
2. Trash receptacles and removal service shall be maintained by the CONTRACTOR specifically for this project. Existing such facilities shall not be used to maintain the project.
3. Temporary debris piles shall be limited in number as much as practical and contained in designated areas until removal. Debris and trash shall not be scattered in areas outside the limited designated areas at any time.
4. Removal of debris/trash shall be scheduled as appropriate to not allow piles to reach five feet in height or greater than ten feet in diameter. Debris individually larger than these dimensions shall be removed from the site within five working days. Receptacles shall not be allowed to overflow at any time.
5. The CONTRACTOR shall prepare and submit a Maintenance of Traffic Plan that applies to vessels, vehicles and pedestrians. The plan must be in writing, including sketches or drawings, and must be submitted to the ENGINEER for review and approval before commencement of the plan.
6. The CONTRACTOR shall note that this project consists of work adjacent to a boat launch activities that will continue to operate and be open to the public to some extent during construction. The safety of pedestrians, vessel owners, CITY staff is of primary concern and must be addressed by the CONTRACTOR. The CONTRACTOR shall prepare a safety plan for approval by the ENGINEER and CITY.
7. Where applicable, CONTRACTOR to use steel/kevlar boots, long sleeve pants, gloves, hardhat, safety kit, etc.
8. CONTRACTOR to make note of nearest hospital and quickest route.
9. CONTRACTOR to assure availability of at least one working cell phone and one serviceable vehicle on site at all times.
10. The CONTRACTOR shall follow all applicable local, state and federal codes regarding site safety and maintenance.

ARTICLE 5 - ENVIRONMENTAL

1. A Florida Department of Environmental Protection (FDEP) Permit, U.S. Army Corps of Engineers (USACE) Permit and Broward County License exert jurisdiction of the project. The CONTRACTOR shall request all permits prior to the start of construction from the ENGINEER or the CITY and review prior to any construction activities.
2. The CONTRACTOR shall be responsible for complying with applicable restricting permit conditions imposed by the state, federal government and the County.
3. The CONTRACTOR shall pay particular attention to the standard state conditions for manatee protection during construction and shall comply with them fully.

ARTICLE 6 - GEOTECHNICAL

1. A geotechnical study has been conducted, the sub-surface investigation included two (2) Standard Penetration Test (SPT) borings at upland locations as near to the bulkhead as practically possible.
2. Should the CONTRACTOR encounter sub-surface soil conditions that differ from that described in the Geotechnical Report prepared by Nutting Engineers, dated December 2024, or from the results of the field test programs, the CONTRACTOR shall cease operations and promptly notify the ENGINEER.
3. The CONTRACTOR in coordination with the ENGINEER may be responsible for a test pile program to verify sub-surface soil characteristics related to pile driving characteristics. Details of the optional Test Pile Program are outlined, herein.
4. The CONTRACTOR shall note that the sub-surface soil conditions may vary throughout the project area and that piles are to be driven to achieve the required pile penetration dictated by the ENGINEER regardless of soil conditions. The CONTRACTOR must note that there is no provision for encountering unforeseen soil conditions.

ARTICLE 7 - CONSTRUCTION SURVEYING

1. The CONTRACTOR is responsible for horizontal / vertical control establishment, construction layout or any other survey effort required to complete the project. If requested by the CONTRACTOR, the ENGINEER will provide the CONTRACTOR existing site benchmark information for reference.
2. Method of continuing layout and control of work to be submitted to ENGINEER for approval prior to beginning construction.
3. The CONTRACTOR is advised that certification of the project elevation and alignment is required for final acceptance of work.
4. The CONTRACTOR will be required to provide a final â€œAsbuiltâ€ survey after construction. The survey must be conducted and certified by a State of Florida licensed Surveyor and Mapper.

ARTICLE 8 - CONSTRUCTION SEQUENCING AND HOURS OF OPERATION

1. The CONTRACTOR shall provide a schedule that details the proposed sequence of construction with estimated number of calendar days and milestones for major components of work. The ENGINEER shall be notified in advance of any intended changes to construction sequencing, required alterations to overall project schedules or deviations from projected milestone dates.
2. The CONTRACTOR shall note that the CITY may limit hours of operation and require the CONTRACTOR to schedule daily work activities as necessary to minimize disruption to the Fishing Center activities. Operations, including but not limited to pile driving, or other crane / large equipment related activities and activities that produce excessive noise, vibration, dust or other air quality impacts, may be limited to specific timeframes when working in proximity to certain facilities. The CONTRACTOR can work Monday through Friday, as typical, until 5:00 PM, noting that noise, vibration and air pollution must be controlled to minimize impact to the ongoing Fishing Center activities. The CONTRACTOR's bid shall take into account possible construction delays caused by temporary and partial suspensions of work relating to ongoing Fishing Center activities as noted in this paragraph.

ARTICLE 9 - DEMOLITION AND RESTORATION

1. The CONTRACTOR shall acquire all necessary building permits from the CITY prior to commencing work.
2. Demolition work shall be conducted in accordance with plans prepared by the ENGINEER.
3. Upon completion of construction, the site shall be restored by removing and finishing all evidence of construction including temporary haul roads, stockpile areas and all other areas used for construction.

ARTICLE 10 - FIXED ALUMINUM DOCK SYSTEMS

1. The size, geometry and location of fixed aluminum structures is as depicted on the plans. Fixed dock system shall include pre-manufactured dock frames with decking, utility troughs, cleats, fendering and installation hardware. The fixed dock system and all described components shall meet or exceed criteria specified or as indicated on the Drawings. Fixed docks shall be as manufactured by Golden Marine Systems (GMS), Marina Technologies, Inc. (MTI), or approved equal. Aluminum frames shall be heavy-duty, double track systems equivalent to the 950 Series supplied by GMS, Type D260 as supplied by MTI, or equal.
2. Aluminum frames shall be pre-fabricated and supplied in pre-determined sizes as described on the plans. Aluminum frames shall be delivered with decking unless otherwise specified by the MANUFACTURER.
3. Engineering Report: MANUFACTURER shall submit for approval design data for the fixed dock system. This shall be compiled in an Engineering Report that details the results of the fixed dock system analysis as outlined, herein. The Engineering Report shall be prepared and certified by a Licensed Professional Engineer registered in the State of Florida. Professional Engineers licensed in State(s) other than Florida must be approved in advance by the CITY. The Engineering Report and/or other required technical submittals, as outlined in the specifications, herein, must be provided within thirty (30) days of date of contract between CITY and CONTRACTOR, unless otherwise specified by the CITY. MANUFACTURER design data shall demonstrate that all items to be secured to the fixed dock system, either internal to the structural framing or above deck including all conduit and piping, electrical / potable water pedestals, fire standpipes and fire extinguisher cabinets, have been accounted for in the required system structural analysis.
4. Shop Drawings: The fixed docks shown in the plans shall be considered schematic in nature showing the dimensions and location of the docks in plan view. The MANUFACTURER shall provide final design details in a set of shop drawings addressing all pertinent fixed dock system specifications. Shop drawings shall be certified by a Licensed Professional Engineer registered in the State of Florida. Professional Engineers licensed in State(s) other than Florida must be approved in advance by the CITY. Certified shop drawings, pursuant to the specifications, herein, must be provided within thirty (30) days of date of contract between CITY and CONTRACTOR, unless otherwise specified by the CITY. Shop drawings shall depict the layout of all docks and be fully dimensioned. In addition, and at a minimum, shop drawings shall include the following:
   * Material type and grade, bolt sizes, welding, coatings, colors, and other product makes and models.
   * Material type of decking and attachment details.
   * Details of all utility routing and attachment.
   * Attachment details of all above deck permanent items.
   * Specifications including attachment details for cleats, fendering, cross members and ladders.
   * Location, specifications and layout of piling.
   * Shop drawings shall clearly specify the design criteria used by the MANUFACTURER's engineer for the design of the fixed dock system including but not limited to dead / live load criteria; maximum wind speed; storm surge; wave parameters; and current velocity. Design criteria shall indicate the criteria used for both occupied and unoccupied conditions.
5. General Design Parameters: The fixed dock system shall be designed to withstand the physical conditions and surroundings associated with the project site(s). It shall be the responsibility of the MANUFACTURER to evaluate the site conditions as relating to the design of the fixed dock system and to verify such factors as water depth, tidal current conditions, vessel traffic and boat wake, typical wind-driven wave conditions and characteristics of expected use of the proposed fixed docks on a day-to-day basis.

   The fixed dock system without boats in place (unoccupied) shall be designed to withstand forces from a Category 4 Hurricane and associated storm surge, wind and waves. The numerical values for surge, wind, wave height, wave period and wavelength shall be provided by the ENGINEER, however it shall be the responsibility of the MANUFACTURER's engineer to review and verify this information prior to commencing the system analysis. These numerical values will serve as a record for assessing performance of the fixed dock structures over the twenty-five (25) year minimum life expectancy of the system.
6. Design Loads: The engineering analysis shall take into consideration all storm loading conditions specified above, as well as dead loads and live loads. Live load design criteria shall be 100 psf.
7. Aluminum framing: Aluminum extrusions and other components shall be marine grade aluminum alloy 6061-T6.
8. All hardware shall be stainless steel type 316.
9. Decking shall be 1.25" x 5.5" Wear Deck" reinforced polymeric decking, Endeck PVC decking, or approved equal. Live load capacity of decking based on a maximum span of 16" shall be 125 psf. Decking shall have a slip and wear resistant surface. Additionally, the decking material shall be rot-and warp-resistant and splinter free. The decking material supplier must provide a standard 25-year warranty for the product. Decking shall be installed with stainless steel, type 316 screws, two (2) each at all stringer locations. Screws shall be countersunk.

ARTICLE 11 - CLEATS AND LADDERS

1. Cleats shall be cast-aluminum 18-inch, heavy-duty straight cleats or stainless steel 10-ton bollards as shown on the plans. Cleats and bollards shall be of the type and size to withstand the horizontal forces of the largest vessel to occupy the slip under the design parameters specified, herein. Number and location of cleats and bollards are depicted on the plans.
2. The MANUFACTURER shall provide aluminum ladders. Number and location of ladders shall be dictated by the CITY. Ladders shall have a minimum 250-lb capacity and be made of marine-grade, aluminum alloy, type 6061-T6 or 6063. No other metals or aluminum alloy types will be considered.

ARTICLE 12 - DELIVERY, HANDLING, STORAGE AND INSTALLATION

1. Delivery: The MANUFACTURER shall be responsible for delivery of the fixed dock structures and all other pre-manufactured products. The products shall be delivered as pre-assembled modules to facilitate offsite or onsite unloading and installation. The MANUFACTURER shall take all precautions to ensure that the products are not damaged during transport to the project site. The ENGINEER or CITY's representative will inspect the condition of the products upon arrival to the site. Damaged products shall be rejected and removed from the site at the expense of the CONTRACTOR or MANUFACTURER. All products shall be delivered with an Installation Manual including all necessary hardware for the assembly and installation of the systems. The installation manual shall include all instructions, drawings and part sheets necessary for the assembly and installation of the system.
2. Offloading, Deployment and Installation: All products shall be offloaded and either stored at a secure upland location or immediately installed by the CONTRACTOR as per the handling and installation specifications provided by the MANUFACTURER. The CONTRACTOR will be responsible for the installation of the products in accordance with MANUFACTURER supplied shop drawings, Installation Manuals and other technical information, as applicable.

   The MANUFACTURER will deliver the pre-manufactured products to the site or designated offsite staging area via truck. It will be the CONTRACTOR's responsibility to provide personnel and equipment to offload MANUFACTURER supplied products and install the systems as per the MANUFACTURER's approved shop drawings and pile specifications. The CONTRACTOR is responsible for any or all damage to the products during the offloading and installation processes. If not moved and installed immediately at the design location, the CONTRACTOR is responsible for storage of the products in such a manner to avoid damage. The CITY will not be responsible for damages caused by the handling or storage of the delivered products.
3. MANUFACTURER Representation: The MANUFACTURER shall provide a qualified representative onsite, as they deem necessary, during the offloading, assembly and installation of the products. The MANUFACTURER's representative shall be onsite during the installation of the systems to ensure that the product is handled and installed in strict compliance with the MANUFACTURER's shop drawings and Installation Manual. No less than two (2) site visits per month are anticipated by the MANUFACTURER's representative to inspect work completed by the CONTRACTOR and overall project progress. The CONTRACTOR shall be responsible for requesting additional support from the MANUFACTURER. The CONTRACTOR will be responsible for the costs of any special requests for onsite visits, meetings and inspections by the MANUFACTURER.
4. CONTRACTOR - MANUFACTURER Coordination: The CONTRACTOR is responsible for coordination with the MANUFACTURER regarding installation procedures and schedules. In advance of construction, the CONTRACTOR must request from the MANUFACTURER final certified shop drawings, installation manuals and other technical information, as necessary. The CONTRACTOR, in coordination with the MANUFACTURER, must prepare and submit a schedule for the installation of the products to the CITY for approval. It shall be the CONTRACTOR's responsibility to coordinate the installation schedule with the MANUFACTURER's delivery schedule at all times during construction. The CITY will NOT be responsible for any delays caused by the MANUFACTURER's delivery schedule as pertaining to the CONTRACTOR's installation schedule. Equally, the CITY will NOT be responsible for any delays caused by the CONTRACTOR that impacts the MANUFACTURER's fabrication, and delivery schedule. The MANUFACTURER will provide onsite representation during the product installation to assist, as necessary.

ARTICLE 13 - WARRANTY

1. The aluminum structures (Systems), including all structural and utility components, shall be designed for a minimum twenty-five year life expectancy. The deck, sidewalls, structure framing and other components of the Systems shall be delivered to the site free of cracks, corrosion, blemishes, broken or bent parts, uneven or non-fitting parts, missing or non-correct parts. A MANUFACTURER's Warranty shall be issued and go into effect upon acceptance by the CITY. The warranty shall be continuously effective for ten (10) years after acceptance. Subject to conditions at or below the specified design conditions, the warranty shall include, but not be limited to, the following items:
   * Repair or replacement of the product or components of the project due to failure or damage resulting from any or all conditions that fall within the design criteria outlined in the Specifications. This includes damages caused by live loads, wind, currents, waves, surge, vessel impact, storm and hurricane events. Components to be warranted include but are not limited to aluminum structural members or special extrusions (i.e. utility troughs), decking material, pile guides, cleats, fendering, handrails and hardware.
   * Repair or replacement of the product or components of the product due to deterioration caused by corrosion from typical marine environmental conditions.
   * Full repair or replacement cost including product manufacturing, system components, materials, hardware, taxes, shipping and handling and all required labor for removal of or repairs to damaged product and installation of new product. The MANUFACTURER may not devalue the product or components of the product based on years in service from the date of final product acceptance.
   * The warranty shall remain effective for the full ten (10) year term with no option by the MANUFACTURER to refund to the CITY the original purchase price, or devalued price based on number of years in service from the date of final product acceptance.
   * The Warranty must state that the CITY will be notified in advance of any discontinued parts or components of the dock system, especially proprietary parts or components, to allow sufficient time for the CITY to procure, through separate Purchase Order, such spare parts or components for stocking in case of need through the 10-Year term of the Warranty.

ARTICLE 14 - CONCRETE PILES AND PILE DRIVING (DOCK AND BATTER PILES)

1. All piles shall be 12" or 14" square prestressed concrete, minimum 6,000 psi, eight (8) prestressed strands, #5 spirals and three inches of clear concrete cover to the outside of the spirals in all sides meeting or exceeding FDOT standards for concrete piles to be driven in salt water conditions. The exposed side of the pile in forming shall be finished smooth and corners shall have 3/4" chamfer, or be rounded in the case of the typical FDOT piling. Final design and shop drawings shall be the responsibility of the CONTRACTOR, both of which must be reviewed by the ENGINEER. FDOT specification, with modifications or criteria above, is acceptable.
2. Piles shall be final designed and driven to meet the load rating necessary for each and the minimum penetration dictated by the ENGINEER. Piles shall be driven full length, or to a tip elevation where specified. It shall be the CONTRACTOR's responsibility to verify and guarantee that the specified pile bearing or lateral capacity is met. The CONTRACTOR's verification may be one of the following:
   * providing an equation, chart or table from the pile-driving hammer manufacturer relating bearing capacity to that particular hammer's "blows per foot".
   * performing a test pile program to the satisfaction of the ENGINEER.
   * providing a certified, engineered foundation design based on actual soil borings for the site.
3. The CONTRACTOR will be required to maintain a pile driving log to document the pile driving characteristics of all piles. Pile driving logs must be conducted by an independent engineering firm or geotechnical testing facility retained and paid for by the CONTRACTOR. The CONTRACTOR's bid shall include the cost of independent monitoring and preparation of field logs / reports pertaining to the installation of piles. Field logs and pile driving reports must be submitted to the CITY and/or ENGINEER on a daily basis or immediately following the installation of piles unless otherwise directed by the CITY. The pile driving logs shall include the following minimum information: date, time, weather conditions, equipment used, pile location designation, blows per foot over entire driving sequence, total length of pile, embedment length, un-cut top of pile, length of amount cut off, final elevation of top of pile (after driving and cut-off), amount of jetting or punching (if required), unusual pile behavior, damage and re-driving.
4. Jetting of piles is not permitted except only as necessary, and then must be approved by the ENGINEER prior to performing the jetting.
5. If solid rock, debris or refusal is encountered prior to achieving the minimum penetration, the CONTRACTOR shall use drilling equipment to achieve the required penetration dictated by the ENGINEER. Any deviation from the specified penetration due to sub-surface rock conditions must be approved by the ENGINEER.
6. Piles shall be handled and driven in a manner that does not damage the piles. Damaged piles must be removed, discarded and replaced at the CONTRACTOR's expense.

ARTICLE 15 - CONCRETE TEST PILE PROGRAM FOR COMPRESSION (AXIAL LOAD) - OPTIONAL:

1. At the discretion of the CITY in coordination with the ENGINEER, the CONTRACTOR shall perform a test pile program to determine the adequacy of the piles in compression. A minimum of two (2) test piles shall be placed in locations approved by the ENGINEER. An effort shall be made to evenly distribute the test piles over the site where production piles are required. Pile testing may be performed from the land or from a barge.
2. Test piles shall be of similar material, finish and size in cross-section to those in the design specifications, and of the same strength and number of strands. Test piles may be used as production piles if inspected and approved for use by the ENGINEER.
3. The ENGINEER may have specified pile lengths and embedment based on limited soils information. The ENGINEER will provide the design axial capacity for the test. The CONTRACTOR shall verify the bearing capacity of the test pile meets or exceeds the design value by one of the following methods:
   A. For a standard, drop-hammer type pile driver, use the Engineering News Record equation for calculating bearing capacity based on the average last five (5) blows per foot. Any other equations used must be supported with documentation approved by the ENGINEER.
   B. For piston or dynamic hammers not applicable with the Engineering News Record equation, use an equation or calibration chart as provided by the manufacturer of the hammer to relate bearing capacity to blows per foot.
   C. Install a test pile and load the pile in tension and/or compression to verify that it satisfies the design bearing capacity. A calibrated gauge must be used in conjunction with this method. If a test pile or the soil fails under an applied test load with an embedment less than specified in the plans, then the pile shall be removed, re-driven and re-tested at the CONTRACTOR's expense.
4. The CONTRACTOR shall be responsible for providing all materials and labor to perform the tests. The test program, equipment and subcontractors required shall be presented to the ENGINEER for review prior to scheduling and/or purchasing for the actual test. Access to the test area and allowance for independent measurements and gauge readings shall be allocated. The CONTRACTOR shall give at least 48 hours notice prior to performing the tests. Tests performed with shorter notice or without the CITY's third party observers present may be deemed invalid and non-billable by the CONTRACTOR.
5. If design bearing capacity is not reached at the specified tip elevation, then the test program shall be continued at greater depths under the direction of the ENGINEER and at extra cost to the CITY. If the initial two (2) test piles do not compare well in bearing capacity, then a third pile test shall be performed, at the CITY's expense, in a location directed by the ENGINEER. Test pile analyses shall continue until some correlation between results occurs or a conservative schedule of pile lengths can be determined from the data accumulated.

ARTICLE 16 - CONCRETE TEST PILE PROGRAM FOR LATERAL CAPACITY (HORIZONTAL LOAD)- OPTIONAL:

1. At the discretion of the CITY in coordination with the ENGINEER, the Contractor shall perform a test pile program to determine the adequacy of the piles under lateral loading. A minimum of two (2) test piles shall be placed in locations and to an embedment approved by the ENGINEER. An effort shall be made to evenly distribute test piles over the site where production piles are required. Pile testing may be performed from the land or from a barge. If the piling used in the axial test pile program are not significantly damaged, they may be used in the lateral load test program.
2. Test piles shall be of similar material, finish and size in cross-section to those in the design specifications, and must be of similar same strength and number of strands as it may desirable to re-use the test piles for production. The piling itself shall at least withstand the pile-driving operation without cracking or failing, typical chips around the pile head notwithstanding.
3. The Engineer may have specified pile lengths and embedment based on limited soils information. The ENGINEER will provide the design lateral capacity and allowable final lateral deflection for the test. The CONTRACTOR shall perform the lateral load test as follows:
   A. Using an approved lateral loading system with a scaled gauge device measuring the pull force, load the pile in 1,000 pound increments and measure the lateral deflection after three (3) minutes of achieving each increment.
   B. Each incremental load shall be completely unloaded with the "at rest deflection" recorded prior to applying the subsequent lateral load.
   C. Applying and releasing loads shall be performed in a slow and even manner at a point on the pile equal to the proposed elevation dictated by the ENGINEER.
   D. The final load shall be the even 1,000 pound increment beyond the lateral load requirement, and shall be held for six (6) minutes prior to recording the lateral deflection and release.
   E. The final "at rest deflection" shall be recorded.
   F. The pile shall be determined adequate if the final "at rest deflection" is less than the value determined to be acceptable for the project application.

ARTICLE 17 - CAP CONCRETE

1. All construction, manufacturing, fabrication and testing of materials shall be performed under the guidelines set forth in applicable local, state, and federal codes, and/or under recommendations provided in technical publications of respected professional or industry organizations. Material testing programs, where applicable, shall be presented to the ENGINEER for review and approval. All mix designs by the concrete supplier must be submitted to the ENGINEER for approval prior to submitting order.
2. All products constructed or manufactured/supplied for the project shall be accompanied by industry acceptable warranties or guarantees.
3. All concrete shall be of the same mix design as follows:
   A. Compressive Strength = 6000psi
   B. Water-cement ratio <= 0.40
   C. Air entrainment = 1.5% min.
   D. Potable water, no chlorides.
   E. Type I Cement
   F. 6% addition of microsilica per weight of binders.
   G. Apply Master Builders "Confilm", or equivalent immediately after finishing per manufacturer's specifications.
   H. Large and small aggregates washed and free of chlorides or reactive chemicals.
   I. Retarders or accelerators not allowed unless justified to the ENGINEER prior to their use.
4. Concrete cover from all exterior faces shall be 4" clear to outermost face of any reinforcement.
5. Continually wet water curing on all components. Begin water curing when the concrete has hardened to a point where a "knock" with the knuckles does not indent the surface. Water must be applied such that the entire exposed surface is saturated. Sprinklers or perforated hoses are common methods used for continuous water curing.
6. Curing compound applied uniformly and within one hour to formed sides after stripping forms.
7. Use non-metallic chairs and spacers in reinforcement placing, or for any other necessary in form attachments or alignments.
8. The final alignment of the concrete cap shall be straight and level per elevations and plans provided.
9. Concrete shall be continually cast in forms, fully filling forms as the casting progresses. No greater than 45 minutes may transpire between individual castings. Trucks may not sit on site for greater than 45 minutes. Delays in casting a given form greater than 45 minutes shall be rejected, unless an acceptable construction joint can be made. Concrete sitting for greater than 45 minutes in the truck on-site shall be rejected at the CONTRACTOR's expense.
10. The CONTRACTOR is solely responsible for integrity of forms. Formwork shall be rigid and remain in-place throughout the casting and curing process. Incomplete filling, or filling bottoms of, forms, to allow partial curing prior to completely filling forms is not acceptable.
11. A working concrete vibrator must be on-site prior to delivery of first concrete. The ENGINEER or ENGINEER's Representative shall not allow concrete to be cast otherwise.
12. Vibrate concrete fully, particularly at corners and edges, in a continuous vertical plunging motion, taking care not to hold the vibrator still at any time while in the concrete. Concrete with voids and/or honeycombing will be rejected.
13. Concrete materials testing shall be per acceptable ASTM methods and intervals. A materials testing program shall be prepared by the CONTRACTOR and/or Manufacturer for review and approval by the ENGINEER. As a minimum, four (4) test cylinders shall be cast for any given amount of concrete cast in a day. At the CONTRACTOR's expense, the cylinders shall be tested at 3, 7, 14 and 28 days to demonstrate compliance with the specified compressive strength.

ARTICLE 18 - VERTICAL JOINTS IN CAP - EXPANSION JOINTS (E.J.)

1. All expansion joints shall be full depth with no typical cap reinforcing passing through the joint. Longitudinal cap reinforcing shall stop 4 inches from the ends of the joint on each side.
2. The vertical joint gap shall be 1/2 inch uniformly over the entire cross-section. One suggested method to effect proper vertical and plane joints is to cast every other section of cap and cast the remaining sections after the first castings are set.
3. As noted on the plans there are two types of expansion joints. One type includes three (3), 30-inch long, 1 1#2" diameter, smooth, greased dowels shall be placed in the center of the joint cross-section. The dowels shall be at the approximate mid-cap height level, side-by-side, and equally spaced laterally across cap. The dowels shall not be within 1.5 inches of any cap reinforcing or other structural component. The other type of expansion joint does not include dowels extending across the joint.
4. The joint spacer shall be 1/2" neoprene, full cap width and height.

ARTICLE 19 - PILE CAPS

1. Pile Caps: Concrete dock piles along the ICWW side of the project shall have HDPE or fiberglass pile caps as supplied by Henderson Marine Supply, Inc., Petaluma, California, or approved equal. Color shall be white. Pile caps shall be constructed of high gloss, long lasting fiberglass with gelcote. Minimum wall thickness shall be 1/8".

ARTICLE 20 - STEEL SHEET PILING

1. The pile driving equipment shall be of the proper size and have the capacity to handle, place and hold the piles to the alignment shown on the Drawings. The equipment shall be maintained in a safe operating condition.
2. Prior to signing of the construction contract, the CONTRACTOR being considered shall have all major equipment items available for inspection. Any deficiencies in quality, quantity or type of equipment shall be corrected prior to commencing work and such correction shall be a required condition to properly fulfill the contract. This inspection and subsequent approval shall in no way relieve the CONTRACTOR from his obligation to provide all equipment required to properly perform the work. In addition, the equipment shall be as further specified in the following paragraphs.
3. Leads: The leads are to be made of steel and shall be held rigid either by being fastened to the pile-driving machine or by use of jigs or templates. In any case the leads shall be stiff enough to direct the hammer and pile to the plan alignment of the pile being driven. A follower will be permitted for driving the sheet piling. Details of the follower to be used shall be submitted to the ENGINEER for approval.
4. Sheet piles shall be driven using a low noise, high-frequency pile driving hammer with minimal or no vibration at start up and shut down to minimize vibration and disruption to surroundings. The CONTRACTOR shall verify site conditions and determine the type hammer to be used that will minimize impacts to upland structures and utility infrastructure. The CONTRACTOR will be held responsible for damage to upland structures, utility infrastructure, resort amenities, and other existing site features for improper selection of equipment or construction methodologies. The CONTRACTOR shall note that the CITY may monitor vibration during construction through independent contractor, at the expense of the CITY. Details of the vibration monitoring program will be provided to the CONTRACTOR prior to construction, as applicable.
5. The lower end of the hammer shall be fitted with an anvil base or bonnet that is built especially for holding the pile under the center of the hammer during driving operations.
6. Hammers shall be maintained in good operating condition and shall be operated at the manufacturer's rates number of blows per minute.
7. Steel Sheet Piling: Steel sheet piles shall conform to ASTM A572, or as indicated on Drawings. Sheet piles shall be of the continuous interlock type of the form and weight shown on the Drawings. All accessories and special make-up shall conform to ASTM A36.
8. Coating: Targuard (4.72) high build, polyamide epoxy coal tar coating as manufactured by Sherwin-Williams, or approved equal. The CONTRACTOR shall submit a coating specification for approval by the ENGINEER.
9. Piling shall be shop coated on each side with two coats of 8 mils each, in accordance with manufacturer's specifications. Coat both sides of the top 20 feet of the sheets. Prepare surface as per SSPC-10. Coating of sheets shall be sufficiently dried prior to shipping such that sheets do not adhere to each other upon separating in the field. Loss of coating due to separating "stuck" sheets shall be grounds for refusal of product.
10. All necessary demolition and excavation for pile clearance shall be completed before diving is commenced.
11. The location of any existing underground obstructions shall be referenced by indicator posts and these points shall be protected until all pile driving in the area has been completed.
12. No pile shall be driven within 10 feet of concrete which is less than four days old, unless so directed in writing by the ENGINEER.
13. Piles shall be carefully located to the lines indicated on the Drawings and shall be driven plumb. Extreme care shall be exercised in the locating and driving of piles so that other piles or existing utilities and structures will not be damaged in any way.
14. Each run of piling shall be driven progressively from the start and no pile shall be driven to a lower grade than those behind in the same run. When driving the sheet piling, no cutting edge shall lead its adjacent sheets by more than four feet.
15. The maximum permissible deviation from the indicated lines shall be not more than 2" on any 20 feet length of wall or a total of 6". No sheet pile in the finished wall shall be out of plumb more than 1" in 20 feet, or a total of 2". All sheet piles shall be driven to elevation shown on Drawings.
16. Execute welding with welders qualified in criteria set forth in applicable local, state and federal codes.
17. Welding electrodes shall be suitable for the steel and intended service.
18. Any pile so out of line or plumb that it exceeds the maximum permissible deviation shall be removed and re-driven, at the expense at the CONTRACTOR.
19. The pile driving procedure shall not subject the piles to excessive abuse causing damage. Any pile so damaged in handling or driving shall be replaced by a new pile, or otherwise corrected, as directed by the CITY's Designated Representative and at the expense of the CONTRACTOR.
20. Protection by Pile Head: The heads of sheet piles shall be protected during driving by a steel driving head provided with a steel block to receive the impact from the hammer. The head shall fit closely over the top of the pile and shall extend down at least four inches on the pile head.

ARTICLE 21 - HELICAL ANCHORS (ALTERNATIVE)

1. The extent of the helical tieback anchors are depicted on the plans. Helical tieback anchors shall be provided by A.B. CHANCE, or approved equal. The CONTRACTOR shall provide materials, tools, equipment, labor and supervision, and installation techniques necessary to install helical anchors as detailed on the plans, including connection details. This shall include provisions for load testing to verify tieback capacity and deflection as described, herein.
2. The helical anchor CONTRACTOR shall be experienced in performing design and construction of helical tieback anchors and shall furnish all materials, labor, and supervision to perform the work. The CONTRACTOR shall provide names of on-site personnel that will be involved with the work including supervisors, machine operators and project managers.
3. All helical tieback anchors shall be installed in the presence of the ENGINEER or designated representative of the CITY unless said representative informs the CONTRACTOR otherwise. The ENGINEER or designated representative shall have the right of access to any and all field installation records and test reports.
4. Helical tieback anchors shall be designed to meet the specified loads and acceptance criteria as depicted on the plans. The CONTRACTOR shall provide shop drawings, technical data and calculations for review and approval by the ENGINEER. Shop drawings at a minimum shall include:
   * Helical anchor number, location and pattern by assigned identification number
   * Helical anchor design load
   * Type and size of central steel shaft
   * Helix configuration (number and diameter of helix plates)
   * Minimum effective installation torque
   * Minimum overall length
   * Inclination of helical anchor
   * Type and size of thread bar

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"
PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
NOTES AND SPECIFICATIONS

PREPARED FOR:
pompano beach
Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
FOR THE FIRM SEA DIVERSIFIED, INC.
C.A. LICENSE NUMBER 25937

PREPARED BY:
SEA DIVERSIFIED, INC.
Surveying & Engineering Applications
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DATE:	JUNE 2025
DRAWN BY:	W.T.S.
CHECKED BY:	W.T.S.
SCALE:	N.T.S.
SHEET:	N-1

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990

5. The CONTRACTOR must demonstrate to the ENGINEER through testing and/or mutually agreed upon acceptance criteria that the production helical tiebacks meet or exceed the specified performance parameters.

6. Centerline of helical anchors shall not deviate more than six inches unless approved by the ENGINEER. Angular tolerance shall not deviate more than five degrees.

7. Helical anchor components shall be hot-dipped galvanized as per manufacturer recommendations to achieve a minimum service life of fifty years. The CONTRACTOR shall provide the coating specification for approval by the ENGINEER.

8. The CONTRACTOR shall be provided with a Geotechnical Report. The report shall be considered to be representative of the in-situ subsurface conditions likely to be encountered on the project site. The Geotechnical Report shall be the used as the basis for helical tieback anchor design using generally accepted engineering judgment and methods.

9. The Geotechnical Report shall be provided for purposes of bidding. If during helical tieback anchor installation, subsurface conditions of a type and location are encountered of a frequency that were not reported, inferred and/or expected at the time of preparation of the bid, the additional costs required to overcome such conditions shall be considered as extras to be paid for by the CITY.

10. The CONTRACTOR shall provide the ENGINEER copies of helical tieback anchor installation records within 24 hours after each installation is completed. Records shall be prepared in accordance with the manufacturer specifications and shall include at a minimum the following information:
    * Name of project and CONTRACTOR
    * Name of CONTRACTORâ€™s supervisor during installation
    * Date and time of installation
    * Name and model of installation equipment
    * Location of helical anchor by assigned identification number
    * Helical tieback anchor installation duration and observations
    * Total length and inclination of installed helical anchor
    * Actual helical tieback anchor type and configuration including lead/starter section, number and size of helix plates, number and type of extension sections
    * Notes pertaining to interruptions, obstructions, or other relevant information
    * Rated load capacities
    * Note that the CONTRACTOR shall provide a final report prepared by a Professional ENGINEER certifying the helical anchors met or exceeded the required load rating.

ARTICLE 22 - HELICAL ANCHOR TEST PROCEDURE

1. The CONTRACTOR shall submit plans for pre-production and production testing for the helical tieback anchors to the ENGINEER for review and acceptance prior to beginning load tests. Load tests shall be performed to verify the suitability and capacity of the proposed helical tieback anchor, and the proposed installation procedures prior to installation of production anchors. A minimum of two sacrificial test anchors shall be constructed immediately prior to the start of work on the production tieback anchors. The CITY shall determine the number of pre-production tests, their location, and acceptable load criteria.

2. Test procedures shall be performed to industry standards and in accordance to manufacturer specifications. Pre-production helical anchor installation methods, procedures, equipment, and overall length shall be identical to the production anchors to the extent practical.

3. Work shall not begin until all the submittals have been received and approved by the ENGINEER. The CONTRACTOR shall allow the CITY a reasonable time to review, comment, and return the submittal package after a complete set has been received.

4. The ENGINEER will provide performance and acceptance criteria prior to commencement of the test.

5. The CONTRACTOR shall provide the OWNER copies of field test reports within 24 hours after completion of the load tests. The test report, at a minimum shall include the following information:
    * Name of project and CONTRACTOR
    * Name of CONTRACTORâ€™s supervisor during test
    * Name of third party test agency, if required
    * Date, time and duration of the test
    * Name and model of test equipment
    * Description of calibrated testing equipment and test set-up
    * Location of helical anchor by assigned identification number
    * Total length and inclination of installed helical anchor
    * Helical tieback anchor type and configuration including lead/starter section, number and size of helix plates, number and type of extension sections
    * Notes pertaining to test procedure, equipment adjustments, or other relevant information
    * Load capacities achieved
    * Signed by third party test agency representative or registered professional engineer

ARTICLE 23 – TIMBER PILES

1. Timber piles shall be 12" minimum diameter (measured 36" from top of pile) Southern Yellow Pine (SYP), No. 1 dense grade with minimum 2.5 pcf CCA pressure treatment conforming to ASTM D25. Pressure treatment must be in accordance with AWPA C3 and C18. For bidding purposes pile length shall be forty (40) feet. Final pile length for construction shall be determined based on a Geotechnical Investigation or approved test pile program. If pile length is to be determined based on a test pile program, the CONTRACTOR is to submit proposed test pile to ENGINEER for approval prior to installation of production piles. Test pile program, if implemented as an alternate to soil borings, must be monitored by an independent geotechnical engineering firm in coordination with the ENGINEER.

2. Piles shall be final designed and driven to meet the load rating necessary for each and the minimum penetration dictated by the ENGINEER. Piles shall be driven full length, or to a tip elevation where specified. It shall be the CONTRACTOR's responsibility to verify and guarantee that the specified pile bearing or lateral capacity is met. The CONTRACTOR's verification may be one of the following:
    * providing an equation, chart or table from the pile-driving hammer manufacturer relating bearing capacity to that particular hammer's "blows per foot".
    * performing a test pile program to the satisfaction of the ENGINEER
    * providing a certified, engineered foundation design based on actual soil borings for the site.

3. The CONTRACTOR will be required to maintain a pile driving log to document the pile driving characteristics of all piles. Pile driving logs must be conducted by an independent engineering firm or geotechnical testing facility retained and paid for by the CONTRACTOR. The CONTRACTOR's bid shall include the cost of independent monitoring and preparation of field logs / reports pertaining to the installation of piles. Field logs and pile driving reports must be submitted to the CITY and/or ENGINEER on a daily basis or immediately following the installation of piles unless otherwise directed by the CITY. The pile driving logs shall include the following minimum information: date, time, weather conditions, equipment used, pile location designation, blows per foot over entire driving sequence, total length of pile, embedment length, un-cut top of pile, length of amount cut off, final elevation of top of pile (after driving and cut-off), amount of jetting or punching (if required), unusual pile behavior, damage and re-driving.

4. Jetting of piles is not permitted except only as necessary, and then must be approved by the ENGINEER prior to performing the jetting.

5. If solid rock, debris or refusal is encountered prior to achieving the minimum penetration, the CONTRACTOR shall use drilling equipment to achieve the required penetration dictated by the ENGINEER. Any deviation from the specified penetration due to sub-surface rock conditions must be approved by the ENGINEER. It is noted that the CONTRACTOR's means and methods for pile driving and the associated cost of pile driving included in the CONTRACTOR's Bid Schedule must anticipate the use of drilling equipment to penetrate rock to achieve minimum depths of penetration required by the ENGINEER.

6. Piles shall be handled and driven in a manner that does not damage the piles. Damaged piles must be removed, discarded and replaced at the CONTRACTOR's expense.

ARTICLE 24 – POTABLE WATER SYSTEM

1. The extent of the potable water system is shown on the drawings prepared by the ENGINEER. CONTRACTOR shall coordinate with the MANUFACTURER regarding the installation of the potable water system including details of the power centers with hose bibs and attachment details.

2. All plumbing work shall be conducted by a licensed Plumbing Contractor, registered in the State of Florida.

3. Drawings do not attempt to show exact details of all piping. Where diagrams have been made to show piping connections, CONTRACTOR is cautioned that these diagrams must not be used for obtaining material quantities. Changes in location of equipment or piping, advisable in the opinion of the CONTRACTOR, shall be submitted to the ENGINEER for review and approval before proceeding with the work. All measurements and dimensions shall be verified at the site.

4. CONTRACTOR shall be fully aware of the peculiarities and limitations of the space available for the installation of all materials in this Contract. In addition, the CONTRACTOR shall ensure that all equipment is readily accessible and provide access panels as required. The foregoing shall also apply in general to any part of the system that may be necessary to be accessed from time to time for maintenance and operation of the system.

5. CONTRACTOR shall install all piping, fixtures, equipment, and accessories in strict accordance with the laws, rules, and regulations of the State, County and Municipality, whichever represents the highest standard. All work shall be approved by the applicable Plumbing Code Inspector.

6. Hose bibs are components of marine power centers, light bollards or independent water pedestals as depicted on the plans. Marine power centers are of the type specified in ARTICLE 25. The extent of the potable water system is shown on the drawings prepared by the ENGINEER. CONTRACTOR shall coordinate with the MANUFACTURER regarding the installation of the potable water system including details of the power centers with hose bibs and attachment details.

7. All materials shall conform to the requirements of the Standard Building Code, ASA, ASTM, NBS, AWWA or other applicable standards.

8. Dielectric couplings shall be provided between ferrous and nonferrous materials, where applicable.

9. All pipe material shall be High Density Polyethylene, HDPE (Heat Fused), ASTM F-14.

10. HDPE pipelines including all valves and fittings shall be routed within utility chaseways, integral to the aluminum frame floating dock systems or as otherwise specified on MANUFACTURER approved shop drawings. Any strapping used to secure piping or valves to the dock systems including screws and other hardware shall be stainless steel, type 316. Plastic, galvanized coated steel or other type strapping and hardware is not acceptable.

11. Valves shall be installed at locations shown on the plans in a manner recommended by the MANUFACTURER and acceptable to the ENGINEER.

12. The CONTRACTOR shall coordinate with the ENGINEER regarding utility routing through existing bulkhead or rock revetment structures, as applicable.

13. The CONTRACTOR shall coordinate with the CITY regarding the location of connection to the existing potable water system

14. Pipeline Testing: Per plans and specifications prepared by the ENGINEER or as specified by the CITY.

ARTICLE 25 – ELECTRICAL SYSTEM

1. The extent of the electrical system is shown on the drawings prepared by the ELECTRICAL ENGINEER. CONTRACTOR shall refer to the electrical plans for power pedestal, lighting and other component locations and specifications including conduit / wiring schematics, distribution panel schedules and other details specific to the electrical and related components of the project. Additionally, the CONTRACTOR shall coordinate with the MANUFACTURER regarding the pipe routing installation of the electrical system.

2. All electrical work shall be conducted by a licensed Electrical Contractor, registered in the State of Florida.

3. Drawings do not attempt to show exact details of all electrical components. CONTRACTOR is cautioned that these diagrams must not be used for obtaining material quantities. Changes in location of equipment or conduit / cables, advisable in the opinion of the CONTRACTOR, shall be submitted to the ELECTRICAL ENGINEER for review and approval before proceeding with the work. All measurements and dimensions shall be verified at the site.

4. CONTRACTOR shall be fully aware of the peculiarities and limitations of the space available for the installation of all materials in this Contract. In addition, CONTRACTOR shall ensure that all equipment is readily accessible and provide access panels as required. The foregoing shall also apply in general to any part of the system that may be necessary to be accessed from time to time for maintenance and operation of the system.

5. Installation of electrical systems shall be performed to all applicable local, state and federal codes.

6. Marina power pedestals shall be stainless steel, type 316, with a UV-resistant powder coating. Color shall be white. Enclosures shall be UL listed as Type 3R weatherproof. Aluminum, fiberglass, plastic, composite or other types of power center enclosures are not acceptable. Power centers shall include 360 degree photocell-controlled LED lighting (color per OWNER), dual water ball valves with 3/4 inch hose bibs and stainless steel handles and 20A/125V GFI receptacles as depicted on the plans prepared by the ELECTRICAL ENGINEER. Marina power centers (types as per plans) shall be supplied by Marina Electrical Equipment (MEE), Eaton Corporation Marina Power and Lighting, Inc., or approved equal.

ARTICLE 26 – FIRE SYSTEM

1. The extent of the fire protection system is shown on the drawings prepared by the ENGINEER. It shall be the responsibility of the CONTRACTOR to confirm that the existing fire protection system at the facility meets or exceeds the requirements of the applicable local Fire Marshal. The CONTRACTOR shall coordinate with the MANUFACTURER regarding installation of the fire protection system.

2. All work pertaining to the fire protection system shall be conducted by a licensed Sprinkler Contractor, registered in the State of Florida.

3. Fire protection system final design and details, and their approval by the applicable CITY Fire Code Inspector, shall be the responsibility of the CONTRACTOR. Plans shall comply with the Florida Fire Protection Code, Latest Edition, NFPA 1 (Uniform) Fire Code, Latest Edition, NFPA 101, Life Safety Code, Latest Edition and all applicable local amendments or supplements to Florida Fire Protection Codes. Plans and installation shall comply with all applicable requirements of NFPA 13, NFPA 14 and NFPA 24.

4. CONTRACTOR shall install fire extinguisher cabinets at locations depicted on the plans. Relocation of fire extinguisher cabinets to other locations on the fixed and floating dock structures to facilitate the installation process is acceptable if complying with NFPA criteria. Fire extinguisher cabinets shall be stainless steel (316L), powder coated white, model "Firehouse" as manufactured by Marina Electrical Equipment (MEE), Eaton Corporation Marina Power and Lighting, Inc., or approved equal. Cabinets shall have a photocell-controlled light (color red), 20lb fire extinguisher and life ring. CONTRACTOR shall coordinate with the Electrical Contractor regarding the installation and electrical connection.

ARTICLE 27 - WARRANTY (UTILITY - FIRE SYSTEMS)

1. The utility components including but not limited to the fire extinguisher cabinets, marine power pedestals, distribution panels shall have a minimum five (5) year Warranty that goes in effect after acceptance of the product by the CITY. Subject to conditions at or below the specified design conditions, the warranty shall include, but not be limited to, the following items:
    * Repair or replacement of the product or components of the project due to failure or damage resulting from any or all conditions that fall within the design criteria outlined in the Specifications.
    * Repair or replacement of the product or components of the product due to deterioration caused by corrosion from typical marine environmental conditions.
    * Full repair or replacement cost including product manufacturing, system components, materials, hardware, taxes, shipping and handling and all required labor for removal of or repairs to damaged product and installation of new product. The Warranty shall not include a provision that allows for devaluation of the product or components of the product based on years in service from the date of final product acceptance.
    * The warranty shall remain effective for the full five (5) year term with no option by the supplier to refund to the CITY the original purchase price, or devalued price based on number of years in service from the date of final product acceptance.

ARTICLE 28 - FINAL INSPECTION AND PROJECT CERTIFICATION

1. The CONTRACTOR shall be required to coordinate final inspections for project certification by the ENGINEERS and/or other licensed engineers involved in the project. The CONTRACTOR shall anticipate coordinating inspections at time of substantial completion along with subsequent final inspections on a different date, after the CONTRACTOR has completed a final "Punchlist" of items, as necessary.

2. Upon completion of the project, the CONTRACTOR shall provide to the CITY a final asbuilt of all docks and utilities. Record Asbuilt drawings shall reflect any or all changes, modifications or additions to the approved shop drawings used for construction. Any changes to the shop drawings reflected on the Record Asbuilt drawings must be clearly highlighted. Record Asbuilt drawings must be certified by a Licensed Professional ENGINEER registered in the State of Florida.

END OF TECHNICAL SPECIFICATIONS

PLAN SET ISSUED FOR BIDDING PURPOSES 6.25.25

SCALE INDICATED BASED ON A PLOT SIZE OF 24" x 36"

PLANS ARE NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A LICENSED ENGINEER REGISTERED IN THE STATE OF FLORIDA

REVISIONS:

NO.:	DATE:	DESCRIPTION:

PROJECT:
HILLSBORO INLET FISHING CENTER BULKHEAD & MARGINAL DOCK RECONSTRUCTION
CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA

SHEET TITLE:
NOTES AND SPECIFICATIONS

PREPARED FOR:
pompano beach — Florida's Warmest Welcome
CITY OF POMPANO BEACH
1201 NE 5TH AVENUE
POMPANO BEACH, FLORIDA 33060

CERTIFICATION:
WILLIAM T. SADLER JR., P.E.
FLORIDA REGISTRATION NUMBER 41184
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C.A. LICENSE NUMBER 25937

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SEA DIVERSIFIED

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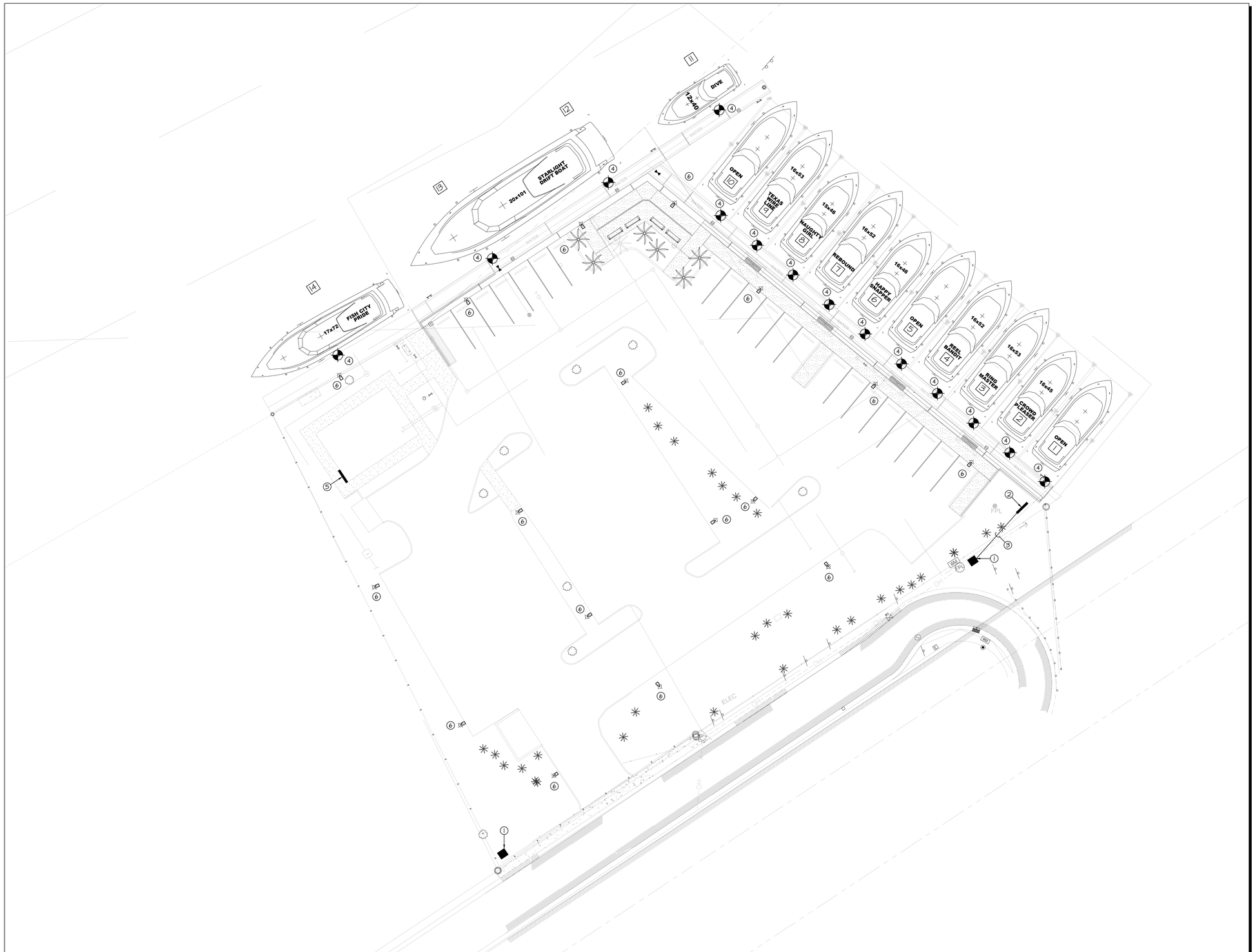
CHECKED BY:	W.T.S.
SCALE:	N.T.S.
SHEET:	N-2

CADD ID:
SHEET NO.:
TOTAL NUMBER OF SHEETS:

SDI P.N. 22-2990



1
E-1

ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

NORTH

PLAN NOTES:

1. APPROXIMATE LOCATION OF EXISTING FP&L PAD MOUNT TRANSFORMER TO REMAIN. VERIFY EXACT LOCATION AND COORDINATE REQUIREMENTS WITH POWER COMPANY PRIOR TO ROUGH-IN.
2. APPROXIMATE LOCATION OF PROPOSED SERVICE RACK. SEE RISER DIAGRAM AND EQUIPMENT RACK DETAIL FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
3. TWO 2"C-3#3/0. VERIFY EXACT ROUTING PRIOR TO ROUGH-IN.
4. APPROXIMATE LOCATION OF PROPOSED SHORE POWER PEDESTAL. SEE SCHEDULE AND RISER DIAGRAM FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN. (TYPICAL OF 14)
5. APPROXIMATE LOCATION OF EXISTING MAIN DISCONNECT AND TENANT METER CENTER FEEDING EXISTING SHORE POWER PEDESTALS TO BE REMOVED AND REPLACED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
6. EXISTING POLE MOUNTED SITE LIGHTING FIXTURE TO BE REPLACED. REMOVE EXISTING POLE AND FIXTURE. EXTEND EXISTING CONDUIT AND CONDUCTORS TO NEW FIXTURE AS REQUIRED. (TYPICAL OF 17)

GENERAL ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CURRENT APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL FIRE CODES (NFPA), THE AMERICANS WITH DISABILITIES ACT (ADA), THE FLORIDA BUILDING CODE (FBC) AND ALL OTHER LOCAL CODES AND AMENDMENTS.
2. ALL PANELBOARDS SHALL BE PROVIDED WITH A TYPEWRITTEN SCHEDULE SHOWING CIRCUIT NUMBERS AND A COMPLETE DESCRIPTION OF EACH CIRCUIT.
3. MINIMUM TRADE SIZE CONDUIT PERMITTED SHALL BE 1/2 INCH UNLESS NOTED OTHERWISE.
4. ALL CONDUCTOR METAL SHALL BE COPPER WITH 600 VOLT INSULATION TYPE THHN (MINIMUM SIZE SHALL BE #12AWG). CONTRACTOR SHALL ADJUST WIRE AND CONDUIT SIZES IF OTHER INSULATION TYPES ARE USED.
5. ALL PANELBOARDS, SWITCHES AND CIRCUIT BREAKERS SHALL BE MEE, ITE, SQUARE D, GE, OR CUTLER HAMMER.
6. ALL CONDUITS SHALL HAVE A SEPARATE GREEN GROUND CONDUCTOR INSTALLED FOR GROUNDING.
7. ALL EMPTY CONDUITS SHALL CONTAIN JET LINE #232 POLYOFIN 200 LB. TEST.
8. ALL WORK SHOWN ON THE ELECTRICAL PLANS SHALL BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

ELECTRICAL SYMBOL LEGEND:

AFCI	ARC FAULT CURRENT INTERRUPTER
GFI	GROUND FAULT INTERRUPT
OC	MOUNT DEVICE AT OVER COUNTER HEIGHT
WP	WEATHERPROOF
	EXHAUST FAN
	GROUND TYPE DUPLEX RECEPTACLE 120V. +18"AFF TO BOTTOM OF DEVICE.
$	S.P.S.T. SWITCH
	LIGHTING FIXTURE
	WALL MOUNTED LIGHTING FIXTURE
A	LIGHT FIXTURE TYPE. SEE SCHEDULE.
X	PLAN NOTE
	120/240V PANELBOARD
	GROUND CONNECTION
	DISCONNECT SWITCH
	CONDUIT

SCOPE OF WORK:

THIS PROJECT CONSISTS OF THE UPGRADING OF THE EXISTING ELECTRICAL SERVICE FOR THE EXISTING BOAT SLIPS ALONG WITH NEW SHORE POWER PEDESTALS.

THE NEW SHORE POWER PEDESTALS WILL HAVE RECEPTACLES TO PROVIDE SHORE POWER LOADS FOR EACH VESSEL.

THE EXISTING SITE LIGHTING WILL BE REPLACED WITH NEW AMBER TURTLE FRIENDLY LED FIXTURES.

RONALD L. LEVINSON, P.E.

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FL P.E. NO. 34871

This drawing has been electronically signed and sealed by Ronald L. Levinson P.E. on the date indicated. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

RONALD L. LEVINSON
LICENSE
No. 34871
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PROJECT:

Hillsboro Inlet Fishing Center

ELECTRICAL UPGRADES

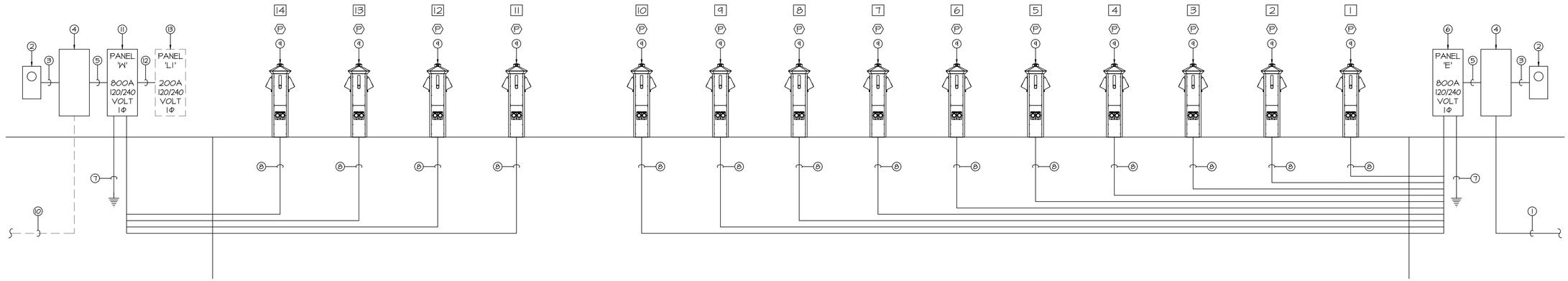
2705 North Riverside Drive
Pompano Beach
Florida 33062

Date:	6-6-2025
Drawn By:	RLL
Checked By:	RLL
Project No.:	250411
Revised:	.
	.

SHEET NO. 1 of 4

E-1

PRELIMINARY NOT FOR CONSTRUCTION



ELECTRICAL RISER DIAGRAM

1 / E-2

120/240 VOLT 1Ø SERVICE

SCALE: NONE

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This drawing has been electronically signed and sealed by Ronald L. Levinson P.E. on the date indicated. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

RONALD L. LEVINSON PROFESSIONAL ENGINEER LICENSE No. 34871 STATE OF FLORIDA

PROJECT:

Hillsboro Inlet Fishing Center

ELECTRICAL UPGRADES

2705 North Riverside Drive
Pompano Beach
Florida 33062

Date:	6-6-2025
Drawn By:	RLL
Checked By:	RLL
Project No.:	250411
Revised:	.
	.

SHEET NO. 2 of 4

E-2

PRELIMINARY NOT FOR CONSTRUCTION

PANELBOARD SCHEDULE — PANEL W

LOCATION: SEE SITE PLAN

BUS AMPS A	BUS AMPS B	LOAD	POLES	TRIP	CIRC.	BUS A	BUS B	CIRC.	TRIP	POLES	LOAD	BUS AMPS A	BUS AMPS B
80		SLIP 11	2	100	1			2	100	2	SLIP 12	80	
	80		-		3			4		-			80
80		SLIP 13	2	100	5			6	100	2	SLIP14	80	
	80		-		7			8		-			80
-		SPACE			9			10			SPACE	-	
	-	SPACE			11			12			SPACE		-
-		SPACE			13			14			SPACE	-	
	-	SPACE			15			16			SPACE		-
-		SPACE			17			18			SPACE	-	
	-	SPACE			19			20			SPACE		-
-		SPACE			21			22			SPACE	-	
	-	SPACE			23			24	20	2	SITE LIGHTING		10
-		SPACE			25			26		-		10	
150		PANEL 'O'	2	200	27			28	30	2	SURGE SUPPRESSION		1
	150		-		29			30		-		1	
					31			32					
					33			34					
					35			36					
					37			38					
					39			40					
					41			42					

RATED VOLTAGE: 120/240 VOLT 1 PHASE, 3 WIRE
RATING IS TO BE: ( )100 ( )225 (●)800 AMPS
(●)MAIN BREAKER 800 AMPS ( ) MAIN LUGS ONLY
BRANCH POLES: ( )12 ( )20 (●)30 ( )42
PANELBOARD IS TO BE: ( )FUSED (●)CIRCUIT BREAKER TYPE
ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT CURRENT Isc = 22,000 AMPS, SYM RMS

FEED IS TO BE: (●)BOTTOM ( )TOP FROM: UTILITY VIA CT
GROUND BAR IS REQUIRED
NEUTRAL BUS IS TO BE: (●)FULL ( )DOUBLE SIZE
HINGED DOOR WITH KEYED LATCH (●)IS ( )IS NOT REQUIRED
NEMA 4X ENCLOSURE (●)IS ( )IS NOT REQUIRED

PANELBOARD SCHEDULE — PANEL E

LOCATION: SEE SITE PLAN

BUS AMPS A	BUS AMPS B	LOAD	POLES	TRIP	CIRC.	BUS A	BUS B	CIRC.	TRIP	POLES	LOAD	BUS AMPS A	BUS AMPS B
80		SLIP 1	2	100	1			2	100	2	SLIP 2	80	
	80		-		3			4		-			80
80		SLIP 3	2	100	5			6	100	2	SLIP 4	80	
	80		-		7			8		-			80
80		SLIP 5	2	100	9			10	100	2	SLIP 6	80	
	80		-		11			12		-			80
80		SLIP 7	2	100	13			14	100	2	SLIP 8	80	
	80		-		15			16		-			80
80		SLIP 9	2	100	17			18	100	2	SLIP 10	80	
	80		-		19			20		-			80
-		SPACE			21			22			SPACE	-	
	-	SPACE			23			24			SPACE		-
-		SPACE			25			26			SPACE	-	
	-	SPACE			27			28	30	2	SURGE SUPPRESSION		1
-		SPACE			29			30		-		1	
					31			32					
					33			34					
					35			36					
					37			38					
					39			40					
					41			42					

RATED VOLTAGE: 120/240 VOLT 1 PHASE, 3 WIRE
RATING IS TO BE: ( )100 ( )225 (●)800 AMPS
(●)MAIN BREAKER 800 AMPS ( ) MAIN LUGS ONLY
BRANCH POLES: ( )12 ( )20 (●)30 ( )42
PANELBOARD IS TO BE: ( )FUSED (●)CIRCUIT BREAKER TYPE
ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT CURRENT Isc = 22,000 AMPS, SYM RMS

FEED IS TO BE: (●)BOTTOM ( )TOP FROM: UTILITY VIA CT
GROUND BAR IS REQUIRED
NEUTRAL BUS IS TO BE: (●)FULL ( )DOUBLE SIZE
HINGED DOOR WITH KEYED LATCH (●)IS ( )IS NOT REQUIRED
NEMA 4X ENCLOSURE (●)IS ( )IS NOT REQUIRED

SHORE POWER PEDESTAL SCHEDULE:

TYPE	SYMBOL	SIDE	QUANTITY	AMPS	VOLTAGE	PHASE
(P)		A	2	30	120	1Φ
			2	50	120/240	1Φ
			1	20	120 GFCI	1Φ
		B	2	30	120	1Φ
			2	50	120/240	1Φ
			1	20	120 GFCI	1Φ

NOTES:
ALL PEDESTALS SHALL BE EQUAL TO: LIGHTHOUSE LH3050

ALL SHORE POWER RECEPTACLES SHALL BE PROVIDED WITH 30 mA GFCI PROTECTION.

ALL PEDESTALS SHALL BE PROVIDED WITH:

(1) 20 AMP 120 VOLT GFCI DUPLEX CONVENIENCE RECEPTACLE.
(1) PHOTOCELL CONTROLLED LED LIGHT FIXTURE.
(2) HOSE BIBS PER ACTIVE SLIP.
(2) HOSE/CABLE HOOKS.
(1) ELECTRIC SUB-METER PER ACTIVE SLIP.
(1) TVSS PROTECTION.

RISER NOTES:

1. THREE 3"C-3#300MCM TO FP&L. VERIFY EXACT ROUTING PRIOR TO ROUGH-IN.
2. CT METER. COORDINATE NEW SERVICE REQUIREMENTS WITH FP&L PRIOR TO ROUGH-IN.
3. 1-1/4"C FOR FP&L USE.
4. CT CAN. COORDINATE REQUIREMENTS WITH FP&L PRIOR TO ROUGH-IN.
5. THREE 3"C-3#300MCM.
6. PANEL 'E'. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.
7. 1#2/0G TO TWO 5/8" X 10' GROUND RODS 8' APART. GROUND AND BOND PER NEC ARTICLE 250.
8. SHORE POWER FEEDERS. SEE FEEDER SCHEDULE FOR ADDITIONAL INFORMATION.
9. PROPOSED SHORE POWER PEDESTAL. SEE RISER DIAGRAM AND SHORE POWER PEDESTAL SCHEDULE FOR ADDITIONAL INFORMATION. (TYPICAL OF 14)
10. EXISTING THREE 3"C-3#350MCM FROM FP&L TO REMAIN.
11. PANEL 'W'. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.
12. 2"C-3#3/0,1#6G.
13. EXISTING PANEL 'L1' TO REMAIN.
14. ALL EXISTING ABANDONED EQUIPMENT SHALL BE REMOVED.

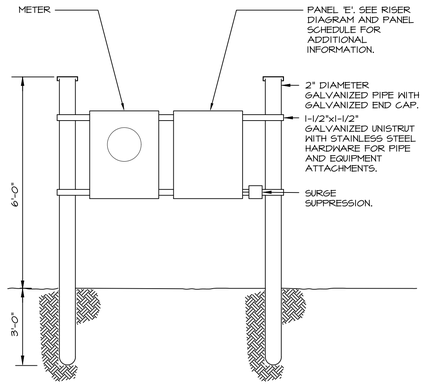
Feeder Schedule

Feeder #	Description	Breaker Size	Voltage	Receptacle Quanitity	Connected Load	Length	Min. Cir. Mils	Conduit Qty.	Conduit	Conductor	Grd.		Proposed Voltage Drop at Full Load
Panel 'E' 120/240V Single Phase													
E-1,3	Slip 1	100	120/240 - 1P	2	100	25	8,958	1	1-1/4"	3 - #3	#8	Single Phase Circuit	0.51%
E-5,7	Slip 3	100	120/240 - 1P	2	100	45	16,125	1	1-1/4"	3 - #3	#8	Single Phase Circuit	0.92%
E-9,11	Slip 5	100	120/240 - 1P	2	100	65	23,292	1	1-1/4"	3 - #3	#8	Single Phase Circuit	1.33%
E-13,15	Slip 7	100	120/240 - 1P	2	100	85	30,458	1	1-1/4"	3 - #3	#8	Single Phase Circuit	1.74%
E-17,19	Slip 9	100	120/240 - 1P	2	100	105	37,625	1	1-1/4"	3 - #3	#8	Single Phase Circuit	2.15%
E-2,4	Slip 2	100	120/240 - 1P	2	100	125	44,792	1	1-1/4"	3 - #3	#8	Single Phase Circuit	2.55%
E-6,8	Slip 4	100	120/240 - 1P	2	100	145	51,958	1	1-1/4"	3 - #3	#8	Single Phase Circuit	2.96%
E-10,12	Slip 6	100	120/240 - 1P	2	100	165	59,125	1	1-1/2"	3 - #2	#6	Single Phase Circuit	2.67%
E-14,16	Slip 8	100	120/240 - 1P	2	100	185	66,292	1	1-1/2"	3 - #2	#6	Single Phase Circuit	3.00%
E-18,20	Slip 10	100	120/240 - 1P	2	100	205	73,458	1	1-1/2"	3 - #1	#6	Single Phase Circuit	2.63%
70% per NEC 555.12				20	700								
90% per NEC 555.12 Note 2					630								
From FP&L	Panel 'E'	800	120/240 - 1P	20	630	50	169,313	3	2-1/2"	3 - #300MCM		Single Phase Circuit	0.38%
Panel 'E' 120/240V Single Phase													
W-1,3	Slip 1	100	120/240 - 1P	2	100	280	100,333	1	1-1/2"	3 - #1/0	#4	Single Phase Circuit	2.85%
W-5,7	Slip 3	100	120/240 - 1P	2	100	220	78,833	1	1-1/2"	3 - #1	#6	Single Phase Circuit	2.83%
W-2,4	Slip 5	100	120/240 - 1P	2	100	160	57,333	1	1-1/2"	3 - #2	#6	Single Phase Circuit	2.59%
W-6,8	Slip 7	100	120/240 - 1P	2	100	80	28,667	1	1-1/4"	3 - #3	#8	Single Phase Circuit	1.63%
90% per NEC 555.12				8	360								
90% per NEC 555.12 Note 2					324								
W-27,29	Office Panel	200	120/240 - 1P		120								
W-24,26	Site Lighting	20	240 - 1P		8								
From FP&L	Panel 'E'	800	120/240 - 1P	20	452	200	485,900	3	2-1/2"	3 - #300MCM		Single Phase Circuit	1.08%

ELECTRICAL LOAD CALCULATIONS:

		PANEL 'W'		PANEL 'E'
DOCK LOADS:				
TYPE A PEDESTALS				
QUANTITY OF TYPE A PEDESTALS	4			
QUANTITY OF 50 AMP 120/240 VOLT 1Φ RECEPTACLES	8			
50 AMP 120/240 VOLT 1Φ RECEPTACLES @ 12.0 KW EACH (2 PER SLIP)		96.0 KW		
TYPE A PEDESTALS				
QUANTITY OF TYPE A PEDESTALS			10	
QUANTITY OF 50 AMP 120/240 VOLT 1Φ RECEPTACLES			20	
50 AMP 120/240 VOLT 1Φ RECEPTACLES @ 12.0 KW EACH (2 PER SLIP)				240.0 KW
SUBTOTAL:	8	96.0 KW	20	240.0 KW
DEMAND FACTOR PER NEC 555.12		90 %		70 %
DERATED TOTAL:		86.4 KW		168.0 KW
DEMAND FACTOR PER NEC 555.12 NOTE 2		90 %		90 %
DERATED TOTAL:		77.8 KW		151.2 KW
OTHER LOADS:				
EXISTING OFFICE		28.8 KW		
PARKING LOT LIGHTING		2.0 KW		
TOTAL KW		108.6 KW		151.2 KW
TOTAL AMPS @ 120/240 VOLT 1Φ		452 AMPS		630 AMPS
RATING		800 AMPS		800 AMPS

NOTES:
1. DEMAND FACTOR PER NEC 555.12
2. DEMAND FACTOR FOR INDIVIDUAL METERS PER PER NEC 555.12.



2 / E-2

EQUIPMENT RACK DETAIL

SCALE: NONE

GROUNDING REQUIREMENTS:

PER NEC 555.13 PROVIDE MINIMUM #8 BONDING CONDUCTOR FROM THE SYSTEM GROUND CONNECTED TO ALL NON CURRENT-CARRYING METAL PARTS IN CONTACT WITH THE WATER THAT ARE LIKELY TO BECOME ENERGIZED.

PER NEC 555.35 (A) (3) PROVIDE GFPE PROTECTION NOT EXCEEDING 100MA FOR ALL FEEDERS AND BRANCH CIRCUITS.

SIGNAGE REQUIREMENTS:

PERMANENT SAFETY SIGNS SHALL BE INSTALLED TO GIVE NOTICE OF ELECTRICAL SHOCK HAZARD RISKS TO PERSONS USING OR SWIMMING NEAR THE DOCK PER NEC 555.10.

SIGNAGE SHALL COMPLY WITH ALL OF THE FOLLOWING:

(1) THE SIGNAGE SHALL COMPLY WITH 110.21(B)(1) AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.

(2) THE SIGNS SHALL BE CLEARLY VISIBLE FROM ALL APPROACHES TO THE MARINA FACILITY.

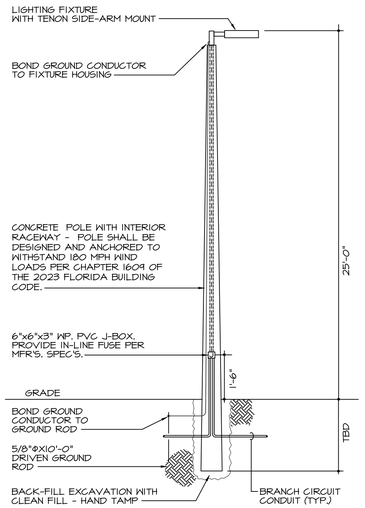
(3) THE SIGNS SHALL STATE: "WARNING - POTENTIAL SHOCK HAZARD - ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER".

GROUND FAULT PROTECTION NOTES:

1 - PROVIDE MAIN CIRCUIT BREAKERS WITH 100mA GFP DEVICE.

2 - PROVIDE ALL PEDESTAL FEEDER CIRCUITS WITH 100mA GROUND FAULT PROTECTION.

3 - PROVIDE ALL SHORE POWER RECEPTACLES WITH 30mA GROUND FAULT PROTECTION.



2 / E-3 POLE MOUNTED LIGHTING FIXTURE DETAIL

SCALE: NONE

NOTE:
MANUFACTURER SHALL PROVIDE WIND LOAD CALCULATIONS FOR POLE SIGNED AND SEALED BY FLORIDA LICENSED ENGINEER.

LUMINAIRE SCHEDULE:

TYPE	MANUFACTURER	DESCRIPTION	ARRANGEMENT	WATTS	LUMENS	MOUNTING	LLF	QTY
A	LITHONIA LIGHTING	DSXI-LED-P1-AMBLW-TFTM	SINGLE	79	4544	25' ABOVE GRADE ON NEW CONCRETE POLE	0.950	9
B	LITHONIA LIGHTING	DSXI-LED-P1-AMBLW-T3M	SINGLE	79	4463	25' ABOVE GRADE ON NEW CONCRETE POLE	0.950	3
C	LITHONIA LIGHTING	DSXI-LED-P1-AMBLW-T5M	SINGLE	79	4769	25' ABOVE GRADE ON NEW CONCRETE POLE	0.950	5

CALCULATION SUMMARY:

AREA NAME	UNITS	TYPE	SPACING	AVE	MAX	MIN	AVE/MIN	MAX/MIN
PARKING LOT	FC	ILLUMINANCE	8.00 FT	1.33	2.0	1.0	1.33	2.00
SPILL AT PROPERTY LINE	FC	ILLUMINANCE	10.00 FT	0.44	0.9	0.1	4.40	9.00

1 / E-3 SITE LIGHTING PHOTOMETRIC PLAN

SCALE: 1" = 20'-0"

NORTH

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RONALD L. LEVINSON · LICENSE · No. 34871 · STATE OF FLORIDA · PROFESSIONAL ENGINEER

PROJECT:

Hillsboro Inlet Fishing Center

ELECTRICAL UPGRADES

2705 North Riverside Drive
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Date:	6-6-2025
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SHEET NO. 3 of 4

E-3

PRELIMINARY
NOT FOR
CONSTRUCTION

D-Series Size 1

Amber Series
LED Area Luminaire

BAA BABA

d^series

Catalog Number

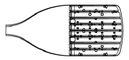
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 0.69 ft² (0.06 m²)
Length: 32.71" (83.1 cm)
Width: 14.26" (36.2 cm)
Height H1: 7.88" (20.0 cm)
Height H2: 2.73" (6.9 cm)
Weight: 34 lbs (15.4 kg)



Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in Amber LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications.

Ordering Information

EXAMPLE: DSX1 LED P7 AMBPC AMCRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature [1]	Color Rendering Index [2]	Distribution		Voltage	Mounting
DSX1 LED	**Forward optics** P1 P6 P2 P7 P3 P8 P4 P9 P5 **Rotated optics** P10 [3] P12 [3] P11 [3]	AMBLW Limited wavelength amber AMBPC Phosphor converted amber	AMCRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare [5] T4M Type IV medium T4LG Type IV low glare [5] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control [6] BLC4 Type IV backlight control [6] LCCO Left corner cutoff [7] RCCO Right corner cutoff [7]	MVOLT (120V-277V) [4] HVOLT (347V-480V) [10] XVOLT (277V - 480V) [10]	**Shipped included** SPA Square pole mounting (4ft drilling) RPA Round pole mounting (4ft drilling) SPA5 Square pole mounting (#5 drilling) [8] RPA5 Round pole mounting (#5 drilling) [8] SPA8N Square narrow pole mounting (#8 drilling) WBA Wall bracket [9] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 3fc. [11,12,13,14] PIR High/low, motion/ambient sensor, 8–40' mounting height, ambient sensor enabled at 3fc. [11,13,17] PER NEMA twist-lock receptacle only (controls ordered separately) [18] PER5 Five-pin receptacle only (controls ordered separately) [18,19] PER7 Seven-pin receptacle only (controls ordered separately) [18,19] FAO Field adjustable output [11,20] BL30 Bi-level switched dimming, 30% [11,21] BL50 Bi-level switched dimming, 50% [11,21] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) [22] DS Dual switching [9,10,22]	**Shipped installed** SPD20KV 20kV surge protection HS Houseside shield (black finish standard) [23] LWR Left rotated optics [3] RWR Right rotated optics [3] CCE Coastal Construction [24] **Shipped separately** EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)	DDBXD Dark Bronze DBLBXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLBTXD Textured black DNATXD Textured natural aluminum DWHTXD Textured white

Ordering Information

Accessories

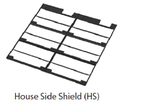
Ordered and shipped separately.

DLL127F1.5 IES Photocell - SSL twist-lock (120-277V) [1]
DLL347F1.5 CUL BR Photocell - SSL twist-lock (347V) [1]
DLL480F1.5 CUL BR Photocell - SSL twist-lock (480V) [1]
DSHORT SBK Shorting cap [2]
DSX1HS PM House-side shield (enter package number 1-12 in place of #) [3]
DSRPA (DNAX) Round pole adapter (4ft drilling, specify finish)
DSSPA (DNAX) Square pole adapter (4ft drilling (specify finish)
DSRPA5 (DNAX) Round pole adapter (#5 drilling (specify finish)
DSX1EGSR (DNAX) External glare shield (specify finish)
DSX1BSDB (DNAX) Bird spike deterrent bracket (specify finish)

NOTES
1. Rotated optics available with packages P10, P11 and P12. Must be combined with option L90 or R90.
2. AMBLW only available in package P1, P4, P7 and P10. AMCRI must be specified with AMBLW or AMBPC.
3. LWR, TFLG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4. MVOLT driver operates on any line voltage from 120–277V (50/60 Hz).
5. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6. HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7. XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8. XVOLT not available in packages P11 or P12.
9. SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10. WBA cannot be combined with Type 5 distributions plus photocell (PER).
11. NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link.
12. NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using MVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
13. PIR, PER and PER5 not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P1 and P10 using HVOLT. PIR not available with P11 or P12.
14. PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15. FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16. BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS.
17. DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18. DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19. PER5 requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with NLTAIR2 PIRHN, PER5 and PER7.
20. Reference Motion Sensor Default Settings table on page 4 to see functionality.
21. Reference Controls Options table on page 4.
22. HS not available with TLG, TLG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23. CCE option not available with options BSDB and EGSR. Contact Technical Support for availability.
24. Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

Shield Accessories

External Glare Shield (EGSR)

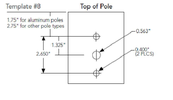


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION

Template #8



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90
2-3/8"	RPA	AS5-5.190	AS5-5.280	AS5-5.290	AS5-5.390	AS5-5.320	AS5-5.490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Options	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Sides B, C & D	Round Pole Only	Sides A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM0128S	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

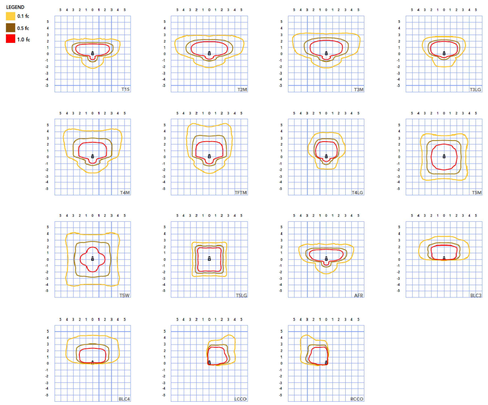
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 with SPA	0.69	1.38	1.23	1.54	—	1.58
DSX1 with SPA5, SPA8N	0.70	1.40	1.30	1.66	—	1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with WA	0.81	1.66	1.50	2.09	2.09	2.09

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

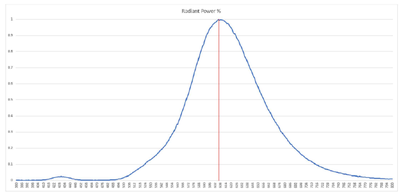
Isofootcandle plots for the DSX1 LED P9 AMBPC AMCRI. Distances are in units of mounting height (20').

LEGEND
0.1 fc
0.5 fc
1.0 fc

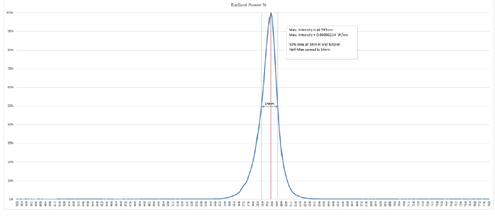


Photometric Diagrams

AMBPC - Phosphor Converted Amber



AMBLW - True Limited Wavelength Amber



Performance Data

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	72%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use minimum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load - AMBPC (Phosphor Converted Amber)

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	52	0.43	0.25	0.22	0.19	0.15	0.11
	P2	30	700	69	0.58	0.33	0.29	0.25	0.20	0.14
	P3	30	1050	105	0.88	0.51	0.44	0.38	0.30	0.22
	P4	40	530	69	0.58	0.33	0.29	0.25	0.20	0.14
	P5	40	700	92	0.77	0.44	0.38	0.33	0.27	0.19
	P6	40	1050	140	1.17	0.67	0.58	0.51	0.40	0.29
	P7	60	530	103	0.86	0.50	0.43	0.37	0.30	0.22
	P8	60	700	138	1.15	0.66	0.57	0.50	0.40	0.29
	P9	60	1050	210	1.75	1.01	0.88	0.76	0.61	0.44
Rotated Optics (Requires L90 or R90)	P10	60	530	103	0.86	0.50	0.43	0.37	0.30	0.22
	P11	60	700	138	1.15	0.66	0.58	0.50	0.40	0.29
	P12	60	1050	210	1.75	1.01	0.88	0.76	0.61	0.44

Electrical Load - AMBLW (Limited Wavelength Amber)

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	41	0.34	0.20	0.17	0.15	0.12	0.08
	P4	40	530	55	0.46	0.26	0.23	0.20	0.16	0.11
	P7	60	530	81	0.68	0.39	0.34	0.29	0.23	0.17
Rotated Optics (Requires L90 or R90)	P10	60	530	81	0.68	0.39	0.34	0.29	0.23	0.17

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 3FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 3FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSCR)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as REGIM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CLAIRITY Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit.	BLC UNIVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Performance Data

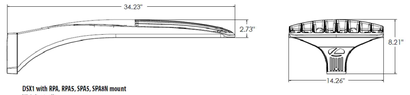
Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

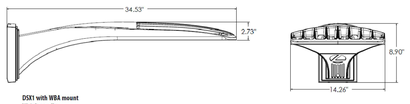
FORWARD OPTICS

Performance Package	LED Count	Drive Current (mA)	Distribution Type	System Watts	AMBPC (Phosphor Converted) Lumens	B	U	G	LPW	AMBLW (Limited Wavelength) System Watts	Lumens	B	U	G	LPW
P7	60	530	T1S	103W	9,284	1	0	2	90	81W	3,529	1	0	1	43
			T2M		8,601	2	0	3	83		3,269	1	0	2	40
			T3M		8,700	2	0	3	84		3,307	1	0	2	41
			T3LG		7,772	1	0	2	75		2,954	1	0	1	36
			T4M		8,830	2	0	3	85		3,357	1	0	2	41
			T4LG		8,031	1	0	2	78		3,053	1	0	1	38
			TFTM		8,830	2	0	3	85		3,380	1	0	2	42
			T5M		9,085	4	0	2	88		3,453	2	0	1	42
			T5W		9,232	4	0	2	89		3,509	3	0	1	43
			T5LG		9,131	3	0	1	88		3,463	2	0	0	42
			BLC3		6,328	0	0	2	61		2,496	0	0	1	30
			BLC4		6,536	0	0	3	63		2,485	0	0	2	31
			RCCO		6,385	1	0	2	62		2,427	0	0	1	30
			LCCO		6,385	1	0	2	62		2,427	0	0	1	30
			AFR		9,284	1	0	2	90		3,529	1	0	1	43
P8	60	700	T1S	130W	11,650	1	0	2	84						
			T2M		10,792	2	0	3	78						
			T3M		10,917	2	0	3	79						
			T3LG		9,752	1	0	2	71						
			T4M		11,080	2	0	3	80						
			T4LG		10,077	1	2	2	73						
			TFTM		11,156	2	0	3	81						
			T5M		11,400	4	0	2	83						
			T5W		11,584	4	0	3	84						
			T5LG		11,453	3	0	1	83						
			BLC3		7,941	0	0	2	58						
			BLC4		8,201	0	0	3	59						
			RCCO		8,012	1	0	2	58						
			LCCO		8,012	1	0	2	58						
			AFR		11,650	1	0	2	84						
P9	60	1050	T1S	210W	15,577	2	0	2	74						
			T2M		14,429	2	0	3	69						
			T3M		14,597	2	0	4	69						
			T3LG		13,039	2	0	2	62						
			T4M		14,814	2	0	4	71						
			T4LG		13,474	2	0	2	64						
			TFTM		14,917	2	0	4	71						
			T5M		15,242	4	0	2	73						
			T5W		15,489	5	0	3	74						
			T5LG		15,286	3	0	2	73						
			BLC3		10,617	0	0	2	51						
			BLC4		10,966	0	0	3	52						
			RCCO		10,713	1	0	2	51						
			LCCO		10,713	1	0	2	51						
			AFR		15,577	2	0	2	74						

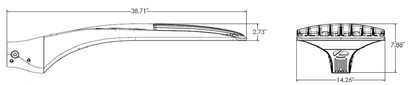
Dimensions



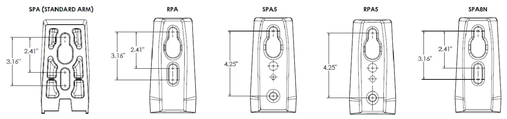
DSX1 with RPA, RPA5, SPA5, SPA8N mount
Weight: 36 lbs



DSX1 with WBA mount
Weight: 38 lbs

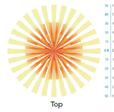


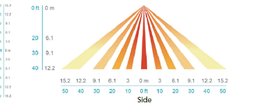
DSX1 with MA mount
Weight: 39 lbs



nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern
NLTAIR2 PIRHN





FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft²) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of amber LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life. Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found here.

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT "Buy America regulations.
BABA – Build America Buy America: Product with the BABA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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This drawing has been electronically signed and sealed by Ronald L. Levinson P.E. on the date indicated. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

RONALD L. LEVINSON PROFESSIONAL ENGINEER LICENSE No. 34871 STATE OF FLORIDA

PROJECT:

Hillsboro Inlet Fishing Center

2705 North Riverside Drive
Pompano Beach
Florida 33062

Date:	6-6-2025
Drawn By:	RLL
Checked By:	RLL
Project No.:	250411
Revised:	.

ELECTRICAL UPGRADES

SHEET NO. 4 of 4

E-4

PRELIMINARY NOT FOR CONSTRUCTION