HYDROGRAPHIC SURVEY

GULF INTRACOASTAL WATERWAY
SECTIONS 20, 29, & 30, TOWNSHIP 39 SOUTH, RANGE 19 EAST
VENICE, FLORIDA

NOTES:

1. THE PURPOSE OF THIS HYDROGRAPHIC SURVEY IS TO: A.) DOCUMENT THE CURRENT DEPTHS OF A PORTION OF THE INTRACOASTAL WATERWAY ADJACENT TO THE VENICE MUNICIPAL AIRPORT RELATIVE TO NAVD88 DATUM, AND B.) DETERMINE THE VOLUME OF MATERIAL IN THE SURVEYED CHANNEL THAT IS ABOVE THE PERMITTED DREDGE DEPTH OF -10.3' NAVD88, WITHIN THE PROJECT LIMITS.
2. PROPOSED CHANNEL BOTTOM LIMITS, DREDGING TEMPLATE, BASELINE, AND STATIONING ARE DEPICTED BASED ON INFORMATION PROVIDED BY WEST COAST INLAND NAVIGATION DISTRICT, (WCIND).
3. COORDINATES, CONTOUR ELEVATIONS, STATIONING, DEPTHS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET OR DECIMALS THEREOF.
4. BEARINGS ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 1983/2011 ADJUSTMENT).
5. ALL CONTOURS SHOWN HEREON ARE RELATIVE TO NAVD88 DATUM.
6. BACKGROUND AERIAL IMAGERY FROM SARASOTA COUNTY WAS ACQUIRED IN 2020. AERIAL PROVIDED FOR INFORMATIONAL PURPOSES ONLY. POSITIONAL ACCURACY OF SAID IMAGERY WAS NOT FIELD VERIFIED.
7. BATHYMETRIC SOUNDINGS WERE COLLECTED USING AN R2 SONIC 2022 MULTI-BEAM ECHO SOUNDER TEAMED WITH A TRIMBLE APPLANIX POSMV NAVIGATION UNIT. TIDAL REDUCTIONS WERE OBTAINED BY REAL-TIME KINEMATIC (RTK) GPS CORRECTIONS RECEIVED FROM THE FDOT FPRN NETORK.
8. SAID SOUNDINGS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988) - GEOID 2012A, AND VERIFIED BY DIRECT MEASUREMENTS TO NGS TIDAL BENCH MARK "P 252".
9. MEASURED SOUNDINGS HAVE BEEN TESTED AND FOUND TO HAVE A ROOT MEAN SQUARE ERROR (RMSE) OF 0.2' YIELDING AN EXPECTED RELATIVE VERTICAL ACCURACY OF 0.4' +/- AT A 95% CONFIDENCE LEVEL. THIS SHOULD BE TAKEN INTO ACCOUNT WHEN EVALUATING VOLUMES REPORTED HEREON.
10. FIELD WORK PERFORMED ON MAY 24, 2023 AS RECORDED IN 240523_HYDROLOG.
11. VOLUMES WERE CALCULATED BY SURFACE TO SURFACE COMPARISON BETWEEN THE DREDGE TEMPLATE AND A 5'X5' GRID OF SURVEYED SOUNDINGS.

SHEET INDEX:

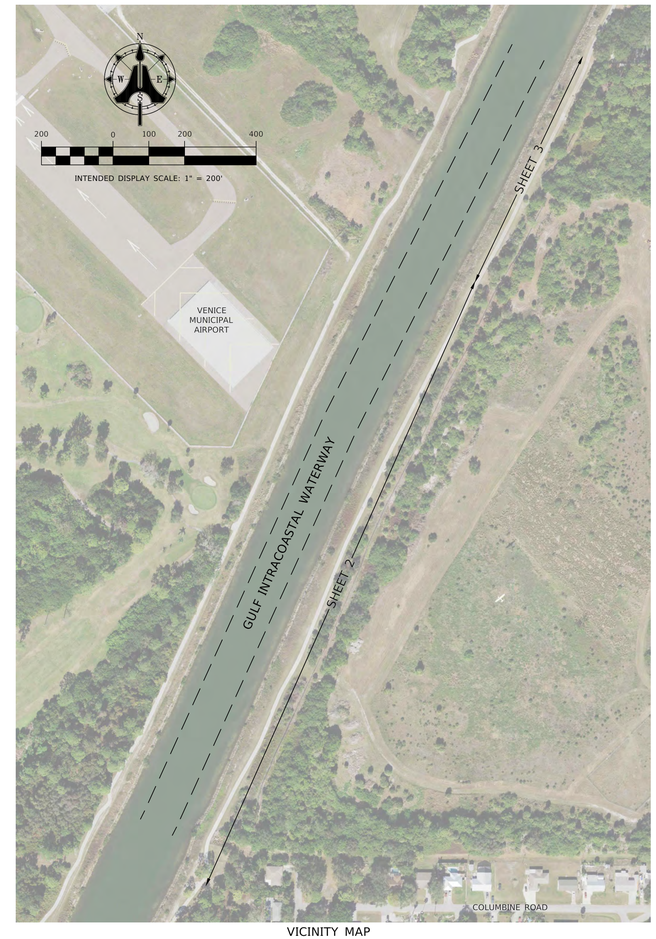
1. NOTES, LEGEND, VICINITY MAP, VOLUME SUMMARY TABLE
2. CHANNEL DETAIL B.O.S. STA. 10+00 TO STA. 27+50
3. CHANNEL DETAIL STA. 27+50 TO STA. 34+02.44
4. CHANNEL SECTIONS STA. 10+00 TO STA. 23+50
5. CHANNEL SECTIONS STA. 24+00 TO STA. 34+00

LEGEND:

B.O.S.	= BEGINNING OF SURVEY
C.Y.	= CUBIC YARDS
E	= EASTING COORDINATE
E.O.S.	= END OF SURVEY
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FPRN	= FLORIDA PERMANENT REFERENCE NETWORK
GPS	= GLOBAL POSITIONING SYSTEM
INC.	= INCORPORATED
LB	= LICENSED BUSINESS
N	= NORTHING COORDINATE
NAD 1983	= NORTH AMERICAN DATUM OF 1983
NAVD 88	= NORTH AMERICAN VERTICAL DATUM OF 1988
NGS	= NATIONAL GEODETIC SURVEY
NO./#	= NUMBER
P.I.	= POINT OF INTERSECTION
P.S.M.	= PROFESSIONAL SURVEYOR & MAPPER
RTK	= REAL-TIME KINEMATIC
NO.	= SURVEY BASELINE STATION
+/-	= MORE OR LESS
TYP	= TYPICAL
WCIND	= WEST COAST INLAND NAVIGATION DISTRICT
	= CONTOUR LINE

VOLUME SUMMARY TABLE:

STATION	DISTANCE (FT)	VOLUME (CY)
10+00	0	0
10+50	50	0
11+00	50	0
11+50	50	0
12+00	50	1
12+50	50	6
13+00	50	11
13+50	0	13
14+00	50	11
14+50	50	7
15+00	50	3
15+50	50	5
16+00	50	6
16+50	50	7
17+00	50	10
17+50	50	13
18+00	50	15
18+50	50	12
19+00	50	6
19+50	50	4
20+00	50	8
20+50	50	15
21+00	50	15
21+50	50	9
22+00	50	5
22+50	50	2
23+00	50	3
23+50	50	5
24+00	50	97
24+50	50	248
25+00	50	377
25+50	50	295
26+00	50	77
26+50	50	8
27+00	50	7
27+50	50	6
28+00	50	4
28+50	50	2
29+00	50	7
29+50	50	10
30+00	50	7
30+50	50	26
31+00	50	45
31+50	50	40
32+00	50	44
32+50	50	52
33+00	50	61
33+50	50	61
34+00	50	64
	TOTAL (CY)	**1732**



VICINITY MAP

Cameron M. Harmon
License Number 7483
STATE OF FLORIDA
Professional Surveyor and Mapper

Digitally signed by Cameron M Harmon
Date: 2023.06.23 12:50:16 -04'00'

No.	DATE:	BY:	REVISIONS:
1			
2			
3			
4			
5			
6			
7			

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FIELD BOOK: PAGE:
240523_HYDROLOG

PROJECT NAME:
GIWW WASHOUT

PREPARED BY: AIM ENGINEERING & SURVEYING, INC.

CAMERON M. HARMON
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 7483

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

AIM Engineering & Surveying, Inc.
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TOLL FREE 800-226-4569
PHONE 239-242-8688
CERTIFICATE OF AUTHORIZATION No. 3114

CLIENT: WCIND
DRAWN: JHP
DATE: 06-13-23
CHECKED: CMH
DATE: 06-13-23

HYDROGRAPHIC SURVEY
GIWW WASHOUT

PROJECT NO: 23-1733
FILE NAME: 23-1733_HYDRO.DWG
COUNTY: SARASOTA
SECTION: 20,29,30
TOWNSHIP: 39 S
RANGE: 19 E

SHEET 1 OF 5

J:\Active\23-1733 GIWW Venice Canal Washout\Working\2306_JP BATHY\23-1733_BATHY.dwg 6/22/2023 1:13:17 PM

HYDROGRAPHIC SURVEY

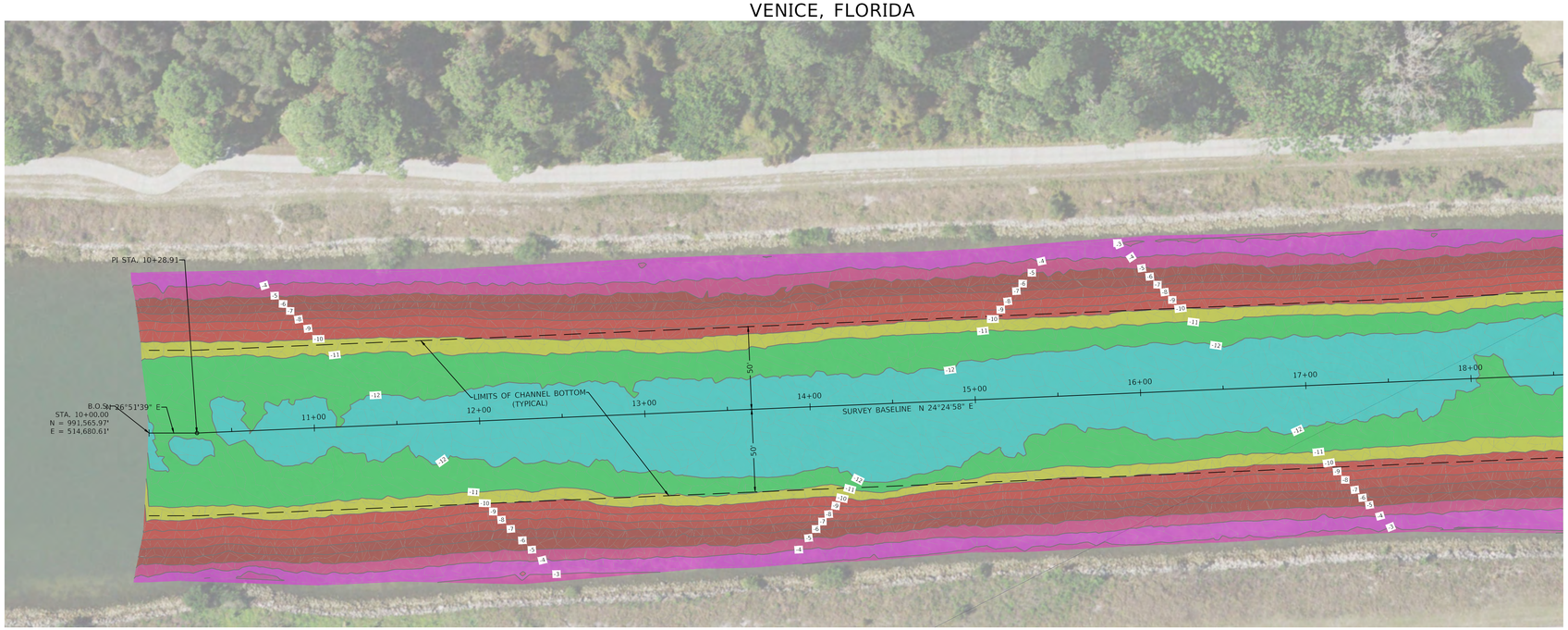
GULF INTRACOASTAL WATERWAY

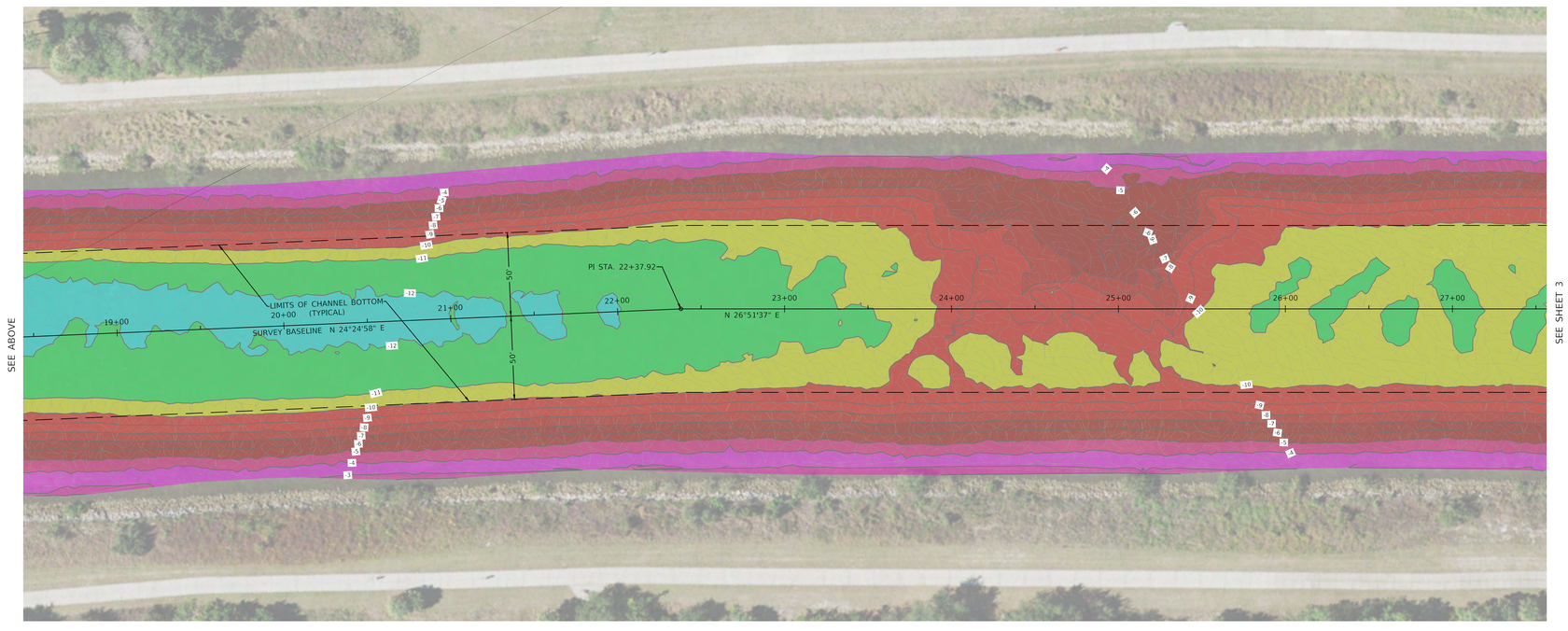
SECTIONS 20, 29, & 30, TOWNSHIP 39 SOUTH, RANGE 19 EAST

VENICE, FLORIDA

40 0 20 40 80

INTENDED DISPLAY SCALE: 1" = 40'





NAVD 88 ELEVATIONS

ELEVATION	Color
-13.0' - -12.0	
-12.0' - -11.0	
-11.0' - -10.0	
-10.0' - -9.0	
-9.0' - -8.0	
-8.0' - -7.0	
-7.0' - -6.0	
-6.0' - -5.0	
-5.0' - -4.0	
-4.0' - -3.0	
-3.0' - -2.0	

No.	DATE:	BY:	REVISIONS:
1			
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FIELD BOOK: PAGE:

240523_HYDROLOG

PROJECT NAME:

GIWW WASHOUT

PREPARED BY: AIM ENGINEERING & SURVEYING, INC.

SEE SHEET 1

CAMERON M. HARMON

PROFESSIONAL SURVEYOR AND MAPPER

FLORIDA CERTIFICATE NO. 6183

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PHONE 239-332-4569
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CERTIFICATE OF AUTHORIZATION No. 3114

A I M

DRAWN:	DATE:	CHECKED:	DATE:
JHP	06-13-23	CMH	06-13-23

CLIENT: WCIND

HYDROGRAPHIC SURVEY

GIWW WASHOUT

PROJECT NO:	COUNTY:	SECTION:	TOWNSHIP	RANGE	FILE NAME:
23-1733	SARASOTA	20,29,30	39 S	19 E	23-1733_HYDRO.DWG

SHEET 2 OF 5

J:\Active\23-1733 GIWW Venice Canal Washout\Working\2306_JP BATHY\Aug 6/22/2023 1:19:03 PM

HYDROGRAPHIC SURVEY

GULF INTRACOASTAL WATERWAY
SECTIONS 20, 29, & 30, TOWNSHIP 39 SOUTH, RANGE 19 EAST
VENICE, FLORIDA

40 0 20 40 80

INTENDED DISPLAY SCALE: 1" = 40'

NAVD 88 ELEVATIONS

ELEVATION	Color
-13.0' - -12.0	
-12.0' - -11.0	
-11.0' - -10.0	
-10.0' - -9.0	
-9.0' - -8.0	
-8.0' - -7.0	
-7.0' - -6.0	
-6.0' - -5.0	
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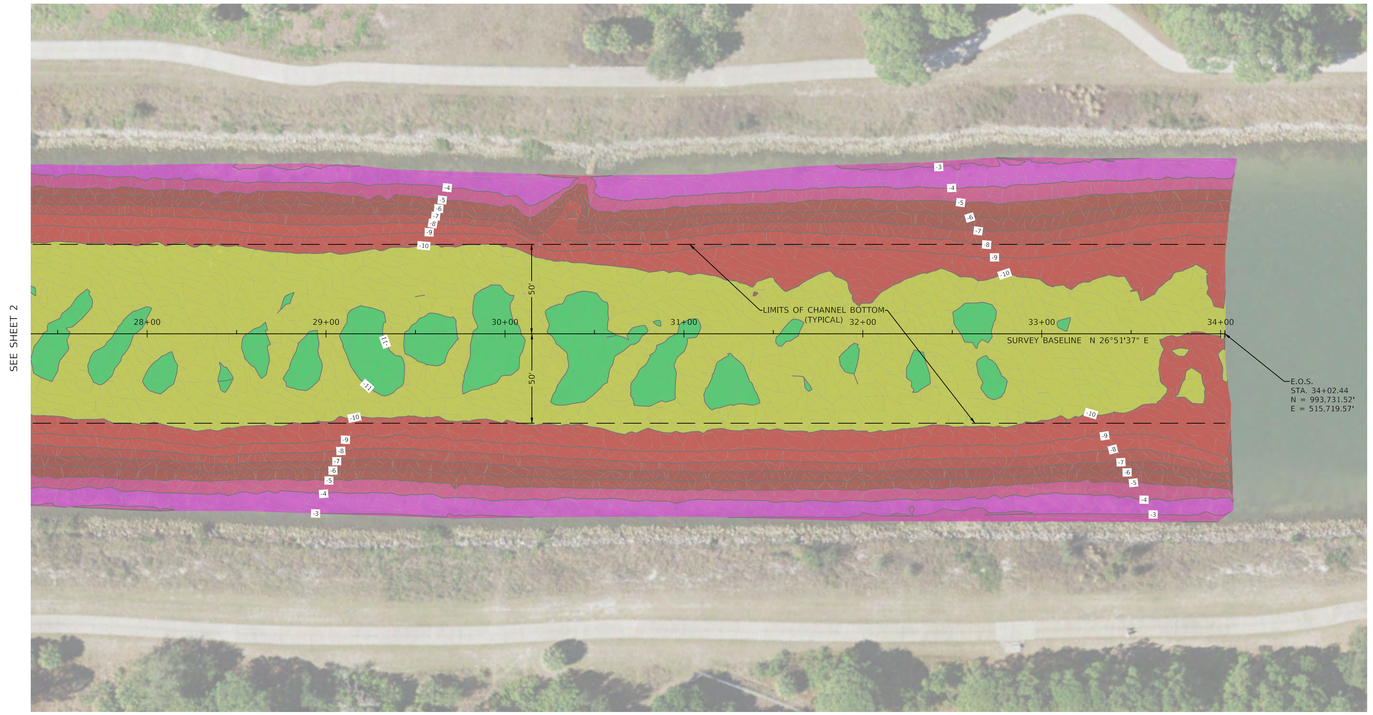
-4.0' - -3.0	
-3.0' - -2.0	



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FIELD BOOK: PAGE:

240523_HYDROLOG

No.	DATE:	BY:	REVISIONS:
1			
2			
3			
4			
5			
6			
7			

PROJECT NAME:
GIWW WASHOUT

PREPARED BY: AIM ENGINEERING & SURVEYING, INC.

SEE SHEET 1

CAMERON M. HARMON
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 7283

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FAX 239-332-3114
CERTIFICATE OF AUTHORIZATION No. 3114

CLIENT: WCIND

DRAWN: JHP DATE: 06-13-23

CHECKED: CMH DATE: 06-13-23

HYDROGRAPHIC SURVEY
GIWW WASHOUT

PROJECT NO: 23-1733

FILE NAME: 23-1733_HYDRO.DWG

COUNTY: SARASOTA SECTION: 20,29,30 TOWNSHIP: 39 S RANGE: 19 E

SHEET 3 OF 5

J:\Active\23-1733 GIWW Venice Canal Washout\Working\2306_JP BATHY\23-1733_BATHY.dwg 6/22/2023 1:20:31 PM

HYDROGRAPHIC SURVEY

GULF INTRACOASTAL WATERWAY
SECTIONS 20, 29, & 30, TOWNSHIP 39 SOUTH, RANGE 19 EAST
VENICE, FLORIDA

SECTION SHEET LEGEND:

℄ = BASELINE

- - - - - - - - - = EXISTING BOTTOM SURFACE MAY 24, 2023

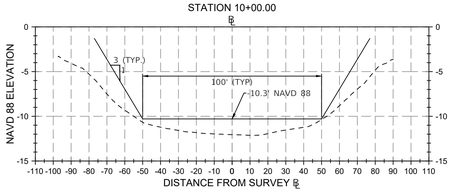
———————— = DREDGE TEMPLATE (BOTTOM ELEVATION = -10.3' NAVD88)

NAVD 88 = NORTH AMERICAN DATUM OF 1988

TYP. = TYPICAL

HORIZONTAL SCALE - 1" = 40'
VERTICAL SCALE - 1" = 8'

STATION 10+00.00



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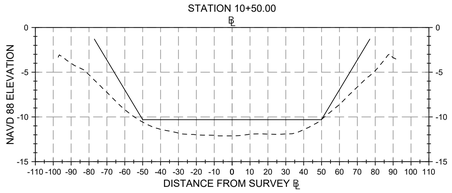

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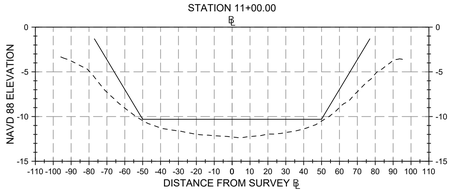

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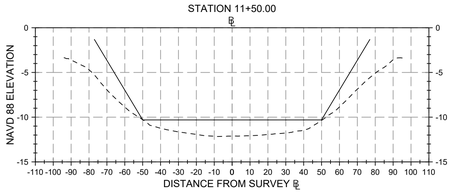

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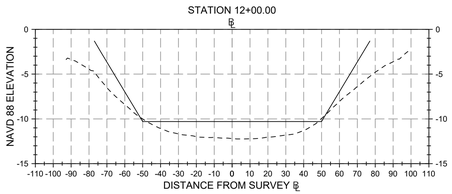

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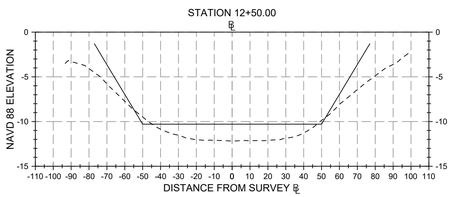

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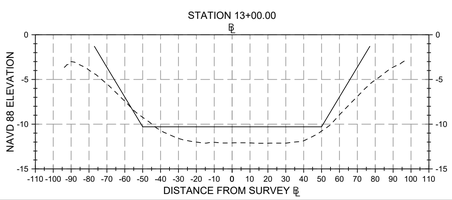

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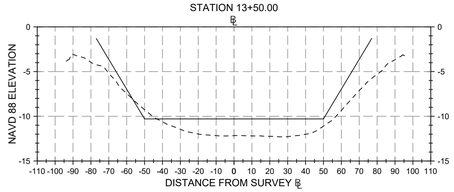

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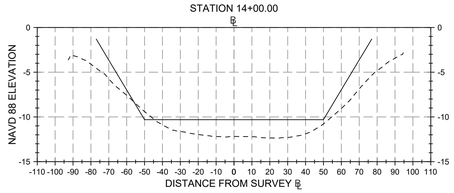

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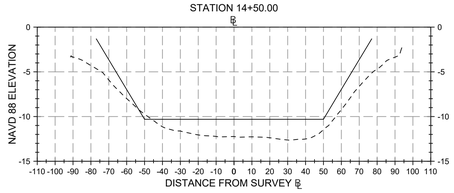

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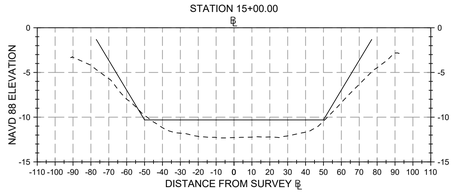

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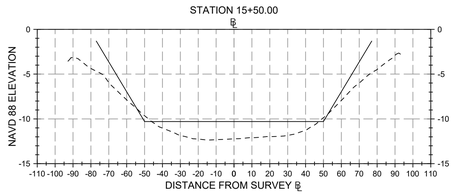

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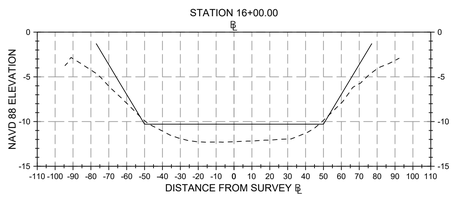

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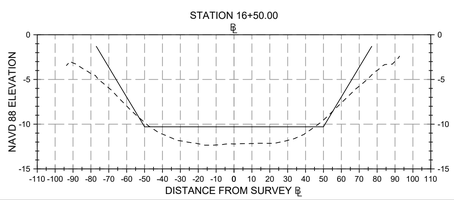

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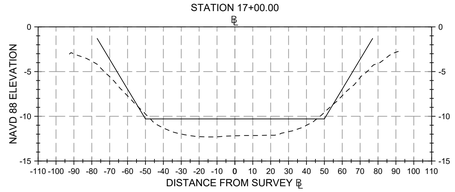

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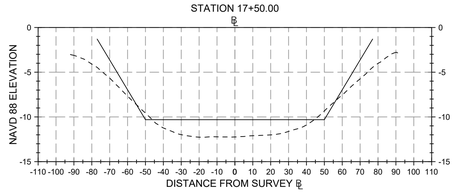

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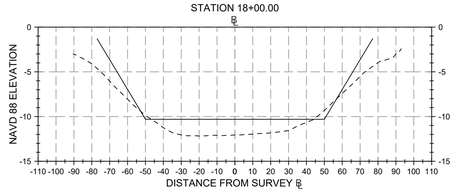

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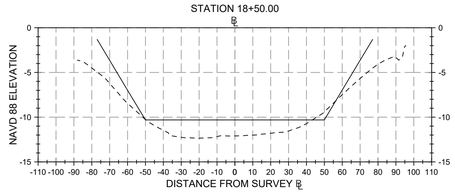

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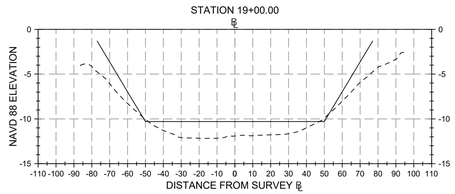

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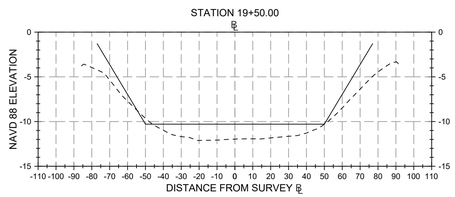

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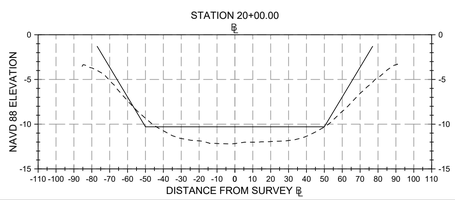

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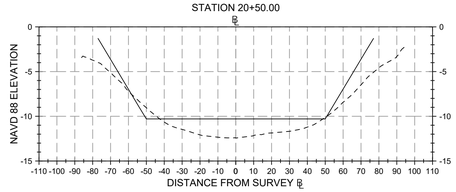

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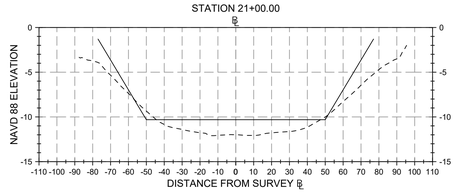

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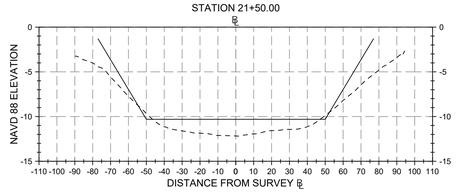
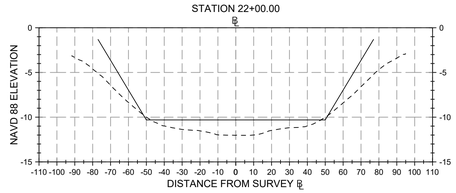


STATION 22+00.00



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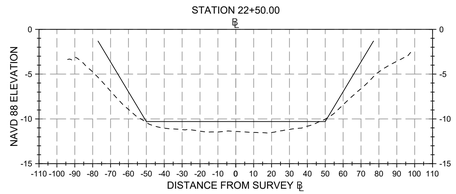

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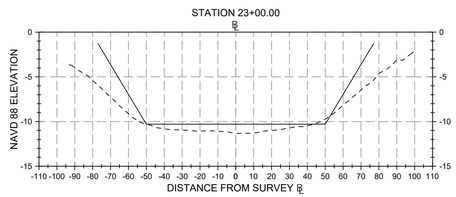

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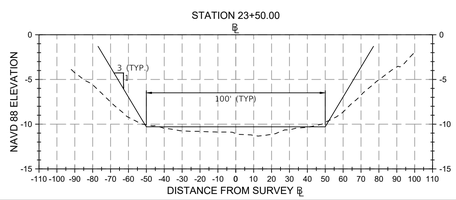

No.	DATE:	BY:	REVISIONS:
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FIELD BOOK: PAGE:

240523_HYDROLOG

PROJECT NAME: GIWW WASHOUT

PREPARED BY: AIM ENGINEERING & SURVEYING, INC.

SEE SHEET 1

CAMERON M. HARMON
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. LS6483

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A LICENSED SURVEYOR AND MAPPER

AIM Engineering & Surveying, Inc.
CIVIL * SANITARY * TRANSPORTATION * DEVELOPMENT * PROJECT MANAGEMENT
2161 FOWLER STREET, SUITE 100
FORT MYERS, FLORIDA 33901
www.aimengr.com
TOLL FREE 800-226-4569
PHONE 239-332-2696
CERTIFICATE OF AUTHORIZATION No. 3114

DRAWN:	DATE:	CHECKED:	DATE:
JHP	06-13-23	CMH	06-13-23

CLIENT: WCIND

HYDROGRAPHIC SURVEY
GIWW WASHOUT

PROJECT NO.:	COUNTY:	SECTION:	TOWNSHIP:	RANGE:	FILE NAME:
23-1733	SARASOTA	20,29,30	39 S	19 E	23-1733_HYDRO.DWG

SHEET 4 OF 5

J:\Active\23-1733 GIWW Venice Canal Washout\Working\2306_JP BATHY\23-1733_BATHY.dwg 6/22/2023 1:21:02 PM

HYDROGRAPHIC SURVEY

GULF INTRACOASTAL WATERWAY
SECTIONS 20, 29, & 30, TOWNSHIP 39 SOUTH, RANGE 19 EAST
VENICE, FLORIDA

SECTION SHEET LEGEND:

℄ = BASELINE

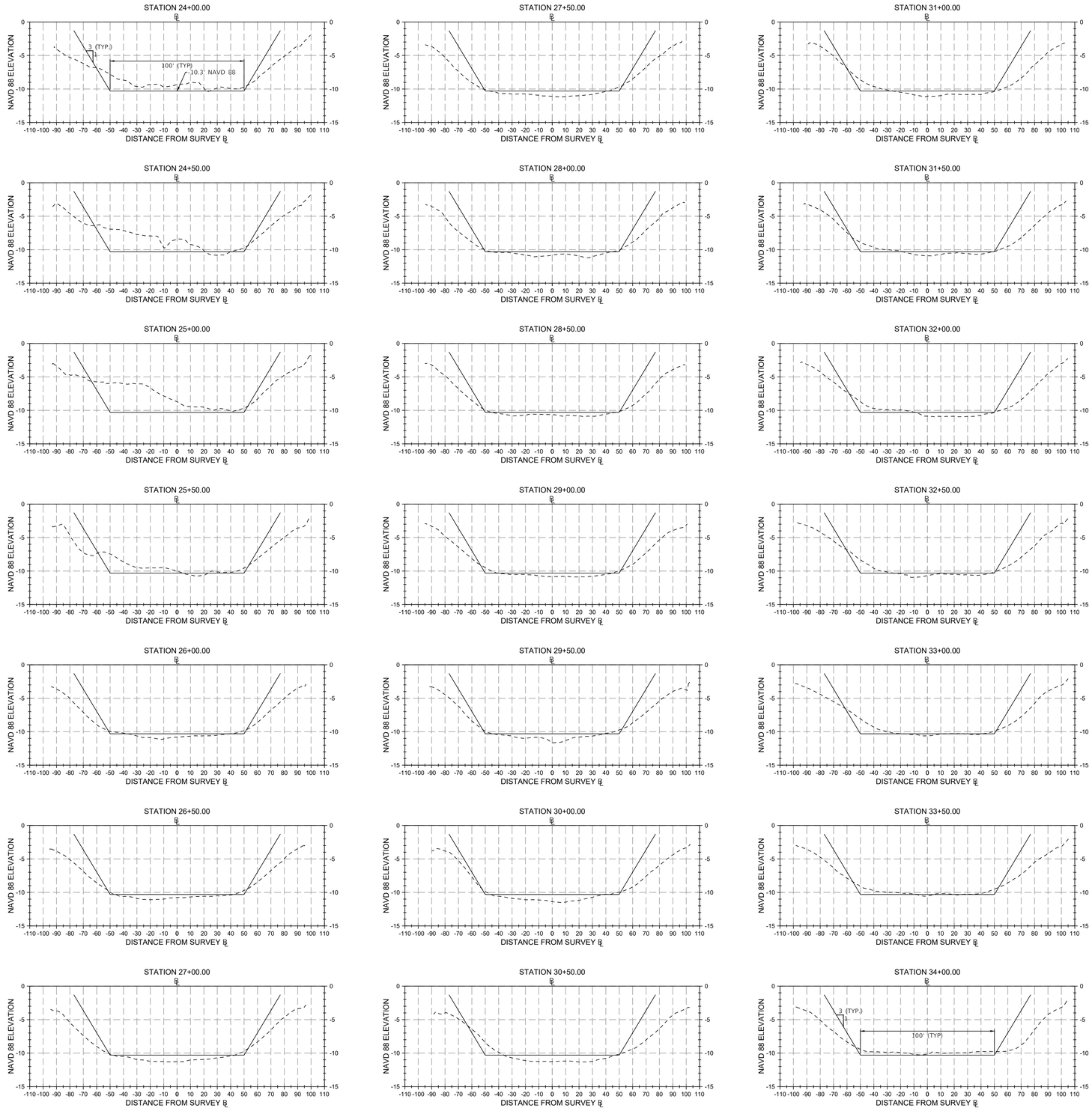
- - - - - - - - - = EXISTING BOTTOM SURFACE MAY 24, 2023

———————— = DREDGE TEMPLATE (BOTTOM ELEVATION = -10.3' NAVD88)

NAVD 88 = NORTH AMERICAN DATUM OF 1988

TYP. = TYPICAL

HORIZONTAL SCALE - 1" = 40'
VERTICAL SCALE - 1" = 8'



No.	DATE:	BY:	REVISIONS:
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FIELD BOOK: | PAGE:
240523_HYDROLOG

PROJECT NAME:
GIWW WASHOUT

PREPARED BY: AIM ENGINEERING & SURVEYING, INC.

SEE SHEET 1

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HYDROGRAPHIC SURVEY
GIWW WASHOUT

PROJECT NO:	SECTION:	COUNTY:	TOWNSHIP:	RANGE:	FILE NAME:
23-1733	20,29,30	SARASOTA	39 S	19 E	23-1733_HYDRO.DWG

SHEET 5 OF 5

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