

LOVERS KEY AND BONITA BEACH NOURISHMENT CONTRACT PLANS

SHEET INDEX

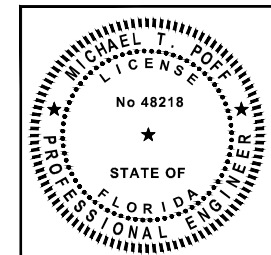
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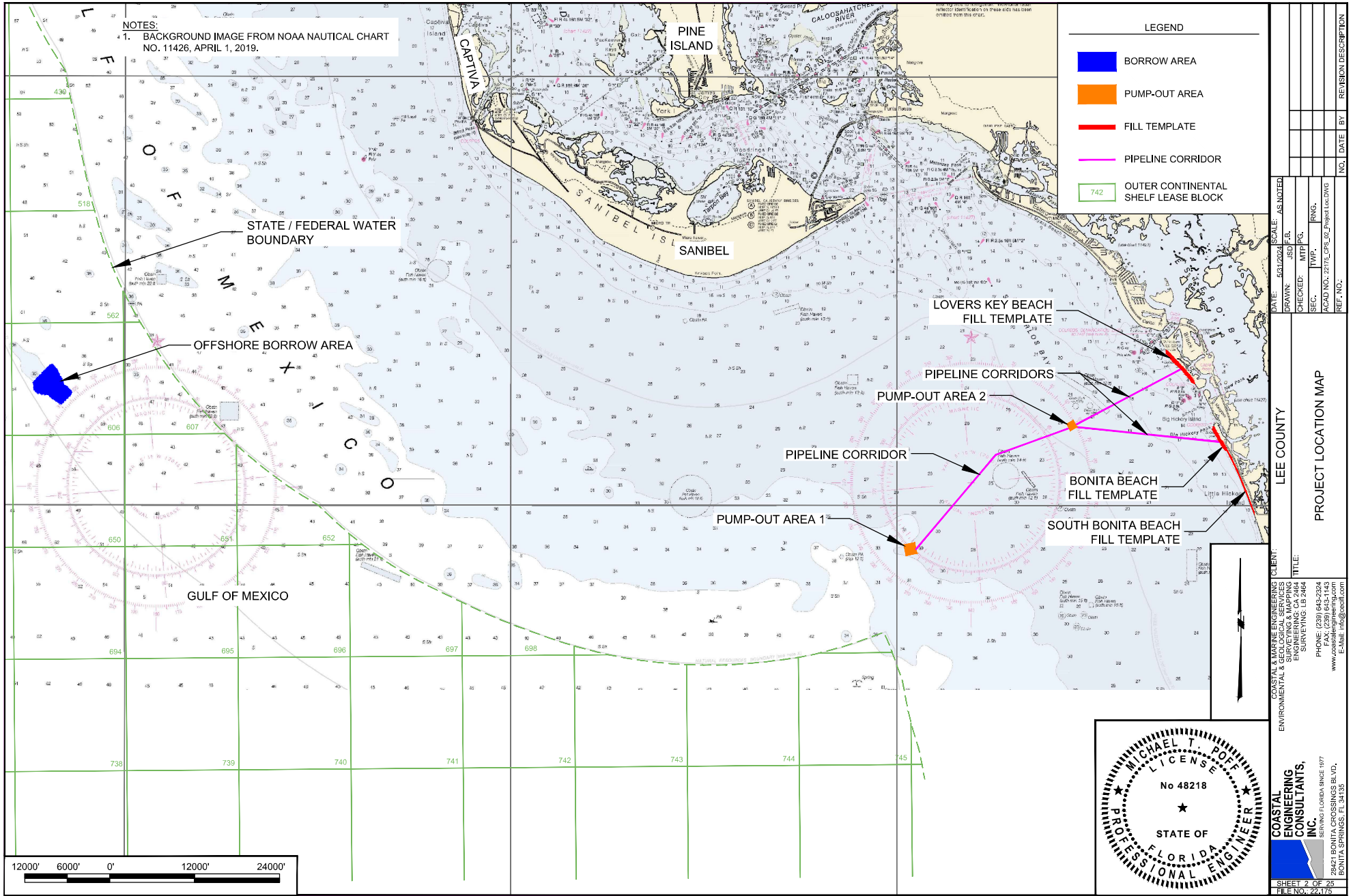
PROJECT LOCATION
N.T.S.

NOTES

1. MEAN HIGH WATER (MHW) ELEVATION OF +0.3 FEET OBTAINED FROM LABINS POINT 100234, FDEP MEAN HIGH WATER PROCEDURE APPROVAL INQUIRY.
2. LOVERS KEY, BONITA BEACH, SOUTH BONITA BEACH TOPOGRAPHIC AND BATHYMETRIC SURVEY CONDUCTED BY COASTAL ENGINEERING CONSULTANTS, INC. (CEC), MAY 22 - 23, 2024. NEW PASS SURVEYS CONDUCTED BY CEC, OCTOBER 2022. SURVEYS FOR THE OFFSHORE BORROW AREA AND OFFSHORE PIPELINE CORRIDORS CONDUCTED BY OCEAN SURVEYS, INC. (OSI), JULY 2021.
3. OFFSHORE BORROW AREA GEOTECHNICAL INVESTIGATION CONDUCTED BY GFA INTERNATIONAL AND AMDRILL, INC., 2020 AND 2021.
4. STATE PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. ELEVATIONS SHOWN HEREON ARE IN FEET AND TENTHS AND REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) GEOID18.
6. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATICS GPS AND REFERENCED TO NAVD88.
7. HYDROGRAPHIC SURVEY ACCURACIES AND PROCEDURES ARE IN ACCORDANCE WITH GENERAL SURVEY STANDARDS, AS DEFINED BY THE U.S. ARMY CORPS OF ENGINEERS, HYDROGRAPHIC SURVEY MANUAL.
8. INFORMATION SHOWN HEREON REFLECTS CONDITIONS AS THEY EXISTED ON THE SURVEY DATE SHOWN AND CAN ONLY BE CONSIDERED INDICATIVE OF CONDITIONS AT THAT TIME.
9. BONITA BEACH EROSION CONTROL LINE (ECL) OBTAINED FROM LEE COUNTY MEAN HIGH WATER (MHW) SURVEY DATED APRIL 1994. LOVERS KEY ECL OBTAINED FROM LEE COUNTY MHW SURVEY DATED MAY 2001.
10. AERIAL PHOTOGRAPHY PROVIDED BY NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.



DATE: 5/31/2024		SCALE: AS NOTED
DRAWN: JSD	CHECKED: MTP	NO. DATE BY
SEC: TWP.	RNG.	REVISION DESCRIPTION
ACAD NO.: 2217	REF. NO.:	
LEE COUNTY		
COVER SHEET		
CLIENT: COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 33435 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceci.com		
TITLE: PROJECT LOCATION MAP		
SHEET 1 OF 25 FILE NO. 22-175		



NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.

BIG CARLOS PASS

GULF OF MEXICO

LOVERS KEY STATE PARK

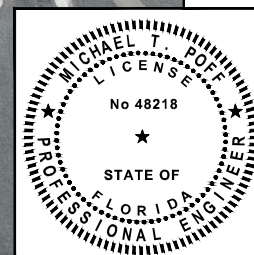
NEW PASS

USGS MONUMENT
PID #AD1334
N: 742,689.561
E: 701,857.275
ELEV: 22.09 NAVD88

LEGEND

- DUNE CREST
- BEACH FILL BERM
- LANDWARD LIMIT OF FILL
- TOE OF BEACH FILL
- R-216 REFERENCE MONUMENT
- REFERENCE MONUMENT TRANSECTS

LOVERS KEY REFERENCE MONUMENT TRANSECTS			
ALIGNMENT COORDINATE TABLE			
REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-214	749,376.54	693,933.34	235
R-214.5	749,048.44	694,168.77	225
R-215	748,722.67	694,480.19	220
R-215.5	748,335.99	694,856.32	225
R-216	747,924.36	695,214.98	215
R-216.5	747,614.48	695,575.32	225
R-217	747,224.52	695,917.44	235
R-217.5	746,934.54	696,322.56	225
R-218	746,474.22	696,634.54	230
R-218.5	746,163.02	697,054.91	225
R-219	745,742.28	697,265.27	230
R-219.5	745,384.46	697,617.06	225
R-220	745,055.41	697,879.86	235
R-220.5	744,645.83	698,166.65	235
R-221	744,191.90	698,389.86	235

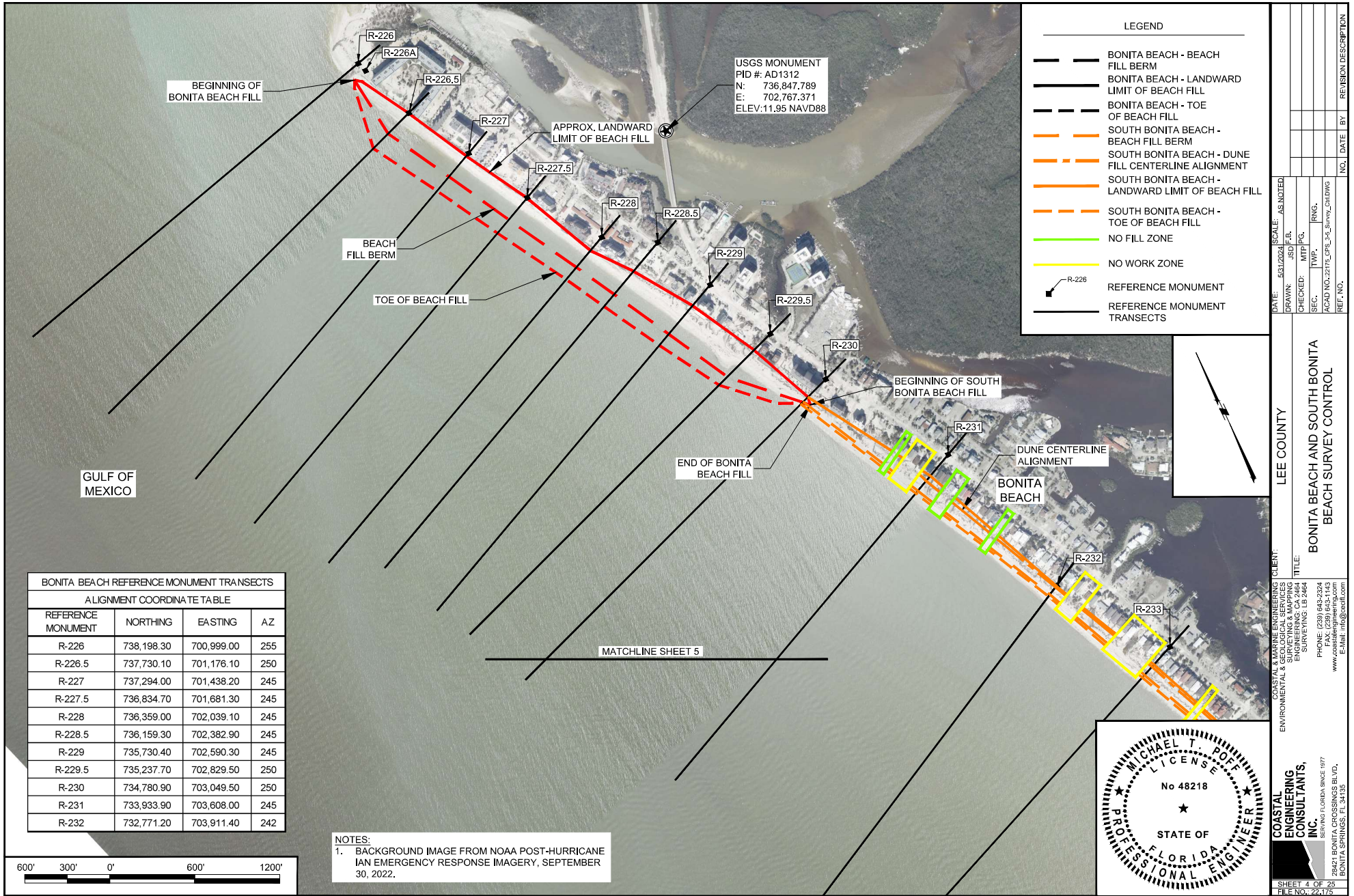


DATE: 5/31/2024		SCALE: AS NOTED	
DRAWN: JSD	SEC: MTP	CHKD: JSD	DATE: 5/31/2024
PROJECT: 22179_CPS_3-5_Survey_Culdwg		SHEET: 3 OF 25	
FILE NO. 22-175		REVISION DESCRIPTION	
NO.		DATE BY	

COASTAL & MARINE ENGINEERING CLIENT: LEE COUNTY
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEYING & MAPPING
ENGINEERING, P.A.
SURVEYING, L.B. 2464
PHONE: (239) 643-2324
FAX: (239) 643-1143
www.coastalengineering.com
E-mail: info@ceol.com

TITLE: LOVERS KEY SURVEY CONTROL

COASTAL ENGINEERING CONSULTANTS, INC.
SERVING FLORIDA SINCE 1977
28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 34135



BONITA BEACH REFERENCE MONUMENT TRANSECTS			
ALIGNMENT COORDINATE TABLE			
REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-226	738,198.30	700,999.00	255
R-226.5	737,730.10	701,176.10	250
R-227	737,294.00	701,438.20	245
R-227.5	736,834.70	701,681.30	245
R-228	736,359.00	702,039.10	245
R-228.5	736,159.30	702,382.90	245
R-229	735,730.40	702,590.30	245
R-229.5	735,237.70	702,829.50	250
R-230	734,780.90	703,049.50	250
R-231	733,933.90	703,608.00	245
R-232	732,771.20	703,911.40	242

NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE
IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER
30, 2022.

LEGEND

BONITA BEACH - BEACH
FILL BERM

BONITA BEACH - LANDWARD
LIMIT OF BEACH FILL

BONITA BEACH - TOE
OF BEACH FILL

SOUTH BONITA BEACH -
BEACH FILL BERM

SOUTH BONITA BEACH - DUNE
FILL CENTERLINE ALIGNMENT

SOUTH BONITA BEACH -
LANDWARD LIMIT OF BEACH FILL

SOUTH BONITA BEACH -
TOE OF BEACH FILL

NO FILL ZONE

NO WORK ZONE

REFERENCE MONUMENT

REFERENCE MONUMENT
TRANSECTS

DATE: 6/31/2024
DRAWN: JSD
CHECKED: MTP
SEC: JRG
ACAD NO: 22179_03_Survey_CivilDWG
REF. NO.

SCALE: AS NOTED

NO. DATE BY REVISION DESCRIPTION

LEE COUNTY

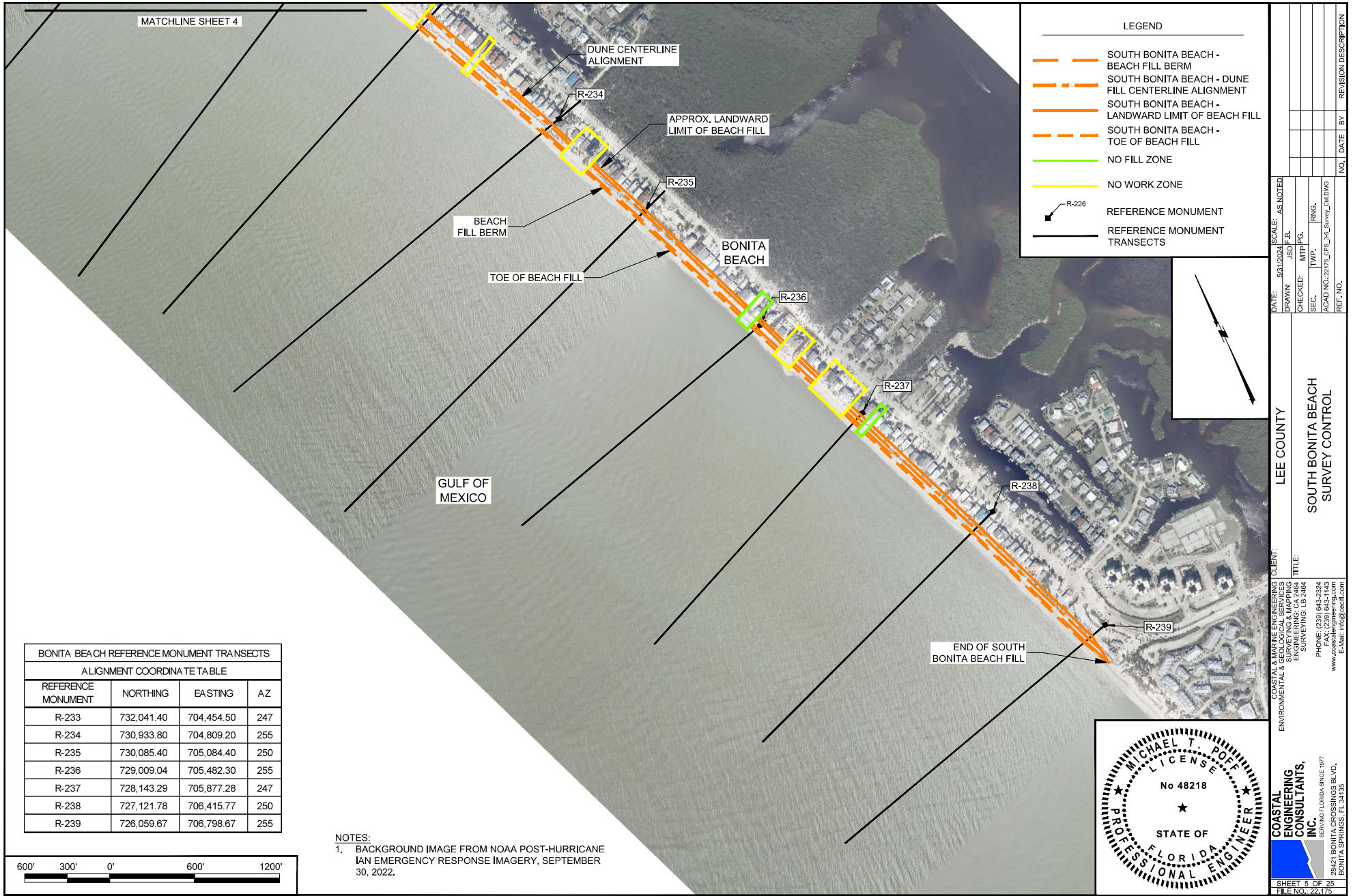
BONITA BEACH AND SOUTH BONITA
BEACH SURVEY CONTROL

COASTAL & MARINE ENGINEERING CLIENT:
ENVIRONMENTAL & GEOLOGICAL SERVICES
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ENGINEERING, L.B. 2464
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PROFESSIONAL ENGINEER
MICHAEL T. POFF
No 48218
STATE OF
FLORIDA

28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 34135

SHEET 4 OF 25
FILE NO. 22-179



MATCHLINE SHEET 4

DUNE CENTERLINE ALIGNMENT

APPROX. LANDWARD LIMIT OF BEACH FILL

BEACH FILL BERM

TOE OF BEACH FILL

BONITA BEACH

GULF OF MEXICO

END OF SOUTH BONITA BEACH FILL

BONITA BEACH REFERENCE MONUMENT TRANSECTS			
ALIGNMENT COORDINATE TABLE			
REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-233	732,041.40	704,454.50	247
R-234	730,933.80	704,809.20	255
R-235	730,085.40	705,084.40	250
R-236	729,009.04	705,482.30	255
R-237	728,143.29	705,877.28	247
R-238	727,121.78	706,415.77	250
R-239	726,059.67	706,798.67	255

NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.



LEGEND

SOUTH BONITA BEACH - BEACH FILL BERM

SOUTH BONITA BEACH - DUNE FILL CENTERLINE ALIGNMENT

DATE: 5/31/2024
DRAWN: JSD
CHECKED: MTP
SEC: TWP.
ACAD NO. 22175_03_Survey_CivilDWG
REF. NO.

SCALE: AS NOTED

NO. DATE BY REVISION DESCRIPTION

LEE COUNTY

SOUTH BONITA BEACH SURVEY CONTROL

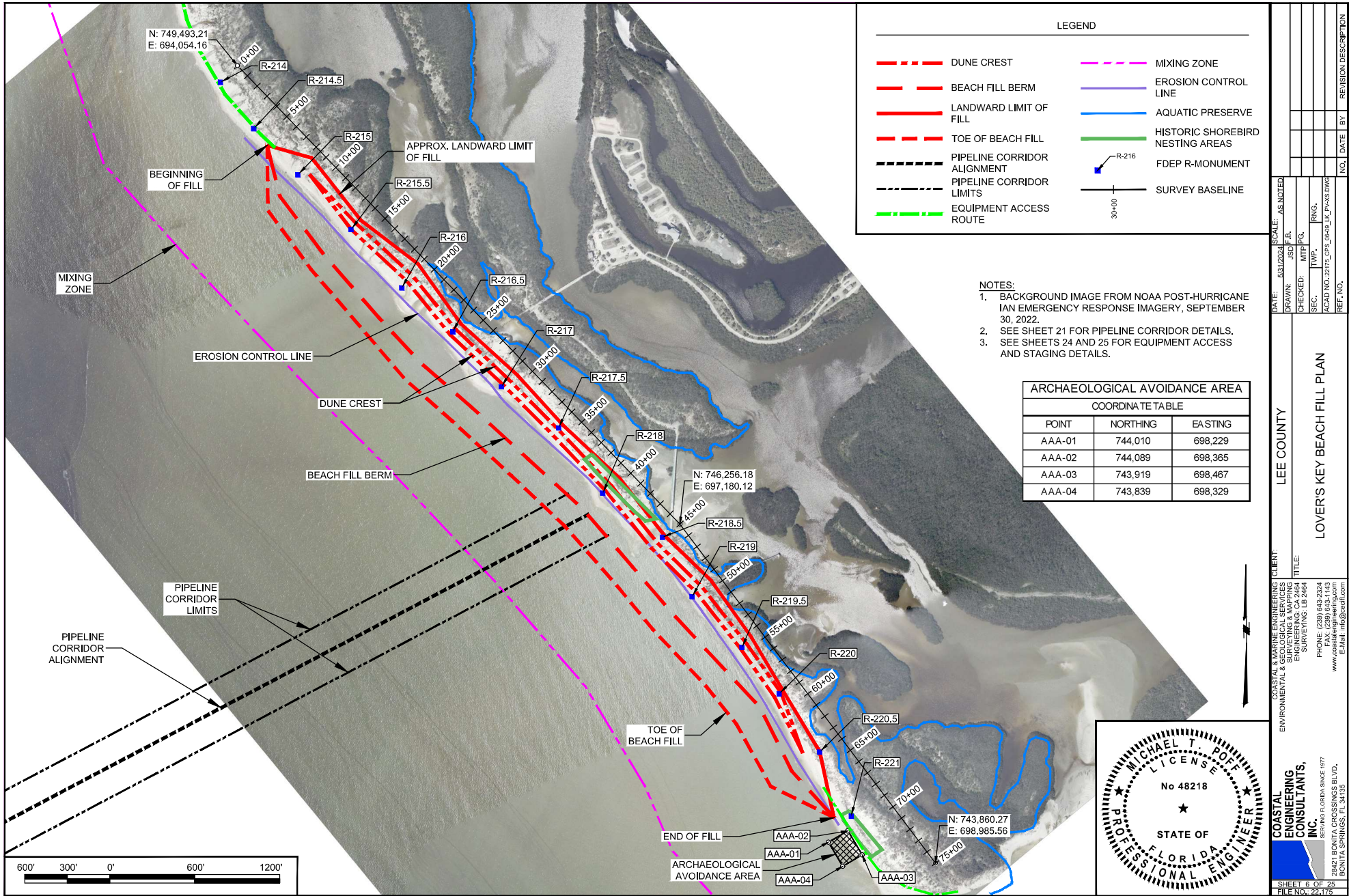
CLIENT: COASTAL & MARINE ENGINEERING
SURVEYING & GEOLOGICAL SERVICES
ENGINEERING, LLC
SURVEYING, LB 2464
PHONE: (239) 643-2324
FAX: (239) 643-1143
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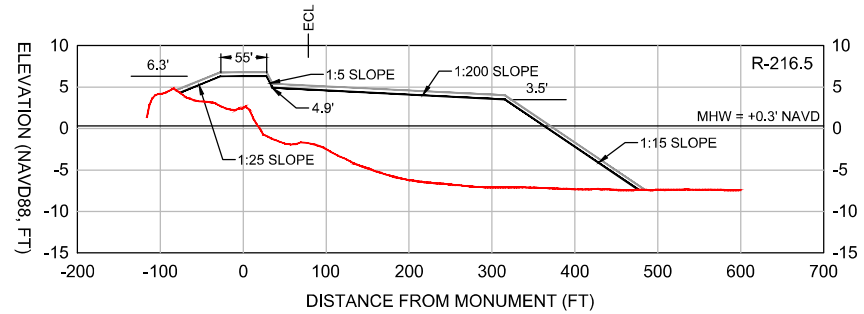
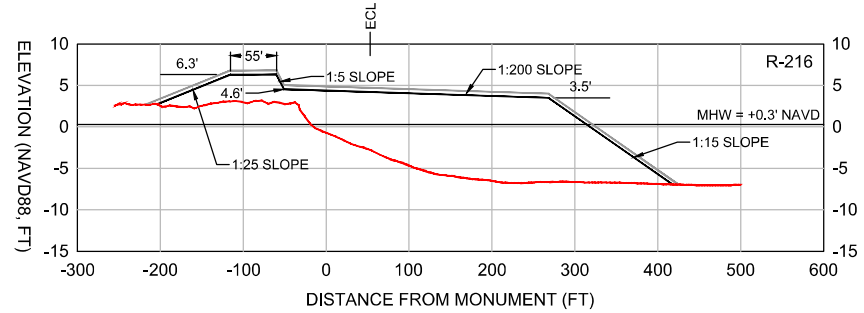
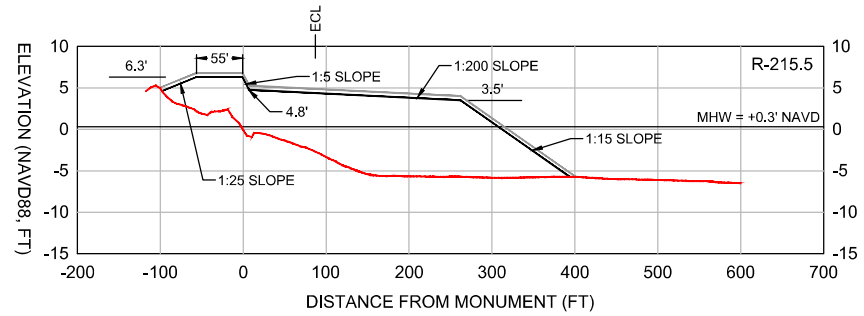
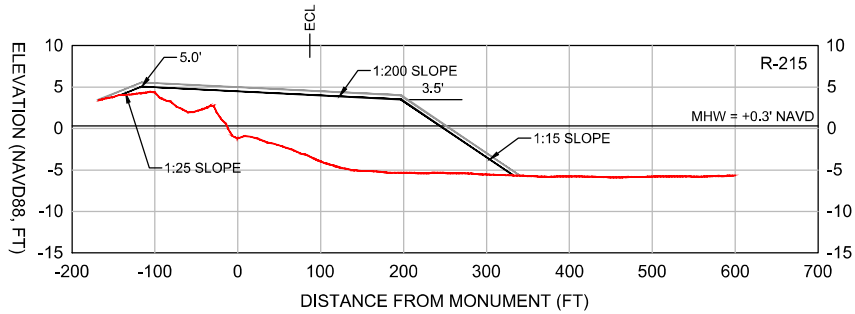
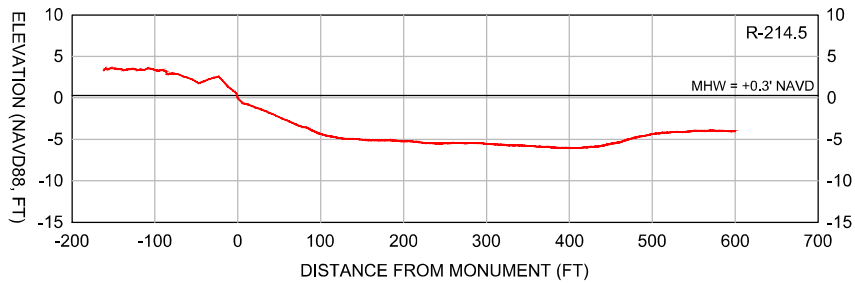
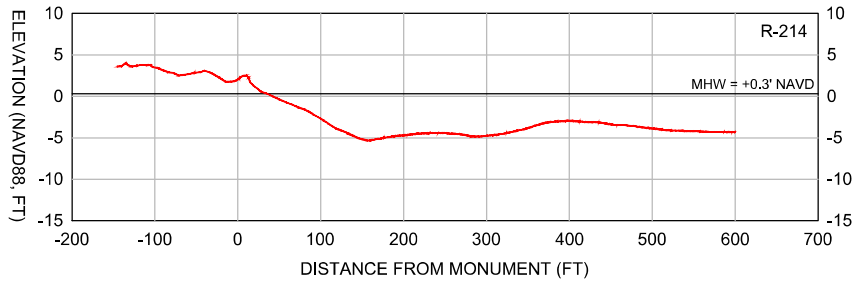
TITLE:

PROFESSIONAL ENGINEER
MICHAEL T. POFF
No 48218
STATE OF FLORIDA

28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 34135

SHEET 5 OF 25
FILE NO. 22-175





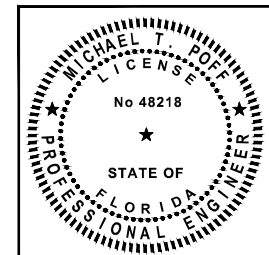
LEGEND:

- DESIGN
- CONSTRUCTION TOLERANCE
- EXISTING GRADE (2024)

SCALE:
H: 1" = 150'
V: 1" = 15'

NOTES:

1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
2. SEE SHEET 3 FOR SURVEY TRANSECT ALIGNMENT.
3. A +0.5FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



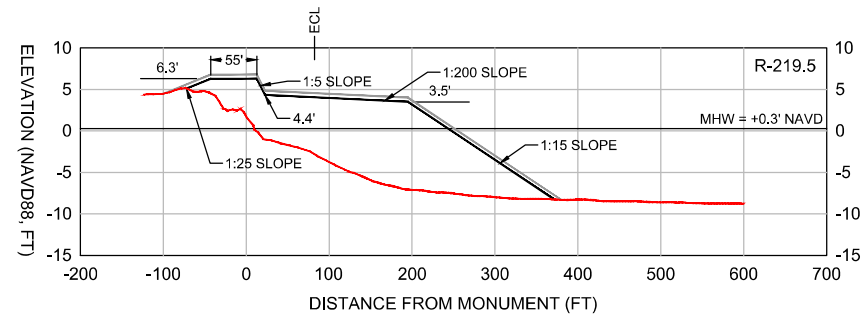
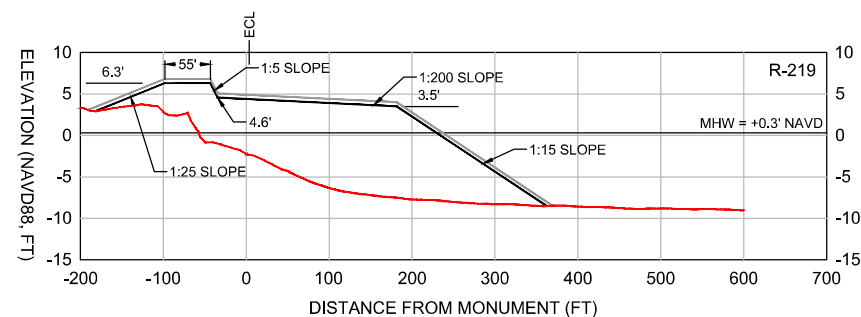
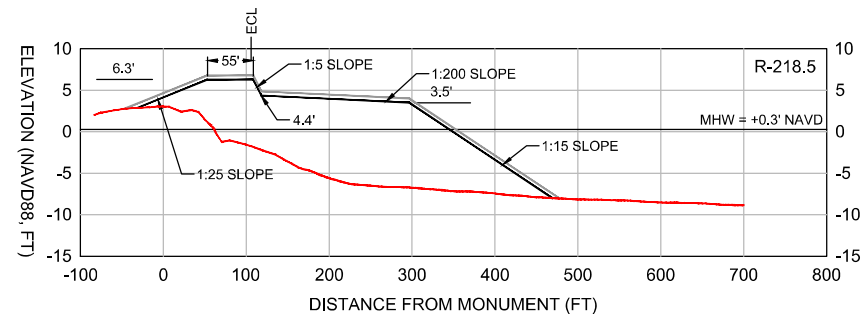
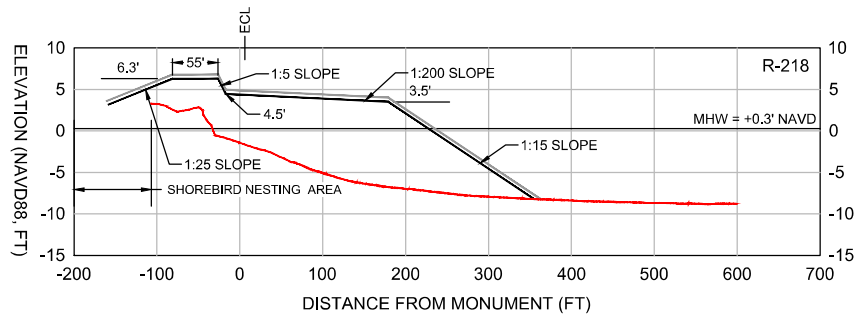
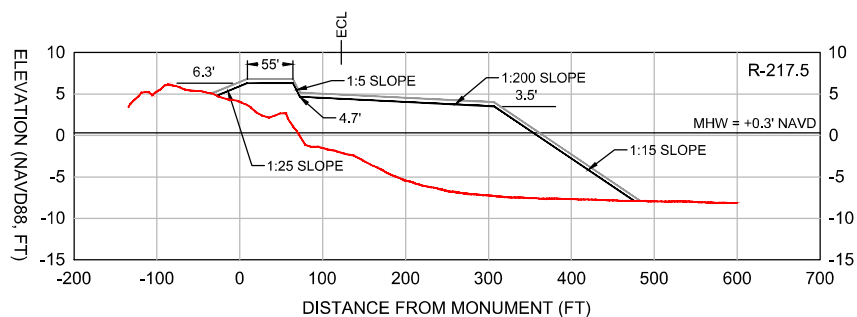
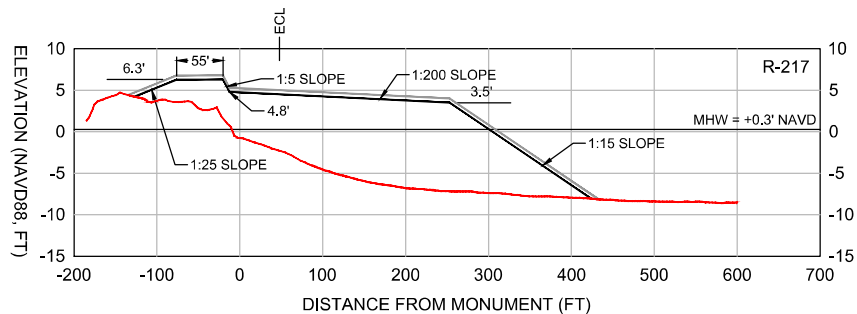
COASTAL & MARINE ENGINEERING CLIENT
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEYING & MAPPING
ENGINEERING, INC.
28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 33435
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FAX: (239) 643-1143
www.coastalengineering.com
E-mail: info@cei.com

COASTAL
ENGINEERING
CONSULTANTS,
INC.
SERVING FLORIDA SINCE 1977
28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 33435

LEE COUNTY
LOVER'S KEY
FILL TEMPLATE PROFILES

DATE	SCALE	AS NOTED
5/31/2024	E.S.	
DRAWN	CHECKED	SEC.
JSD	MTF	RNG.
ACAD NO.	REF. NO.	REVISION DESCRIPTION
NO. 22175		

SHEET 7 OF 25
FILE NO. 22-175



LEGEND:

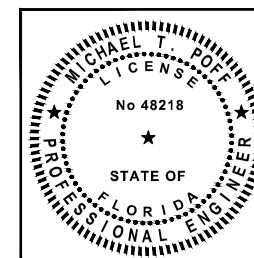
— DESIGN

— CONSTRUCTION TOLERANCE

— EXISTING GRADE (2024)

SCALE:
H: 1" = 150'
V: 1" = 15'

- NOTES:
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
 2. SEE SHEET 3 FOR SURVEY TRANSECT ALIGNMENT.
 3. A +0.5FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



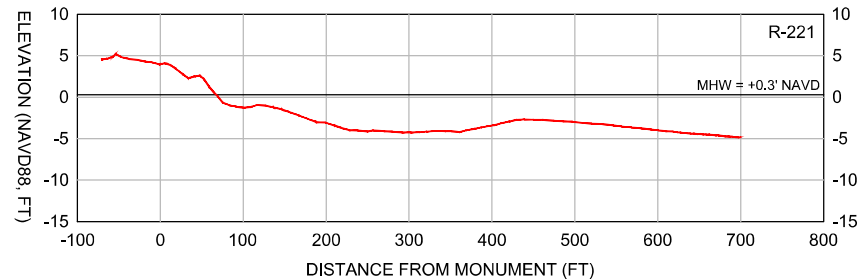
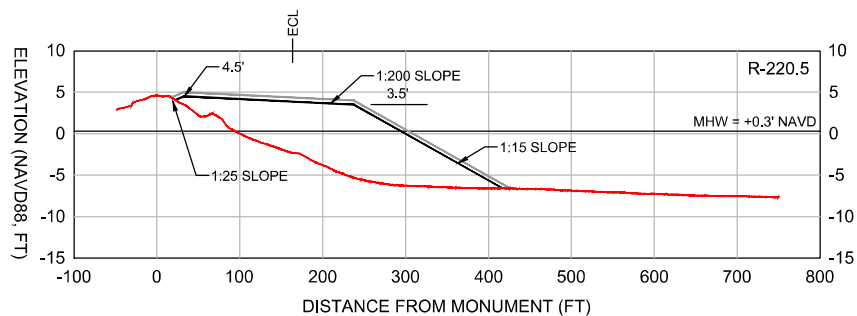
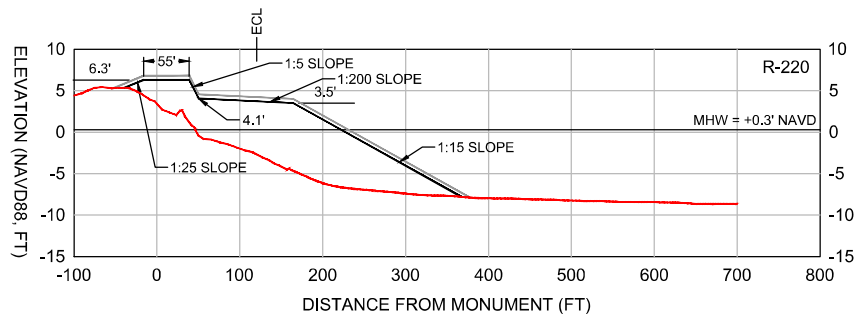
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DRAWN: JSD	DATE: 5/31/2024				
CHECKED: MTP	DATE: 5/31/2024				
SEC: TWP.	DATE: 5/31/2024				
ACAD NO: 22175	DATE: 5/31/2024				
REF. NO.	DATE: 5/31/2024				

LEE COUNTY
LOVER'S KEY
FILL TEMPLATE PROFILES

COASTAL & MARINE ENGINEERING CLIENT
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEYING & MAPPING
ENGINEERING, INC.
SURVEYING, LB 2464
PHONE: (239) 643-2324
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www.coastalengineering.com
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COASTAL ENGINEERING CONSULTANTS, INC.
SERVING FLORIDA SINCE 1977
28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 33435

SHEET 8 OF 25
FILE NO. 22-175



LEGEND:

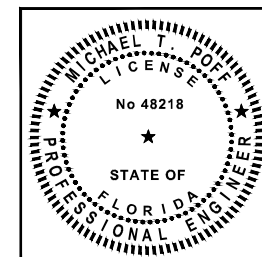
— DESIGN

— CONSTRUCTION TOLERANCE

— EXISTING GRADE (2024)

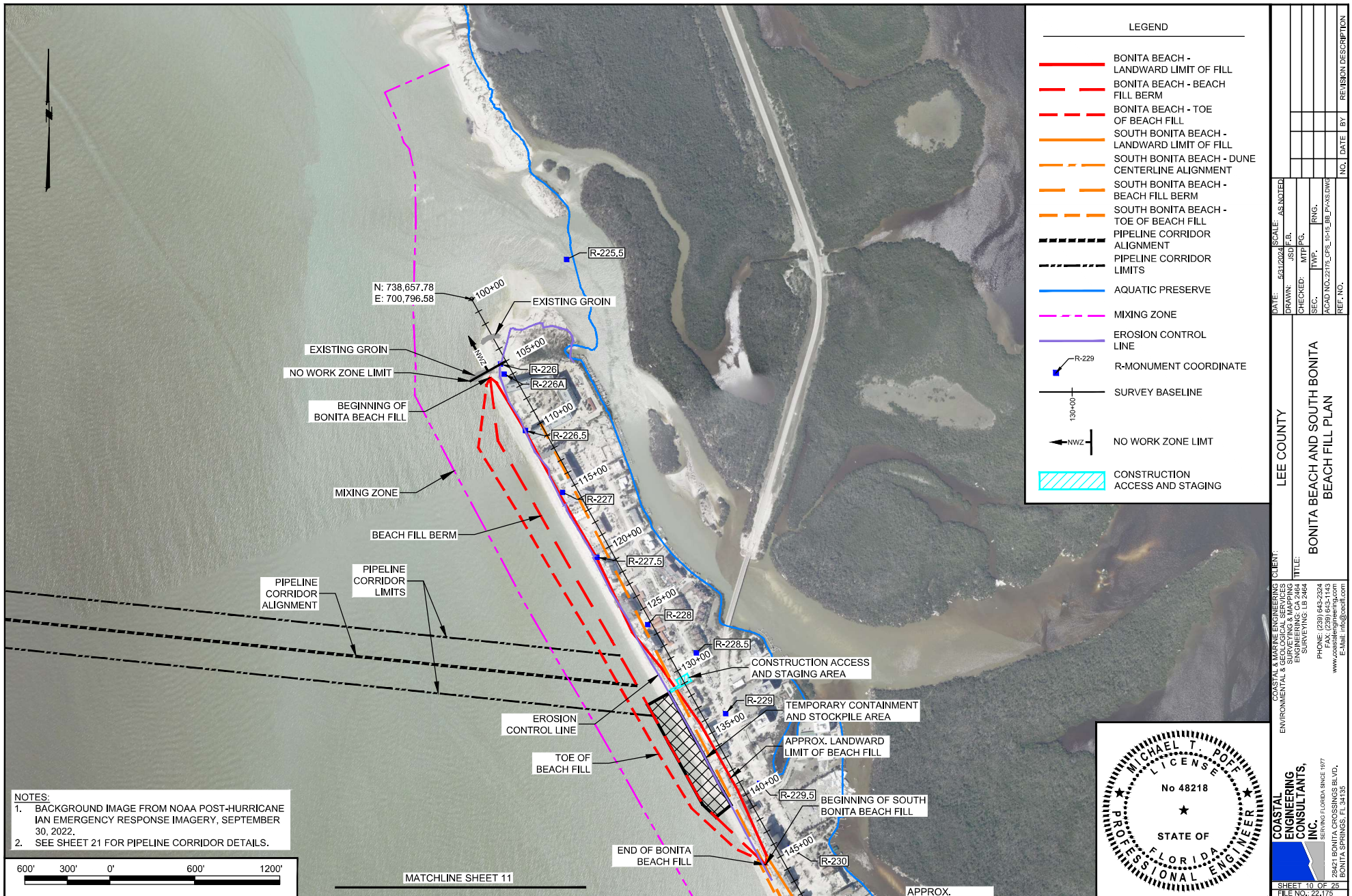
SCALE:
H: 1" = 150'
V: 1" = 15'

- NOTES:
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
 2. SEE SHEET 3 FOR SURVEY TRANSECT ALIGNMENT.
 3. A +0.5FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



COASTAL ENGINEERING CONSULTANTS, INC.		CLIENT: LEE COUNTY		DATE: 5/31/2024		SCALE: AS NOTED	
ENVIRONMENTAL & GEOLOGICAL SERVICES, INC.		SURVEYING & MAPPING		DRAWN: JSD		F.S.	
ENGINEERING CA 2464		SURVEYING LD 2464		CHECKED: MTP		PG.	
TITLE: LOVER'S KEY				SEC: TWP.		RNG.	
PHONE: (239) 643-2324				ACAD NO. 22175_06-09_LK_FVARS.DWG		REF. NO.	
FAX: (239) 643-2324							
WWW.COASTAL-ENGINEERING.COM							
E-MAIL: info@cedi.com							
SERVING FLORIDA SINCE 1977							
28421 BONITA CROSSINGS BLVD.							
BONITA SPRINGS, FL 33435							
				NO.		DATE BY REVISION DESCRIPTION	

SHEET 9 OF 25
FILE NO. 22-175



DATE: 5/31/2024		SCALE: AS NOTED	NO. DATE BY		REVISION DESCRIPTION
DRAWN: JSD	C.S.				
CHECKED: MTP	PG.				
SEC. TWP.	RNG.				
ACAD NO. 22179_CPS_10-15_BB_P048.DWG					
REF. NO.					

LEE COUNTY

BONITA BEACH AND SOUTH BONITA BEACH FILL PLAN

COASTAL & MARINE ENGINEERING SERVICES
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEYING & MAPPING
ENGINEERING, L.L.C.
SURVEYING, LB 2464

PHONE: (239) 643-2324
FAX: (239) 643-1143
www.coastalengineering.com
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COASTAL ENGINEERING CONSULTANTS, INC.

STATE OF FLORIDA

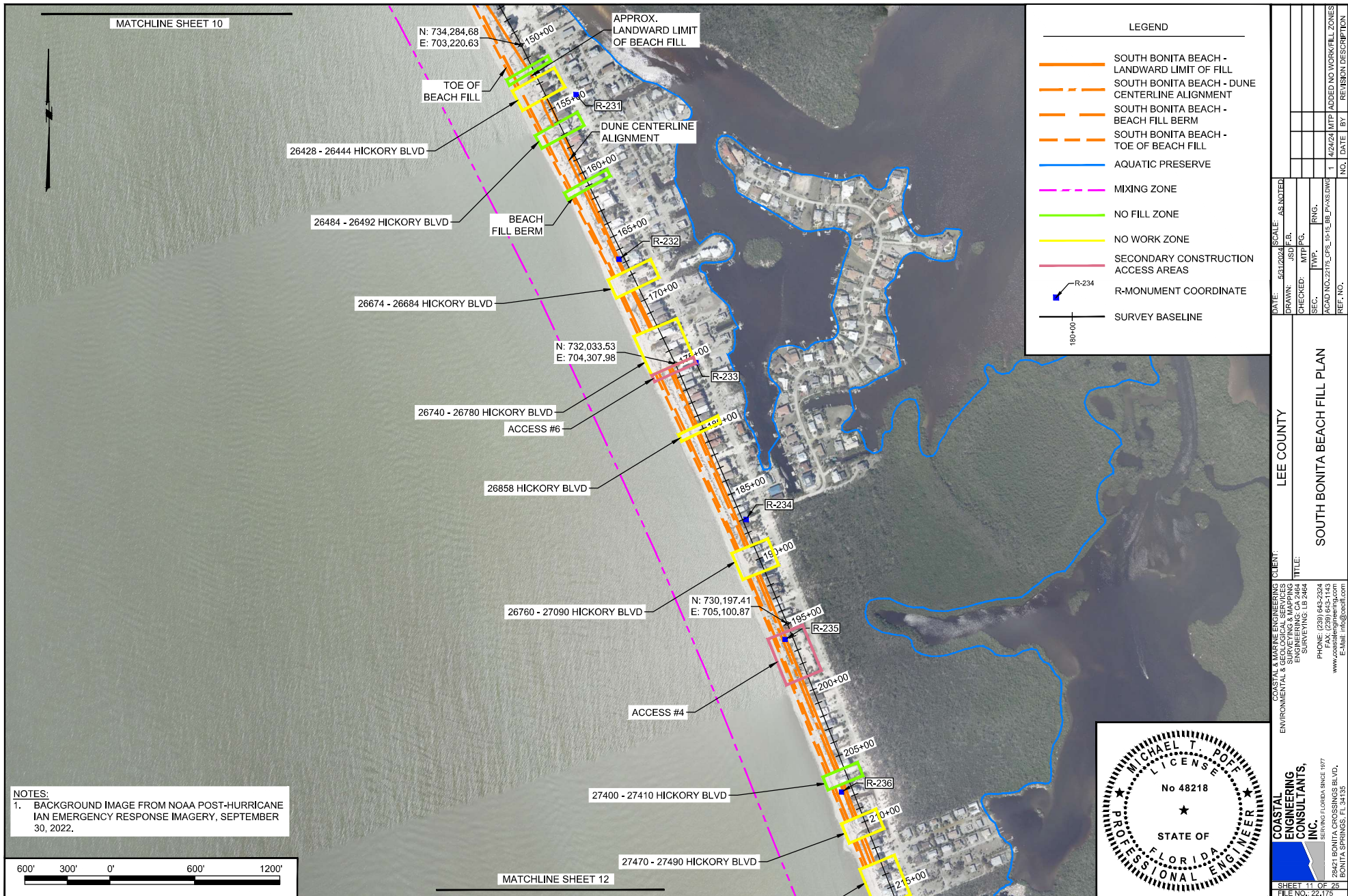
PROFESSIONAL ENGINEER

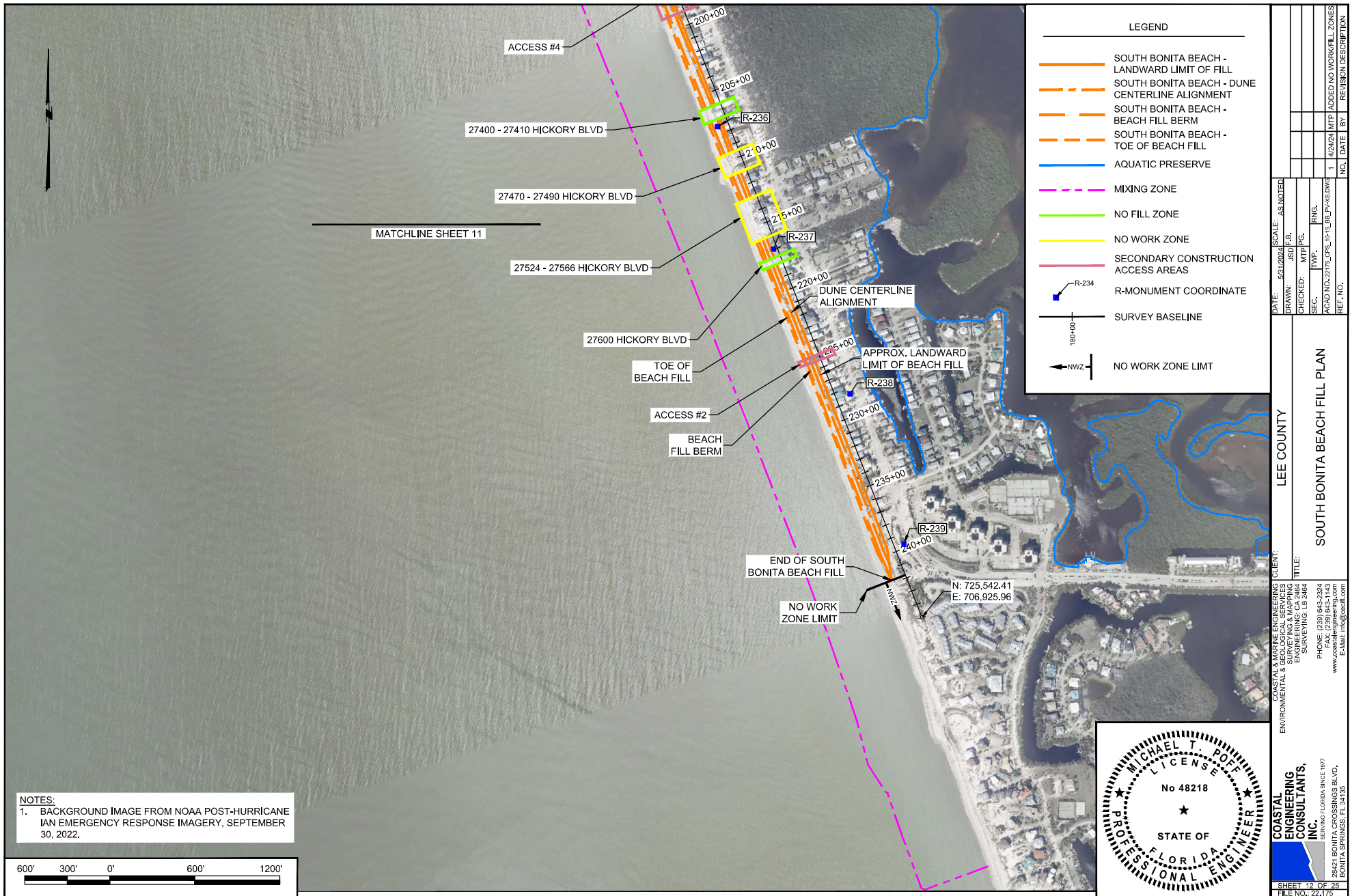
Michael T. Poff

No 48218

28421 BONITA CROSSINGS BLVD.,
BONITA SPRINGS, FL 34135

SHEET 10 OF 25
FILE NO. 22-175



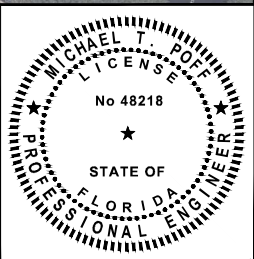


NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE
IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER
30, 2022.



LEGEND

- SOUTH BONITA BEACH - LANDWARD LIMIT OF FILL
- SOUTH BONITA BEACH - DUNE CENTERLINE ALIGNMENT
- SOUTH BONITA BEACH - BEACH FILL BERM
- SOUTH BONITA BEACH - TOE OF BEACH FILL
- AQUATIC PRESERVE
- MIXING ZONE
- NO FILL ZONE
- NO WORK ZONE
- SECONDARY CONSTRUCTION ACCESS AREAS
- R-MONUMENT COORDINATE
- SURVEY BASELINE
- NO WORK ZONE LIMIT



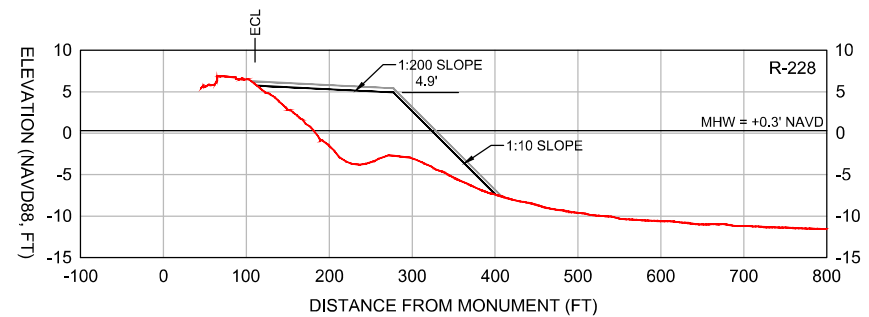
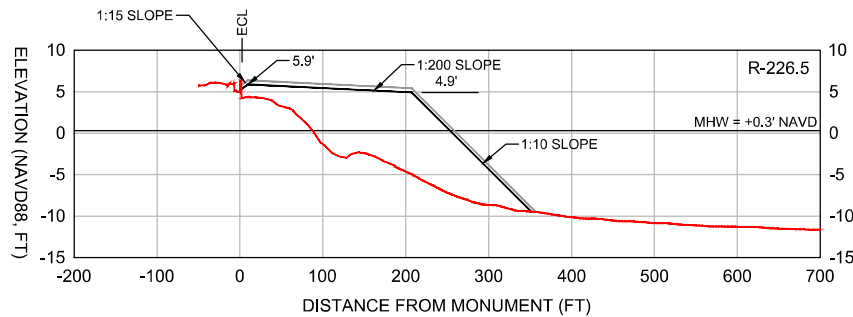
DATE: 5/31/2024	SCALE: AS NOTED	CLIENT: COASTAL & MARINE ENGINEERING, ENVIRONMENTAL & GEOLOGICAL SERVICES	CLIENT: LEE COUNTY
DRAWN: JSD	CHECKED: MTP	ENGINEERING: CO. 2464	ENGINEERING: CO. 2464
SEC. TWP.	RNG.	PHONE: (239) 643-2324	PHONE: (239) 643-2324
ACAD NO. 22175	ACAD NO. 22175	FAX: (239) 643-1143	FAX: (239) 643-1143
NO. 1	DATE: 1/1/2024	WWW.COASTALENGINEERING.COM	WWW.COASTALENGINEERING.COM
BY: JSD	BY: JSD	E-MAIL: info@ceol.com	E-MAIL: info@ceol.com
NO. 1	DATE: 1/1/2024	28421 BONITA CROSSINGS BLVD., BONITA SPRINGS, FL 34135	28421 BONITA CROSSINGS BLVD., BONITA SPRINGS, FL 34135
NO. 1	DATE: 1/1/2024	REVISION DESCRIPTION	REVISION DESCRIPTION
NO. 1	DATE: 1/1/2024	ADDED NO WORK/FILL ZONES	ADDED NO WORK/FILL ZONES

SOUTH BONITA BEACH FILL PLAN

COASTAL & MARINE ENGINEERING, ENVIRONMENTAL & GEOLOGICAL SERVICES
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FAX: (239) 643-1143
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E-MAIL: info@ceol.com

COASTAL ENGINEERING CONSULTANTS, INC.
SERVING FLORIDA SINCE 1977
28421 BONITA CROSSINGS BLVD., BONITA SPRINGS, FL 34135

SHEET 12 OF 25
FILE NO. 22-175



LEGEND:

DESIGN

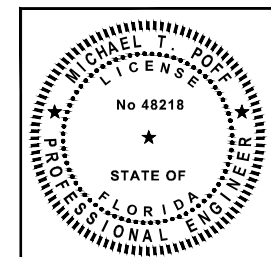
CONSTRUCTION TOLERANCE


EXISTING GRADE (2024)

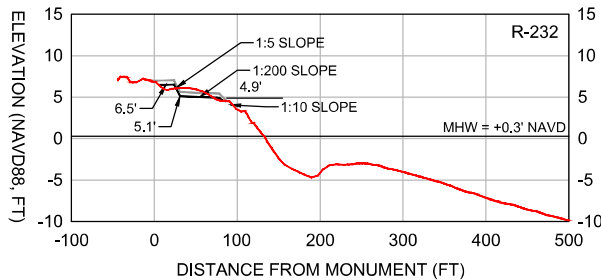
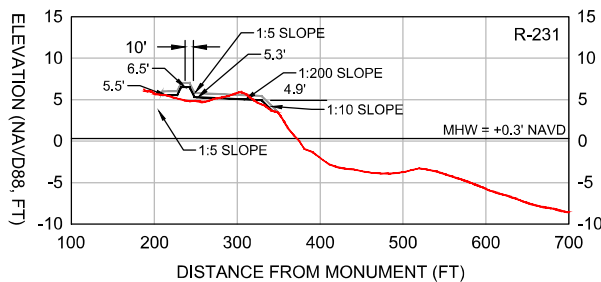
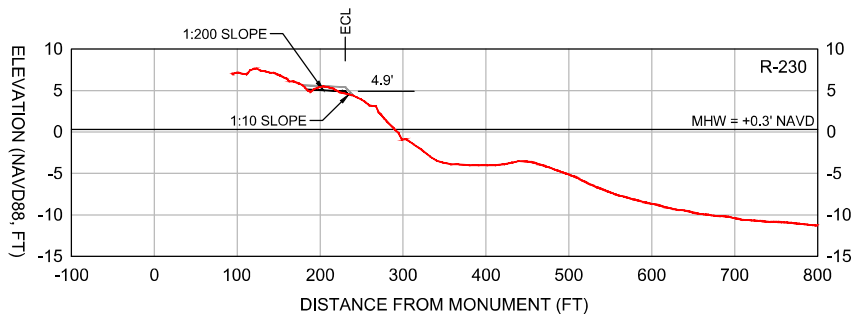
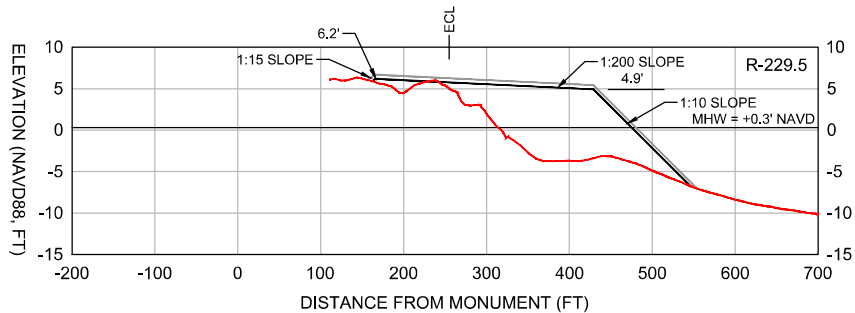
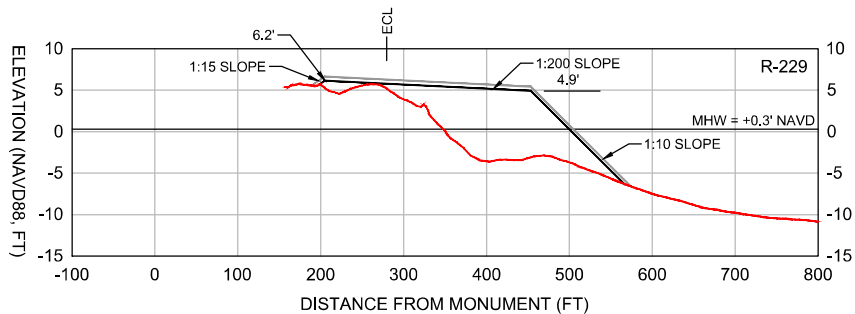
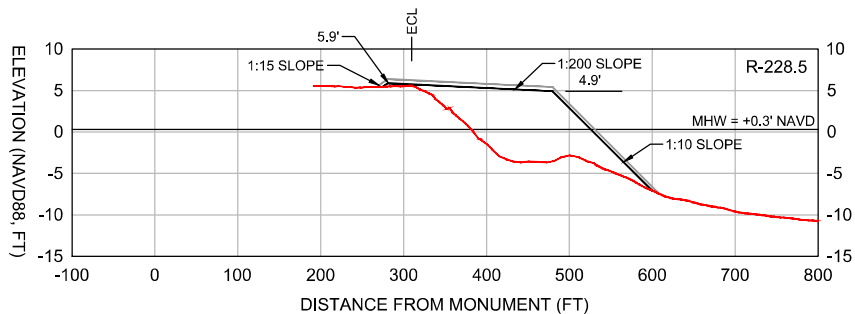
SCALE:
H: 1" = 150'
V: 1" = 15'

NOTES:

1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



 COASTAL ENGINEERING CONSULTANTS, INC. <small>SERVING FLORIDA SINCE 1977</small> 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135	COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, CA 94944 SURVEYING LB 2484 PHONE (738) 643-2324 FAX (738) 643-1143 www.coastalengineering.com E-Mail: info@ceal.com		CLIENT: TITLE:	LEE COUNTY BONITA BEACH FILL TEMPLATE PROFILES	DATE: 5/31/2024 SCALE: AS NOTED DRAWN: JSD P.a. CHECKED: MTP Pg. SEC. _____ TWP. _____ RING. _____ ACAD NO. 22175_CPS_10-15_BB_PWS.DWG	NO. DATE BY REF. NO.	REVISION DESCRIPTION
	SHEET 13 OF 25						



LEGEND:

— DESIGN

— CONSTRUCTION TOLERANCE

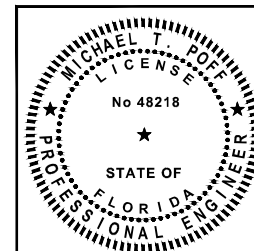
— EXISTING GRADE (2024)

SCALE:

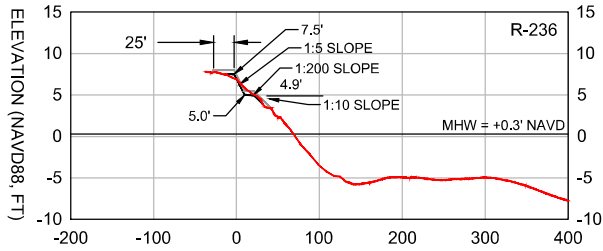
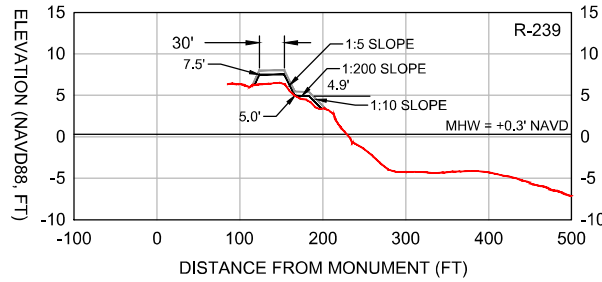
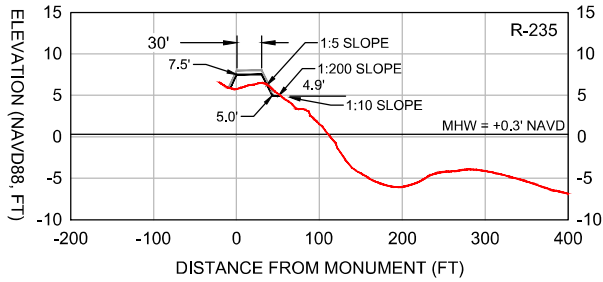
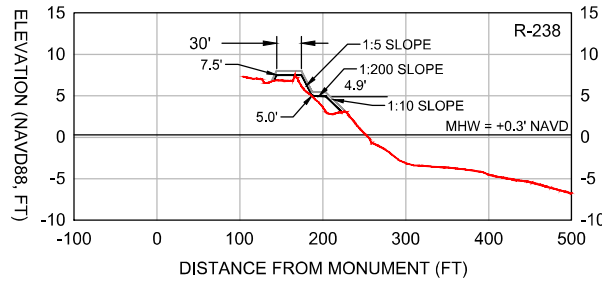
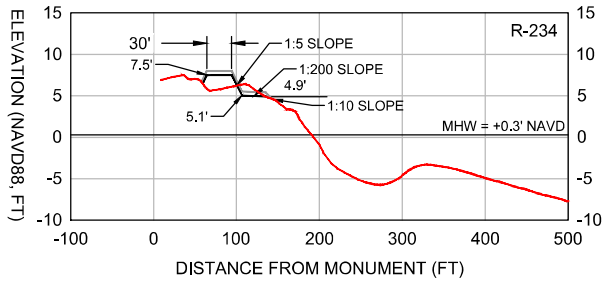
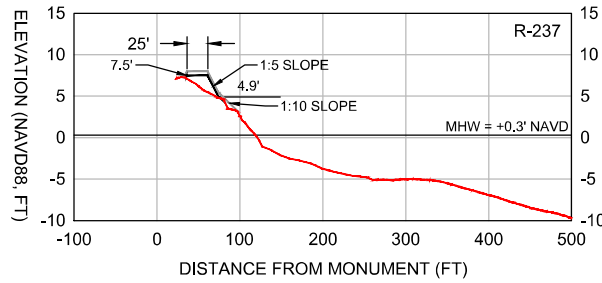
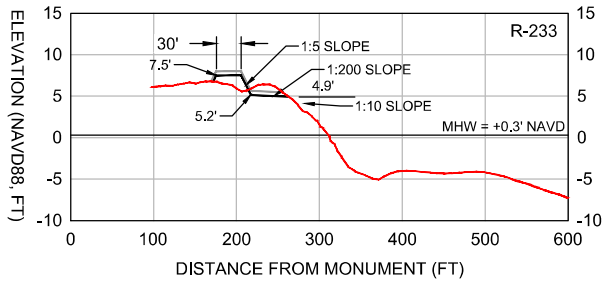
H: 1" = 150'

V: 1" = 15'

- NOTES:
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
 2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
 3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.
 4. THE PERMITTED TEMPLATE IS SHOWN ON THE 2024 PROFILES. NO CUT IS REQUIRED FOR FILL TEMPLATE CONSTRUCTION AND ACCEPTANCE.



DATE: 5/31/2024	SCALE: AS NOTED	NO. DATE BY	REVISION DESCRIPTION
DRAWN: JSD	SEC.:		
CHECKED: MTP	SEC.:		
SEC.:	SEC.:		
ACAD NO. 22175	ACAD NO. 22175		
PROJECT: BONITA BEACH AND SOUTH BONITA BEACH FILL TEMPLATE PROFILES			
CITY: LEE COUNTY			
CLIENT: COASTAL & MARINE ENGINEERING SERVICES, INC.			
ENGINEER: MICHAEL T. POFF			
PHONE: (239) 643-2324			
FAX: (239) 643-1143			
WWW.COASTALENGINEERING.COM			
E-MAIL: info@ceedll.com			
SHEET 14 OF 25			
FILE NO. 22-175			



SCALE:
H: 1" = 150'
V: 1" = 15'

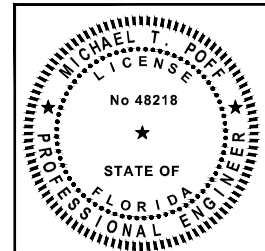
- NOTES:**
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 22-23, 2024.
 2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
 3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.
 4. THE PERMITTED TEMPLATE IS SHOWN ON THE 2024 PROFILES. NO CUT IS REQUIRED FOR FILL TEMPLATE CONSTRUCTION AND ACCEPTANCE.

LEGEND:

— DESIGN

— CONSTRUCTION TOLERANCE

— EXISTING GRADE (2024)



DATE: 5/31/2024		SCALE: AS NOTED	LEE COUNTY	SOUTH BONITA BEACH FILL TEMPLATE PROFILES	CLIENT: COASTAL & MARINE ENGINEERING SERVICES, INC. 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 33435 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com Email: info@ceoi.com
DRAWN: JSD	CHECKED: MTP	SEC: TWP			
ACAD NO: 22175_CPL_10-15_BBL_PV045.DWG	REF. NO.	NO. DATE BY			
REVISION DESCRIPTION					

NOTES:

1. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY OSI IN JULY 2021.
2. GEOTECHNICAL INVESTIGATION CONDUCTED BY GFA INTERNATIONAL AND AMDRILL, INC., 2020 AND 2021.
3. ELEVATIONS ARE NAVD88, US SURVEY FEET.

N: 744,052.40
E: 532,777.20

BORROW AREA					
BOUNDARY COORDINATE TABLE					
POINT	NORTHING	EASTING	POINT	NORTHING	EASTING
BA-01	744,348	534,313	BA-12	742,399	536,602
BA-02	746,761	536,798	BA-13	742,604	536,319
BA-03	746,569	536,950	BA-14	742,666	536,130
BA-04	745,981	537,420	BA-15	742,927	534,844
BA-05	745,785	537,576	BA-16	743,330	534,330
BA-06	745,276	537,770	BA-17	744,016	534,319
BA-07	744,768	537,964	BA-18	744,153	535,537
BA-08	744,115	538,368	BA-19	743,615	536,059
BA-09	743,897	538,503	BA-20	744,346	536,813
BA-10	742,821	539,548	BA-21	742,718	536,930
BA-11	741,358	538,041	BA-22	743,449	537,683

SURVEY BASELINE
N44° 09' 05.95"W
8,000'

N: 739,747.41
E: 536,956.56

800' 400' 0' 800' 1600'

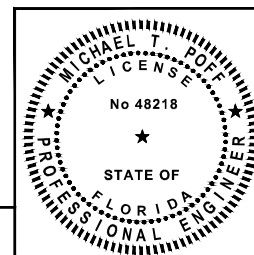
LEGEND

- 55** DESIGN CUT TOE AND ELEVATION (FT)
- 29 BATHYMETRIC CONTOUR (OSI, 2021)
- VC-20_1-1 GEOTECHNICAL VIBRACORE (GFA, 2020)
- VC-21_1-4 GEOTECHNICAL VIBRACORE (AMDRILL, 2021)
- AA LIMITS OF ANCHORING
- BA-01 BORROW AREA ALIGNMENT COORDINATE
- 60+00 SURVEY BASELINE

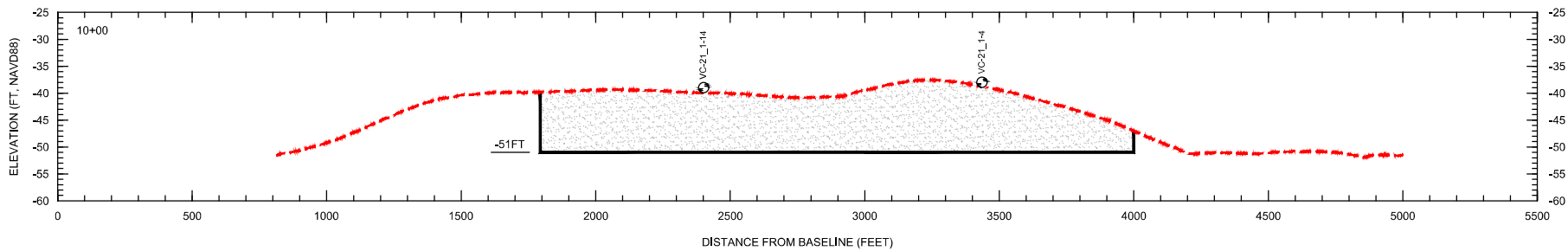
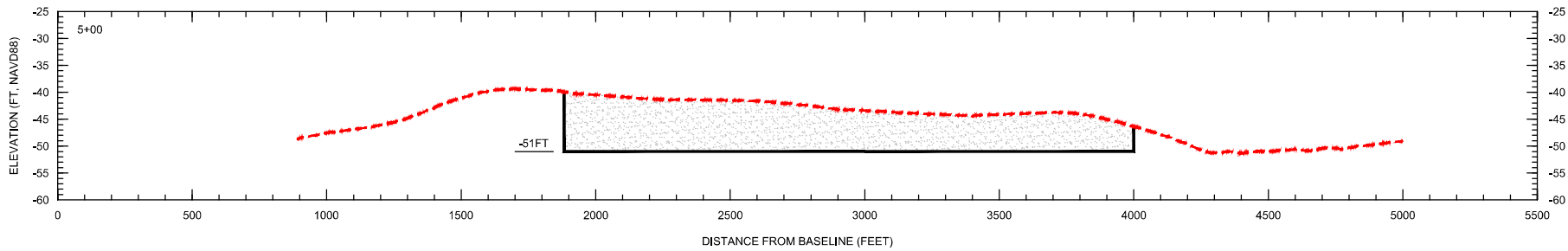
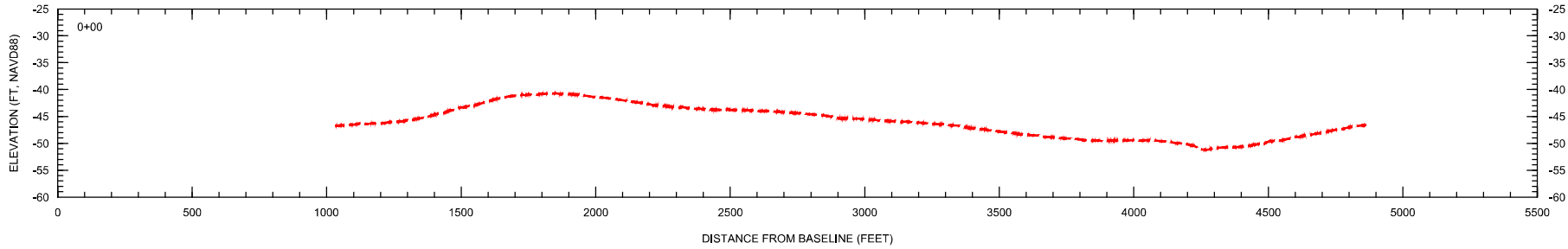
VIBRACORE

COORDINATE TABLE

POINT	NORTHING	EASTING
VC-20_1-1	745,857	534,664
VC-20_1-2	744,374	536,027
VC-20_1-3	742,901	537,375
VC-21_1-4	742,837	538,744
VC-21_1-5	742,847	538,027
VC-21_1-6	742,790	536,860
VC-21_1-7	743,545	537,361
VC-21_1-8	743,544	536,609
VC-21_1-9	743,893	535,617
VC-21_1-10	744,960	535,982
VC-21_1-11	743,893	534,890
VC-21_1-12	744,251	534,552
VC-21_1-13	744,956	535,260
VC-21_1-14	742,123	538,003
VC-21_1-15	742,152	537,304
VC-21_1-16	743,530	538,053
VC-21_1-17	744,588	537,700
VC-21_1-18	742,855	535,909
VC-21_1-19	744,334	536,873
VC-21_1-20	745,482	537,231
VC-21_1-21	743,280	534,986
VC-21_1-22	745,641	536,680
VC-21_1-23	745,641	535,989



DATE: 5/31/2024	SCALE: AS NOTED	CLIENT: LEE COUNTY TITLE: OFFSHORE BORROW AREA PLAN VIEW COASTAL & MARINE ENGINEERING, INC. ENVIRONMENTAL & GEOLOGICAL SERVICES 29421 BONITA CROSSINGS BLVD., BONITA SPRINGS, FL 33435 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalmarineengineering.com E-mail: info@coastalmarine.com	
DRAWN: JSD	CHECKED: MTP		
SEC: RING	REF. NO.		
NO.	DATE		BY



SCALE:
H: 1" = 400'
V: 1" = 20'

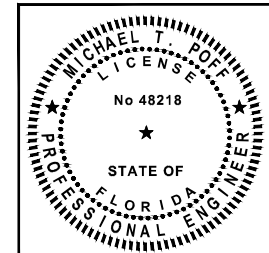
LEGEND:

--- EXISTING GRADE

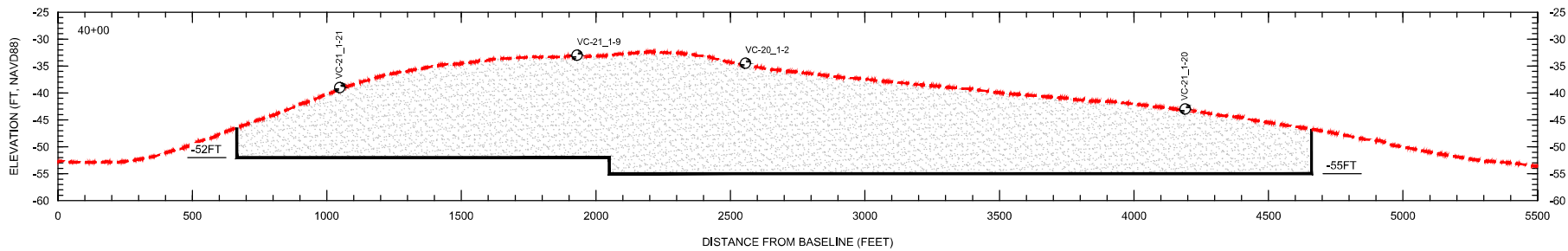
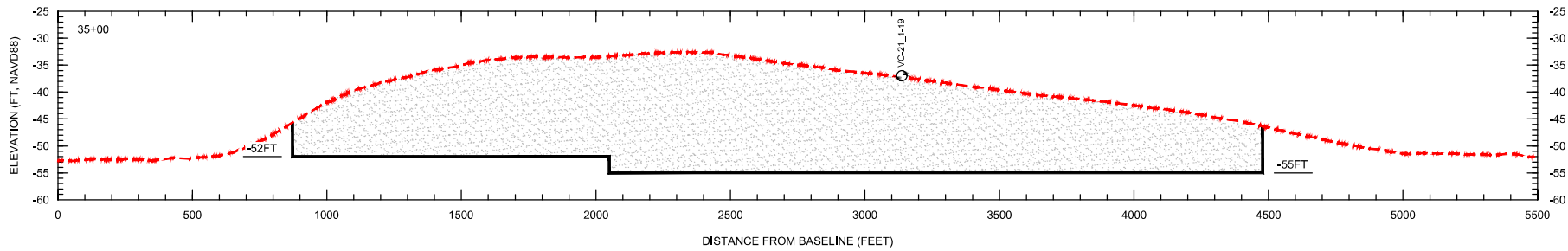
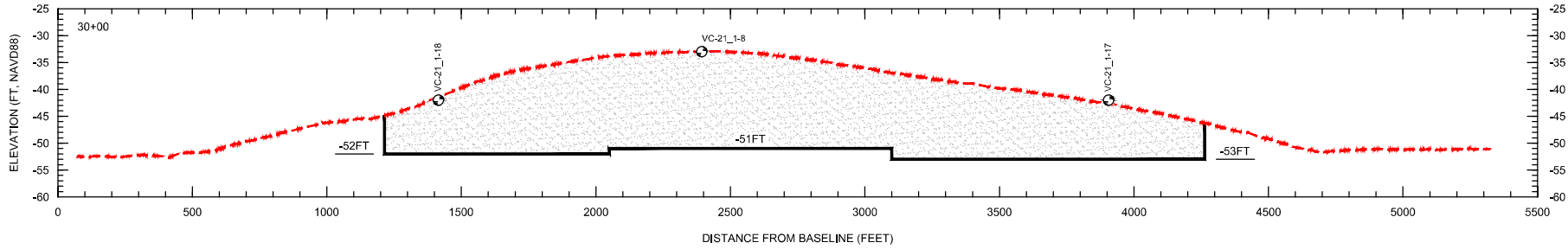
DESIGN DREDGE CUT

VC-21_1-4
VIBRACORE

- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
 2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
 3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.



COASTAL & MARINE ENGINEERING, INC.		LEE COUNTY		DATE: 5/31/2024		SCALE: AS NOTED	
ENVIRONMENTAL & GEOLOGICAL SERVICES		CLIENT:		DRAWN: JSD/C.S.		CHECKED: MTP/P.C.	
ENGINEERING NO. 2464		TITLE:		SEC: TWP.		ACAD NO. 22175_CPL_1-22_Borrow Area.DWG	
SURVEYING, LB 2464		BORROW AREA SECTIONS		REF. NO.		NO. DATE BY	
PHONE: (239) 643-2324		REVISION DESCRIPTION					
FAX: (239) 613-1143							
www.coastalengineering.com							
E-MAIL: info@ceoi.com							



SCALE:
H: 1" = 400'
V: 1" = 20'

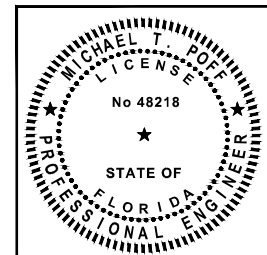
LEGEND:

--- EXISTING GRADE

DESIGN DREDGE CUT

VC-21_1-20
VIBRACORE

- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
 2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
 3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.

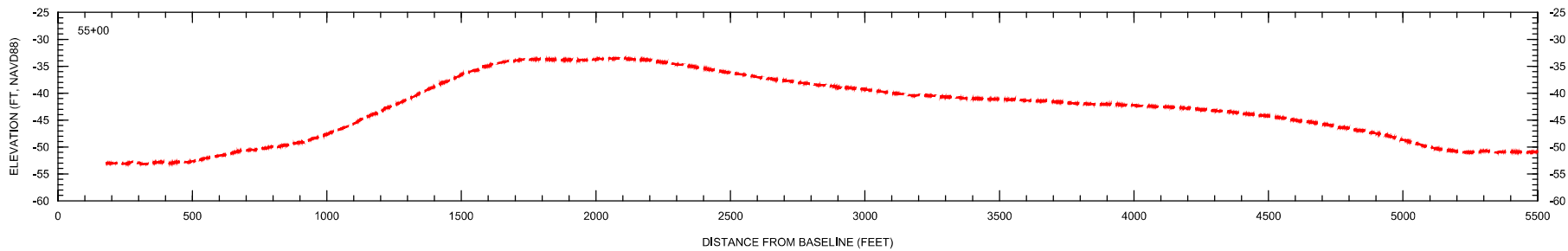
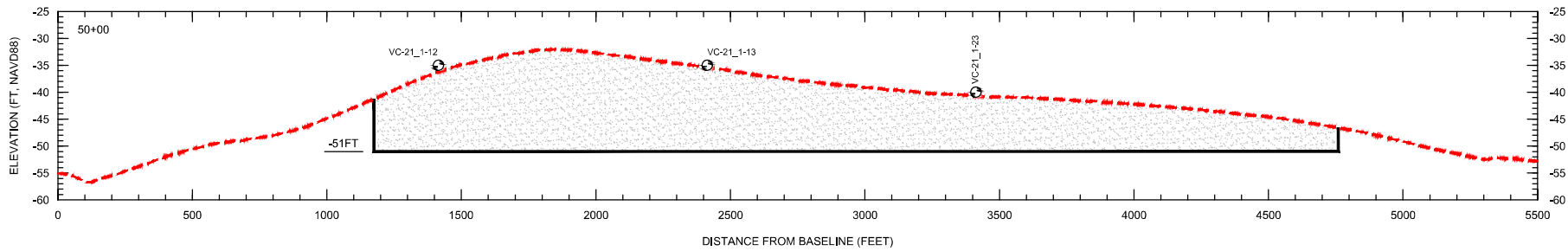
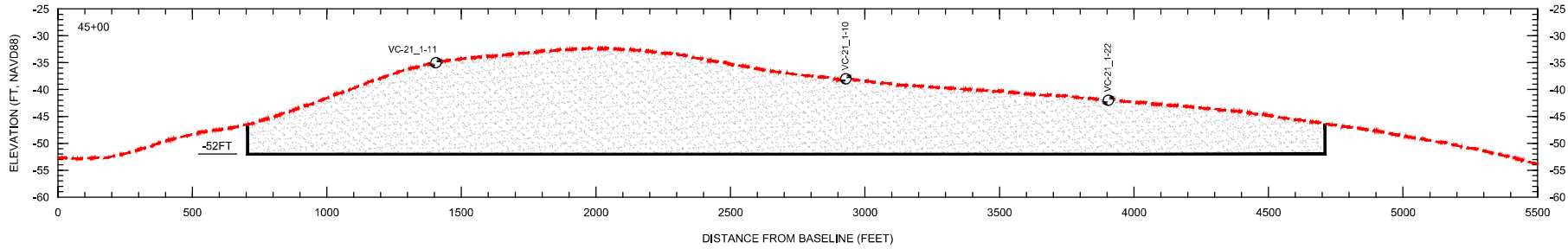


COASTAL & MARINE ENGINEERING, INC.		DATE: 5/31/2024	SCALE: AS NOTED
ENVIRONMENTAL & GEOLOGICAL SERVICES		DRAWN: JSD	CHECKED: MTP
ENGINEERING NO. 2464		SEC: TWP.	RNG.
SURVEYING, LB 2464		ACAD NO. 22175_CPL_1-20_Borrow Area DWG	REF. NO.
PHONE: (239) 643-2324		NO. DATE BY REVISION DESCRIPTION	
FAX: (239) 643-1143			
www.coastalengineering.com			
E-MAIL: info@ceoi.com			

LEE COUNTY
BORROW AREA SECTIONS

COASTAL ENGINEERING CONSULTANTS, INC.
SERVING FLORIDA SINCE 1977
28421 BONITA CROSSINGS BLVD.
BONITA SPRINGS, FL 33435

SHEET 19 OF 25
FILE NO. 22-175



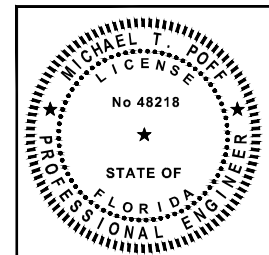
SCALE:
H: 1" = 400'
V: 1" = 20'

LEGEND:

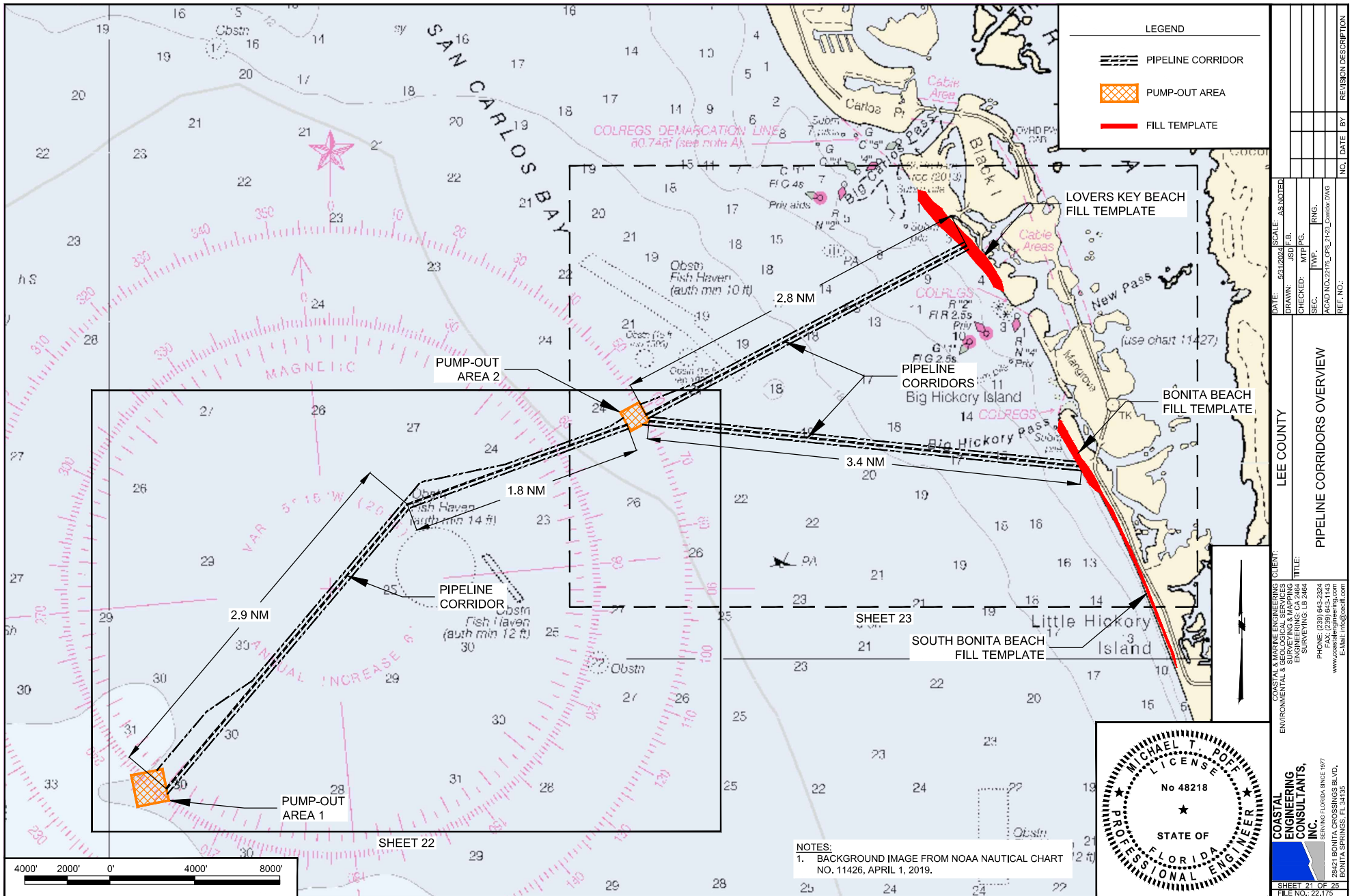
--- EXISTING GRADE
[Shaded Area] DESIGN DREDGE CUT

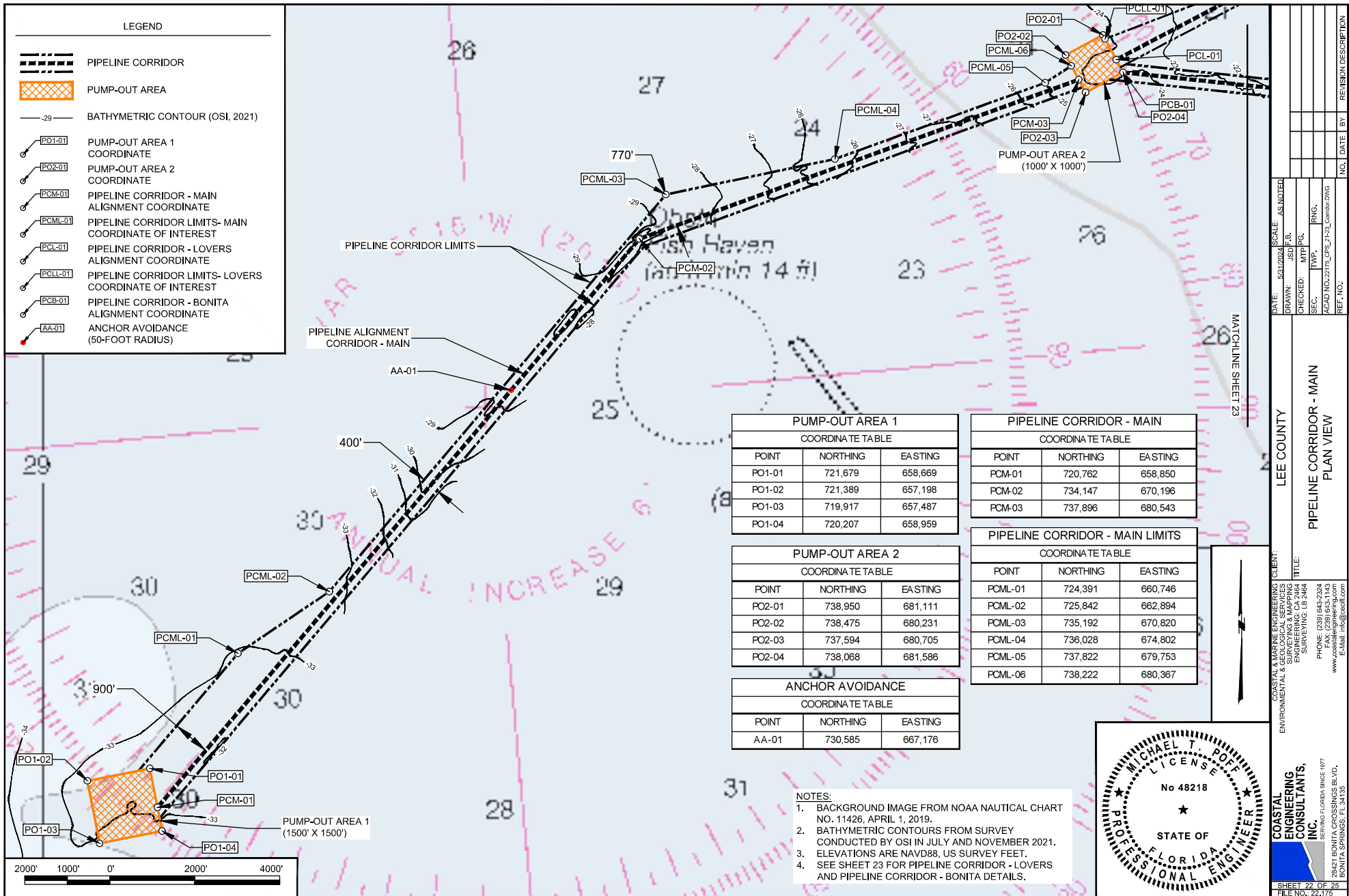
VC-21_1-23
VIBRACORE

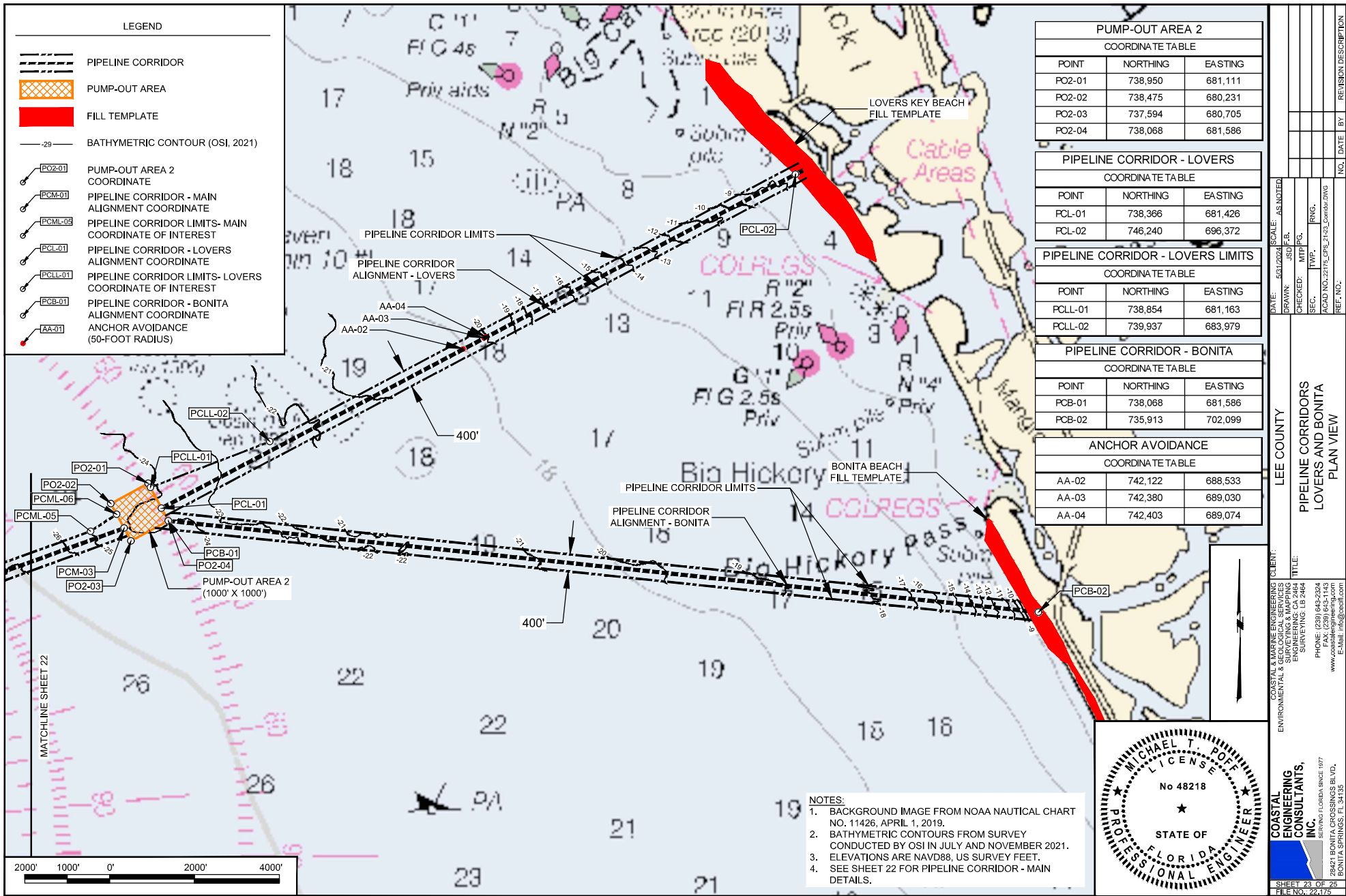
- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.



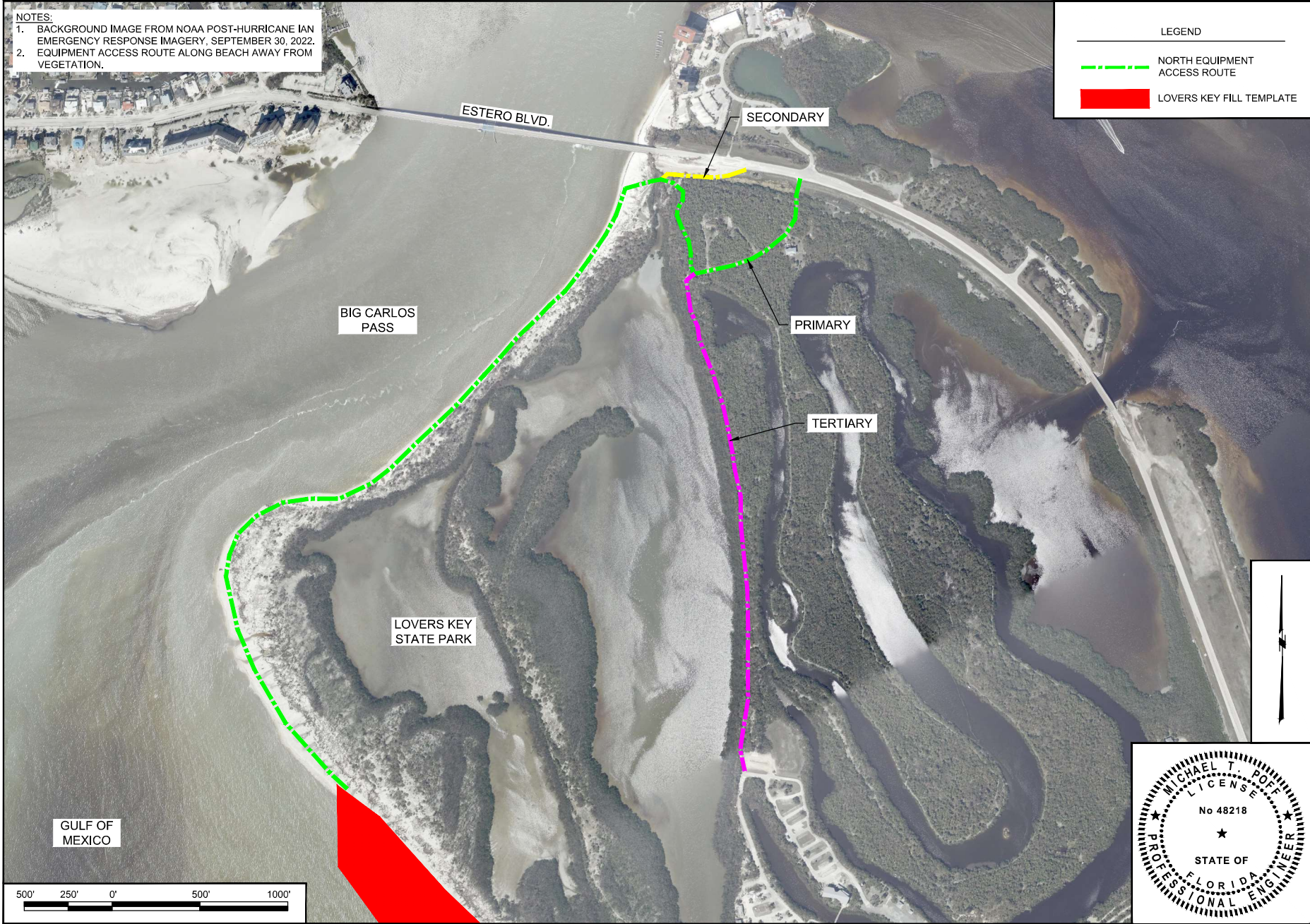
DATE: 5/31/2024		SCALE: AS NOTED	
DRAWN: JSD	CHECKED: MTP	PROJECT: BORROW AREA SECTIONS	
SEC: TWP.	RNG.	ACAD NO.: 22175_CPL_1-23_Borrow Area.DWG	
NO.	DATE	BY	REVISION DESCRIPTION







- NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.
 2. EQUIPMENT ACCESS ROUTE ALONG BEACH AWAY FROM VEGETATION.

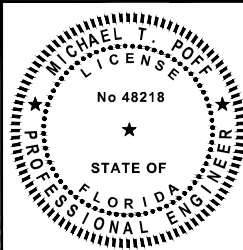


LEGEND

--- NORTH EQUIPMENT ACCESS ROUTE

■ LOVERS KEY FILL TEMPLATE

DATE: 6/12/2024	SCALE: AS NOTED	CLIENT: LEE COUNTY	PROJECT: NORTH EQUIPMENT ACCESS ROUTE
DRAWN: JSD	CHECKED: MTP	ENGINEER: MICHAEL T. POFF	TITLE: NORTH EQUIPMENT ACCESS ROUTE
SEC: TWP.	RNG.	PHONE: (239) 643-2324	28421 BONTA CROSSINGS BLVD.
ACAD NO. 22175_CPS_2L Staging DWG	REF. NO.	FAX: (239) 643-1143	BONTA SPRINGS, FL 34135
NO.	DATE	BY	REVISION DESCRIPTION



COASTAL & MARINE ENGINEERING CLIENT: LEE COUNTY

ENVIRONMENTAL & GEOLOGICAL SERVICES

ENGINEERING NO. 2464

SURVEYING, LB 2464

PHONE: (239) 643-2324

FAX: (239) 643-1143

www.coastalengineering.com

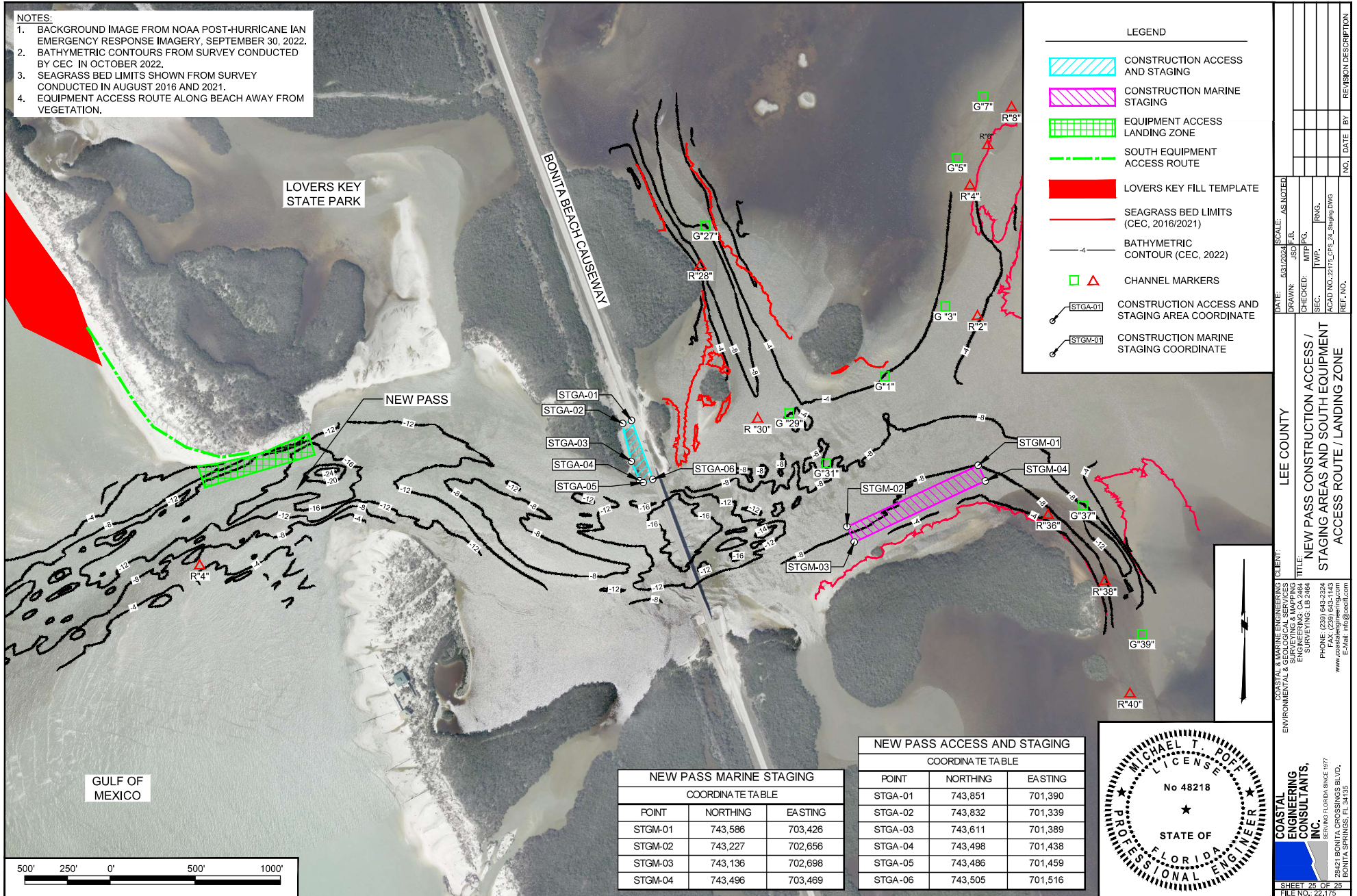
28421 BONTA CROSSINGS BLVD.

BONTA SPRINGS, FL 34135

SHEET 24 OF 25

FILE NO. 22-175

- NOTES:
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.
 2. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY CEC IN OCTOBER 2022.
 3. SEAGRASS BED LIMITS SHOWN FROM SURVEY CONDUCTED IN AUGUST 2016 AND 2021.
 4. EQUIPMENT ACCESS ROUTE ALONG BEACH AWAY FROM VEGETATION.



LEGEND

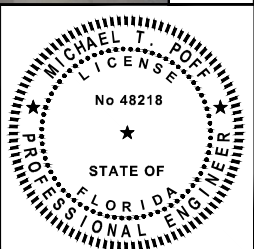
- CONSTRUCTION ACCESS AND STAGING
- CONSTRUCTION MARINE STAGING
- EQUIPMENT ACCESS LANDING ZONE
- SOUTH EQUIPMENT ACCESS ROUTE
- LOVERS KEY FILL TEMPLATE
- SEAGRASS BED LIMITS (CEC, 2016/2021)
- BATHYMETRIC CONTOUR (CEC, 2022)
- CHANNEL MARKERS
- CONSTRUCTION ACCESS AND STAGING AREA COORDINATE
- CONSTRUCTION MARINE STAGING COORDINATE

NEW PASS MARINE STAGING

COORDINATE TABLE		
POINT	NORTHING	EASTING
STGM-01	743,586	703,426
STGM-02	743,227	702,656
STGM-03	743,136	702,698
STGM-04	743,496	703,469

NEW PASS ACCESS AND STAGING

COORDINATE TABLE		
POINT	NORTHING	EASTING
STGA-01	743,851	701,390
STGA-02	743,832	701,339
STGA-03	743,611	701,389
STGA-04	743,498	701,438
STGA-05	743,486	701,459
STGA-06	743,505	701,516



COASTAL & MARINE ENGINEERING SERVICES
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEYING, LB 2464
ENGINEERING, LB 2464
PH: (239) 643-2324
FAX: (239) 643-1143
www.coastalmarineengineering.com
Email: info@ceall.com

LEE COUNTY

DATE: 5/31/2024 SCALE: AS NOTED

DRAWN: JSD / C.A.
CHECKED: MTP / NG.
SEC: TWP.
ACAD NO.: 22175_CPS_24_Staging DWG
REF. NO.

TITLE: NEW PASS CONSTRUCTION ACCESS / STAGING AREAS AND SOUTH EQUIPMENT ACCESS ROUTE / LANDING ZONE

NO. DATE BY REVISION DESCRIPTION

SHEET 25 OF 25
FILE NO.: 22-175