



DEPARTMENT OF THE ARMY
U.S ARMY CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM RD-A
PUBLIC NOTICE NO. SAM-2022-00826-JCC

January 18, 2023

**JOINT PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS AND
STATE OF ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**REQUEST TO DREDGE AND DISCHARGE FILL MATERIAL IN PERDIDO PASS TO
PROTECT AND RESTORE ADJACENT TIDAL MARSH IN ORANGE BEACH, BALDWIN
COUNTY, ALABAMA**

TO WHOM IT MAY CONCERN: This District has received an application for a Department of the Army (DA) permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344). Please communicate this information to interested parties.

APPLICANT: The Nature Conservancy
Attention: Ms. Judy Haner
118 North Royal Street, Suite 500
Mobile, Alabama 36602

LOCATION: Perdido Pass; East of Marina Road; within Section 3, Township 9 South, Range 5 East; near Latitude 30.285587°, Longitude -87.551137°; Orange Beach, Baldwin County, Alabama.

PROJECT PURPOSE: The project purpose is to conserve and restore Robinson and Walker Islands for wildlife and public use by improving resilience of coastal habitats and the natural environment.

PROPOSED WORK: This project would consist of dredging and filling activities on and around Robinson Island and Walker Island. The applicant requests authorization to place material within subtidal and intertidal waters to enhance, restore, and create coastal marsh habitat within the Lower Perdido system using local sediment sources. An existing breakwater on the north side of Robinson Island would also be supplemented with additional rip rap material. Two borrow areas would be used to obtain approximately 308,000 cubic yards of material for construction in the event that beneficial use material is not available. Borrow area A (5 acres) would be dredged to an elevation of -11 feet NAVD88 and Borrow Area B (17 acres) would be dredged to an elevation of -15 feet NAVD88. Around 95,000 total plants are proposed to be planted after creation of the new coastal habitat on the project islands. The three material placement areas are a) Walker Island West, b) Walker Island East, and c) Robinson Island.

a. Approximately 73,350 cubic yards of sediment would be placed to create 4 acres of subtidal habitat, a 5-acre scrub-shrub platform, and a central 1-acre upland platform. The proposed configuration was designed to mimic the historic island footprint while avoiding

impacts to adjacent seagrass beds. The proposed elevation of the scrub-shrub platform is +4 feet NAVD88 with a typical width of 75 feet. In the center of the placement area would be a +6 feet NAVD88 elevation upland platform of variable width. The platforms and elevations were designed to maximize high elevation habitat to support bird habitat and overall longevity of the project.

b. Approximately 120,240 cubic yards of sediment would be placed to create 1 acre of subtidal habitat, 1 acre of restored marsh habitat, 8 acres of scrub-shrub habitat, and 3 acres of upland habitat. The proposed configuration was designed to address erosion in the existing marsh, avoid seagrass impacts, and maximize elevations for bird habitat and longevity. Six inches of material would be used as thin-layer placement within the existing marsh to raise the platform elevation in response to erosion of sediment, loss of vegetation, and overall degradation of habitat. This would result in an elevation of approximately +1.5 feet NAVD88. The scrub-shrub platform has an elevation of +4 feet NAVD88 and a typical width of 75 ft. In the center of the placement area would be a +6 feet NAVD88 elevation upland platform of variable width.

c. Approximately 44,455 cubic yards of sediment would be placed to create 1 acre of subtidal habitat, 3 acres of restored or created marsh habitat, and 3 acres of dune habitat. The proposed configuration was designed to address erosion in the existing marsh habitat, increase marsh and bird habitats on the island, and combat erosion. An existing breakwater would be supplemented with approximately 925 cubic yards of class 4 rip rap to achieve an elevation of +4.5 feet NAVD88. The new rock would tie into the existing submerged breakwater at an elevation of -1.2 feet NAVD88 in order to maintain a continuous structure and eliminate the placement of new rock along most of the breakwater face through relocation of some existing rock.

Table 1. Project Impacts

Location	Description	Quantity (cubic yards)	Footprint (Acres)	Material
Robinson	Rock	925	0.003	Class 4 rip rap
	Dune	32,280	3.2	sand
	Marsh	8,900	3	sand
	Subtidal (fill toe)	2,350	0.8	sand
	<i>Total Fill</i>	44,455	7	
Walker-West	Scrub Shrub Platform	43,110	5	sand
	Upland Platform	16,240	1	sand
	Subtidal (fill toe)	14,000	4	sand
	<i>Total Fill</i>	73,350	10	
Walker-East	Scrub Shrub Platform	66,160	8	sand
	Upland Platform	50,290	3	sand
	Marsh	1,190	1	sand
	Subtidal (fill toe)	2,600	1	sand
	<i>Total Fill</i>	120,240	13	
Borrow Area - Northwest	Dredging	56,600	5	sand
Borrow Area - Northeast	Dredging	251,700	17	sand

AVOIDANCE AND MINIMIZATION: The applicant conducted an analysis of alternative project designs using various configurations and has concluded that the proposed design would provide the greatest restoration and enhancement of habitat while avoiding as many aquatic resources as possible. The proposed configuration was designed to avoid impacts to seagrass beds while also mimicking a historic footprint that was present before surrounding seagrass beds began to thrive. The resulting footprint is a compromise between impacting some adjacent seagrass while maximizing habitat created and prioritizing higher elevation platforms on an island that has seen a historic reduction in suitable bird habitat. The applicant has proposed to implement Best Management Practices, including the use of sediment dikes and turbidity curtains around the marsh fill areas to minimize the transport of fine-grained sediments from the construction area. The U.S. Army Corps of Engineers (USACE), Mobile District has not verified the adequacy of the applicant's avoidance and minimization efforts at this time.

MITIGATION: The provision of compensatory mitigation has not been proposed. Seagrasses within the proposed project boundaries will be relocated using sod methods by experienced partners (Dauphin Island Sea Lab) to reestablish them within the Lower Perdido Islands complex. The combination of seagrass relocation plus the creation of complex marsh habitats are intended to offset any impacts to seagrasses in the area resulting from restoration work. The project proposes approximately 4 acres of marsh restoration or creation on Robinson and Walker Islands. The U.S. Army Corps of Engineers (USACE), Mobile District has not verified the adequacy of the applicant's mitigation efforts at this time.

WATER QUALITY/COASTAL ZONE MANAGEMENT: The applicant will apply for certification from the State of Alabama in accordance with Section 401(a)(1) of the Clean Water Act, as well as Coastal Zone Management (CZM) consistency certification in accordance with the Alabama Coastal Zone Management Program. Upon completion of the required advertising and public comment review, a determination relative to water quality certification and CZM consistency will be made by the Alabama Department of Environmental Management (ADEM) within an established reasonable period of time.

HISTORIC PROPERTIES: In accordance with Section 106 of the National Historic Preservation Act and Appendix C of 33 CFR Part 325, the undertaking defined in this notice is being considered for the potential to affect cultural and historic properties within the permit area. In accordance with Appendix C of 33 CFR Part 325, the Mobile District has determined the permit area consists of the entire undertaking in waters of the United States, which includes the footprint of the proposed dredge and fill areas that would be disturbed by construction of the project. The National Register of Historic Places will be consulted for properties listed, or eligible for listing, in the National Register, which are known to exist and would be affected by the proposed work. The Mobile District is seeking comments regarding the existence, or the potential for existence, of significant cultural and historic properties within the permit area. The applicant has provided a Phase I Cultural Resources Assessment of the project site. At this time, the USACE, Mobile District has made no determination regarding potential effects of the project on cultural/historic resources. Further coordination with the State Historic Preservation Officer and federally-recognized American Indian tribes will be initiated.

ESSENTIAL FISH HABITAT: This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management

Act. The proposed project would temporarily impact 22 acres of estuarine substrate for the dredging of open water Borrow Areas A and B (22 acres), temporarily impact 4 acres of existing tidal marsh for the thin-layer placement of material and would permanently impact 26 acres of estuarine substrate and water column during placement of and fill and rock breakwaters to protect the restored areas. Our initial determination is that the proposed action would have a minimal adverse effect on EFH or federally managed fisheries due to the temporary nature of the proposed construction and the overall ecological benefits to restoring, creating and enhancing acres of tidal marsh, restoring wildlife habitat within Perdido Pass, and providing long-term protection against future erosion. Our final determination relative to project impacts and the need for mitigative measures is subject to review by and coordination with the National Marine Fisheries Service (NMFS).

ENDANGERED SPECIES: Preliminary review of this application and the U.S. Department of the Interior's List of Endangered and Threatened Wildlife and Plants indicate the following federally-listed species are known or expected to occur within the project area: Alabama beach mouse (E), Perdido Key beach mouse (E), West Indian manatee (T), piping plover (T), red knot (T), Wood Stork (T), Eastern Indigo Snake (T), Green Sea Turtle (T), Kemp's Ridley Sea Turtle (E), and Loggerhead Sea Turtle (T). There is no designated critical habitat within the project action area. At this time, the USACE, Mobile District has made no determination with regard to potential effects of the project on the above-listed species. Further coordination with the U.S. Fish and Wildlife Service (USFWS) and NMFS will be performed as determined to be appropriate.

COMMENTS: This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the USACE can be based. The Mobile District is soliciting comments from the public, federal, state and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed below. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing, setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are

conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and in general, the needs and welfare of the people. Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will also include the application of guidelines established by the Administrator of the U.S. Environmental Protection Agency.

Correspondence concerning this notice should refer to Public Notice Number **SAM-2022-00826-JCC**, and should be directed to the District Engineer, Mobile District, Regulatory Division, Attention: **Ms. Jessica C. Comeaux**, Post Office Box 2288, Mobile, Alabama 36628-0001, or by e-mail at Jessica.C.Comeaux@usace.army.mil, or (251) 694-3772. Copies of all comments should be furnished to the ADEM at coastal@adem.alabama.gov, or sent to: Alabama Department of Environmental Management, Mobile Branch, Coastal Section, 3664 Dauphin Street, Suite B, Mobile, Alabama 36608.

All comments should be received no later than 30 days from the date of this Public Notice.

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/Missions/Regulatory.aspx.

MOBILE DISTRICT
U.S. Army Corps of Engineers

Enclosures

1 2 3 4 5 6

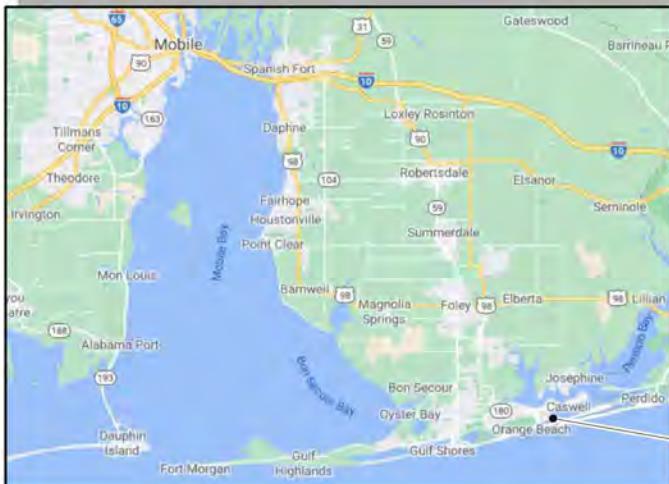
E

RESTORATION ALTERNATIVES ANALYSIS, DESIGNS, AND COST ESTIMATES STUDY FOR LOWER PERDIDO BAY/PERDIDO PASS

D

ORANGE BEACH, ALABAMA

C



VICINITY MAP
SCALE: NTS

B



LOCATION PLAN
SCALE: NTS

A

30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION

1 2 3 4 5 6

DRAWING SCALES SHOWN BASED ON 22x34" DRAWING



Map	Date
Scale	Description

RESTORATION ALTERNATIVES ANALYSIS, DESIGNS, AND COST ESTIMATES STUDY FOR LOWER PERDIDO BAY/PERDIDO PASS	COVER SHEET
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111 WATER ST, STE 2020 MOBILE, AL 36602 +1 251-378-0000	Prepared by: E. DIAZONI HSP AD Drawing date: 05/05/2022 Drawing No.: G-001 Submitted by: O. BUCHEN MORATI & SCHAFF Architects & Engineers File No.: 42975022-7474 PM By: CASTILLO CRISTIAN, Sheet No.: 11 B (4451)
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Sheet Reference No. G-001

Seal

File: G-001/2022 Perdido Pass/001.CADDS Active Drawing

Design: 10005-C-001_Plan 4/20/2022 2:54 PM By: CASTILLO CRISTIAN, Sheet No.: 11 B (4451)

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6

INDEX OF DRAWINGS		
INDEX NO.	SHEET NO.	SHEET TITLE
1	G-001	COVER SHEET
2	G-002	INDEX SHEET
3	G-003	GENERAL NOTES, ABBREVIATIONS AND LEGEND
4	G-004	PROJECT LAYOUT
5	V-101	EXISTING CONDITIONS
6	C-101	BORROW AREA A LAYOUT
7	C-102	BORROW AREA B LAYOUT
8	C-111	ROBINSON ISLAND FILL AREA LAYOUT
9	C-112	WALKER ISLAND FILL AREA LAYOUT - WEST
10	C-113	WALKER ISLAND FILL AREA LAYOUT - EAST
11	C-121	ROBINSON ISLAND BREAKWATER LAYOUT
12	C-301	BORROW AREA A SECTIONS
13	C-302	BORROW AREA B SECTIONS (1 OF 3)
14	C-303	BORROW AREA B SECTIONS (2 OF 3)
15	C-304	BORROW AREA B SECTIONS (3 OF 3)
16	C-305	BREAKWATER TYPICAL SECTION
17	C-311	ROBINSON ISLAND SECTIONS (1 OF 2)
18	C-312	ROBINSON ISLAND SECTIONS (2 OF 2)
19	C-321	WALKER ISLAND SECTIONS - WEST (1 OF 2)
20	C-322	WALKER ISLAND SECTIONS - WEST (2 OF 2)
21	C-323	WALKER ISLAND SECTIONS - EAST (1 OF 2)
22	C-324	WALKER ISLAND SECTIONS - EAST (2 OF 2)

ABBREVIATIONS

ALDOT	ALABAMA DEPARTMENT OF TRANSPORTATION
CY	CUBIC YARDS
DACS	DRAWING AREA COORDINATE SYSTEM
EL	ELEVATION
FT	FOOT/FEET
LIDAR	LIGHT DETECTION AND RANGING
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
NTS	NOT TO SCALE
ST	SAINt
TYP	TYPICAL
+	FOOT/FEET
*	INCHES
#	NUMBER
±	PLUS/MINUS

NOTES

- THE ESTIMATED BORROW (CUT) AND PLACEMENT (FILL) AREA QUANTITIES ARE BASED ON A COMBINATION OF THE ROWE ENGINEERING AND SURVEYING CONSULTING ENGINEERS SURVEYS DATED MAY 16, 26, JUNE 14, 2020 AND THE USGS 2016-2019 ALABAMA 25 COUNTY LIDAR DATA.
- THE INFORMATION DEPICTED ON THESE DRAWINGS REPRESENTS THE RESULTS OF THE SURVEYS ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS AN INDICATION OF THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- HORIZONTAL COORDINATES ARE REFERENCED TO ALABAMA STATE PLANE COORDINATE SYSTEM WEST ZONE (0102), ESTABLISHED BY RTK GPS.
- ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), U.S. SURVEY FEET GEOD 12B.
- GEOTECHNICAL INVESTIGATIONS WERE NOT PERFORMED AS PART OF 30% DESIGN. THE DESIGN IS BASED UPON ASSUMED GEOLOGIC CONDITIONS. GEOTECHNICAL INVESTIGATIONS WILL NEED TO BE PERFORMED TO ADVANCE FROM 30% DESIGN.
- THIS DRAWING SET IS FOR PRELIMINARY DESIGN ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.
- AERIAL PHOTOGRAPHY FROM NEARMAP, DECEMBER 2020
- SUBMERGED AQUATIC VEGETATION WAS DIGITALLY MAPPED BY BARRY A. VITTOR & ASSOCIATES, INC. USING AERIAL IMAGERY OBTAINED IN 2019.
- THE ARCHAEOLOGICAL SITE ON ROBINSON ISLAND WAS VERIFIED BY SEARCH IN 2021. THE NATIONAL REGISTER OF HISTORIC PLACES EVALUATION FOR THE SITE IS UNDETERMINED.

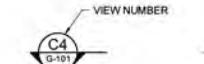
ISLAND	HABITAT	AREA (AC)	VOLUME (CY)
ROBINSON	DUNE	3	32,280
	MARSH	3	8,900
	SUBTIDAL (FILL TOE)	1	2,350
WALKER-WEST	SCRUB SHRUB PLATFORM	5	43,110
	UPLAND PLATFORM	1	16,240
	SUBTIDAL (FILL TOE)	4	14,000
WALKER-EAST	SCRUB SHRUB PLATFORM	8	66,160
	UPLAND PLATFORM	3	50,290
	MARSH	1	1,190
BORROW AREA - NORTH WEST	SUBTIDAL (FILL TOE)	1	2,600
	DREDGING	5	56,600
	BORROW AREA - NORTH EAST	17	251,700

SHEET TYPE DESIGNATORS	
0	GENERAL (COVER SHEET, LEGEND, NOTES)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS (NOT TYPICALLY USED)
3	SECTIONS (OVERALL VIEWS)
4	LARGE-SCALE VIEWS (PLAN, SECT. OR ELEV. - NOT DETAILS)
5	DETAILS (MAY BE PLAN, SECT. OR ELEV. VIEWS)
6	SCHEDULES
7	USER DEFINED
8	USER DEFINED
9	3D ISOMETRIC

LEGEND



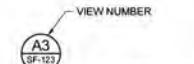
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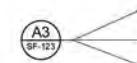
SECTION CALLOUT

KEYED NOTE

DETAIL CALLOUT WITH LEADERS

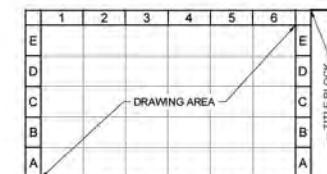


DETAIL CALLOUT



SECTION CALLOUT WITH JOG

* VIEW NUMBER IS BASED ON THE (DACS) LOCATION OF THE LOWER-LEFT EXTENTS OF THE VIEW ON THE REFERENCED SHEET. WHEN REFERENCING DRAWING INFORMATION BETWEEN SHEETS, BOTH THE VIEW AND SHEET NUMBERS MUST BE QUOTED TOGETHER - EITHER IN A CALLOUT FORMAT AS SHOWN ABOVE OR IN THE FORM:
"VIEW NO./SHEET NO." (EG A1/CS-5001)

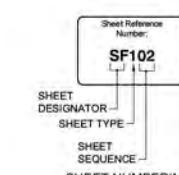


DRAWING AREA COORDINATE SYSTEM (DACS)

DISCIPLINE DESIGNATORS	
DISCIPLINE	DESIGNATOR
GENERAL	G
SURVEY/MAPPING	V
GEOTECHNICAL	B
CIVIL WORKS	W
ENVIRONMENT	Z
STRUCTURAL	S
MECHANICAL	M
ELECTRICAL	E
OTHER DISCIPLINES	X

SECONDARY DESIGNATORS	
DEMOLITION	D
GENERAL	G
SUBSTRUCTURE	B
FRAMING	F
COMPONENT	C
SITE	S

REVISION NUMBERING	
A00-A01...	PRE-BID SUBMITTALS
B00-B01...	BID SUBMITTALS
C00-C01...	CONSTRUCTION SUBMITTALS



SHEET SEQUENCE

SHEET NUMBERING

30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION



RESTORATION ALTERNATIVES ANALYSIS
DESIGN AND COST ESTIMATES FOR
LOWER PERIODO BAY/PERIODO PASS

INDEX GENERAL NOTES
ABBREVIATIONS AND LEGEND

Sheet No.: 11104541
Date: 2022-04-23
Drawn By: K. DIAZ/DR
Checked By: H. SPARKS
Supervised By: P. KOTULAK
Reviewed By: D. BANCHET
Project Manager: M. BURKHARD & SONS
Drawing Scale: 1:1000 (1/8")

Sheet Reference Number: SF102
SHEET DESIGNATOR:
SHEET TYPE:

SEAL

Sheet Reference No.: G-002
INDEX: 2 OF 21

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6

DRAWING SCALES SHOWN BASED ON 22'x36' DRAWING

Page 001/002 Periodo Bay/Pass, CADD/Civil, Active Drawings





1 2 3 4 5 6





LEGEND

- - - - - LIMIT OF FILL
 - - - - - LIMIT OF DREDGE SLOPE
 - - - - - BASE GEOMETRY LINE
 - - - - # EXISTING GRADE CONTOURS
 - - - - DESIGN CONTOUR

30% DESIGN
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TO BE USED FOR CONSTRUCTION

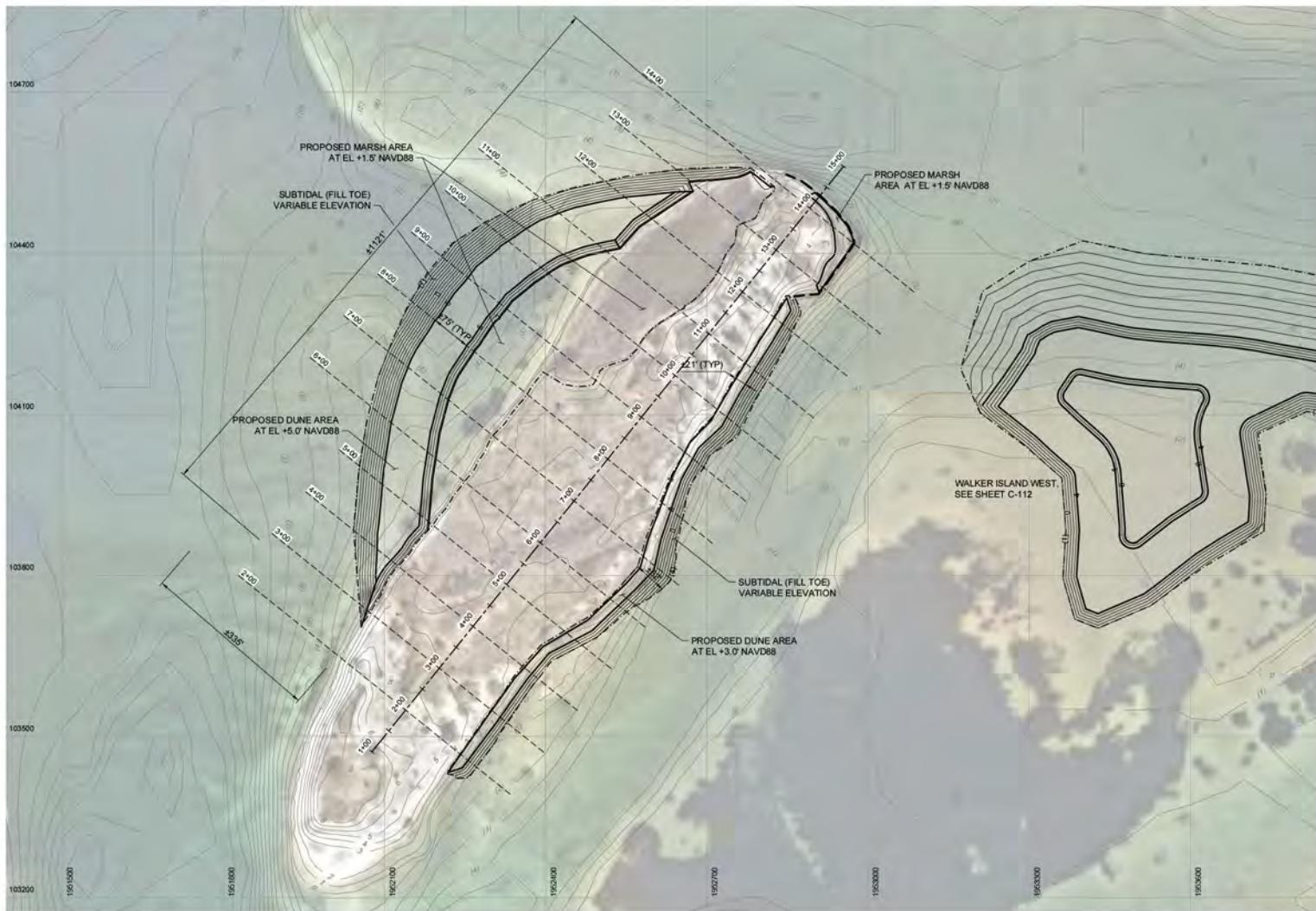
DRAWING SCALES SHOWN BASED ON 22" x 34" DRAWINGS



BORROW AREA B LAYOUT

A business card for moffatt & nichol, Inc. The card features a blue square logo with a stylized 'M' and 'N' on the left. The company name 'moffatt & nichol' is written in a serif font below the logo. To the right, there is contact information: '11 N WATER ST, STE 202/2020' and 'MAHON, AL 36602'. Below this, the phone number '+1 205-376-9000' is listed. At the bottom right, there are small icons for LinkedIn, Facebook, and YouTube.

SEAL



LEGEND

- LIMIT OF FILL
_____ BASE GEOMETRY LINE
- - - - # EXISTING GRADE CONTOURS
----- BREAKWATER CENTERLINE
_____ DESIGN CONTOUR

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DRAWING SCALES SHOWN BASED ON 22" x 34" DRAWINGS



ROBINSON ISLAND FILL AREA LAYOUT

ANSWER

	111WATER ST, AL 36020 MOBILE, AL 36022 4125-3176/9000	Category: C. EXISTING	Date: 2022-03-23
moffat & nico	Deby T-14P	Sub By: KD	MAP Ref No.: 100000-02
		Requester by:	Drawing code:
		J. KOTZLMAN	Drawing System:
			D. BLANCHARD
			Drawings

SEAL



LEGEND

- LIMIT OF FILL
_____ BASE GEOMETRY LINE
----#---- EXISTING GRADE CONTOURS
_____ DESIGN CONTOUR

30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22" x 34" DRAWING



	Date	Ayer
	Descriptive	

D
RESTORATION ALTERNATIVES ANALYSIS,
DESIGN AND COST ESTIMATE STUDY FOR
CROWN PERIODS BAYFORD PASS
WALKER ISLAND FILL AREA LAYOUT - WEST

C	111 WATER ST. STE 2020 MOBILE, AL 36602 +1 251-578-0002	Designate by: K. DAWSON Name: H&P H&P Signature by: P. KOTZLAKE Last Name: MOYNIHAN, KATHLEEN First Name: KATHLEEN Middle Name: - Phone: 2022-02-23 Mobile Phone No.: 100000000000 Driving license:
B		Permit Date: 10/01/2024 Permit Type: 10 SHEET(S)

A
SEAL

Sheet
Reference No.
C-112
INDEX: 8 OF 21

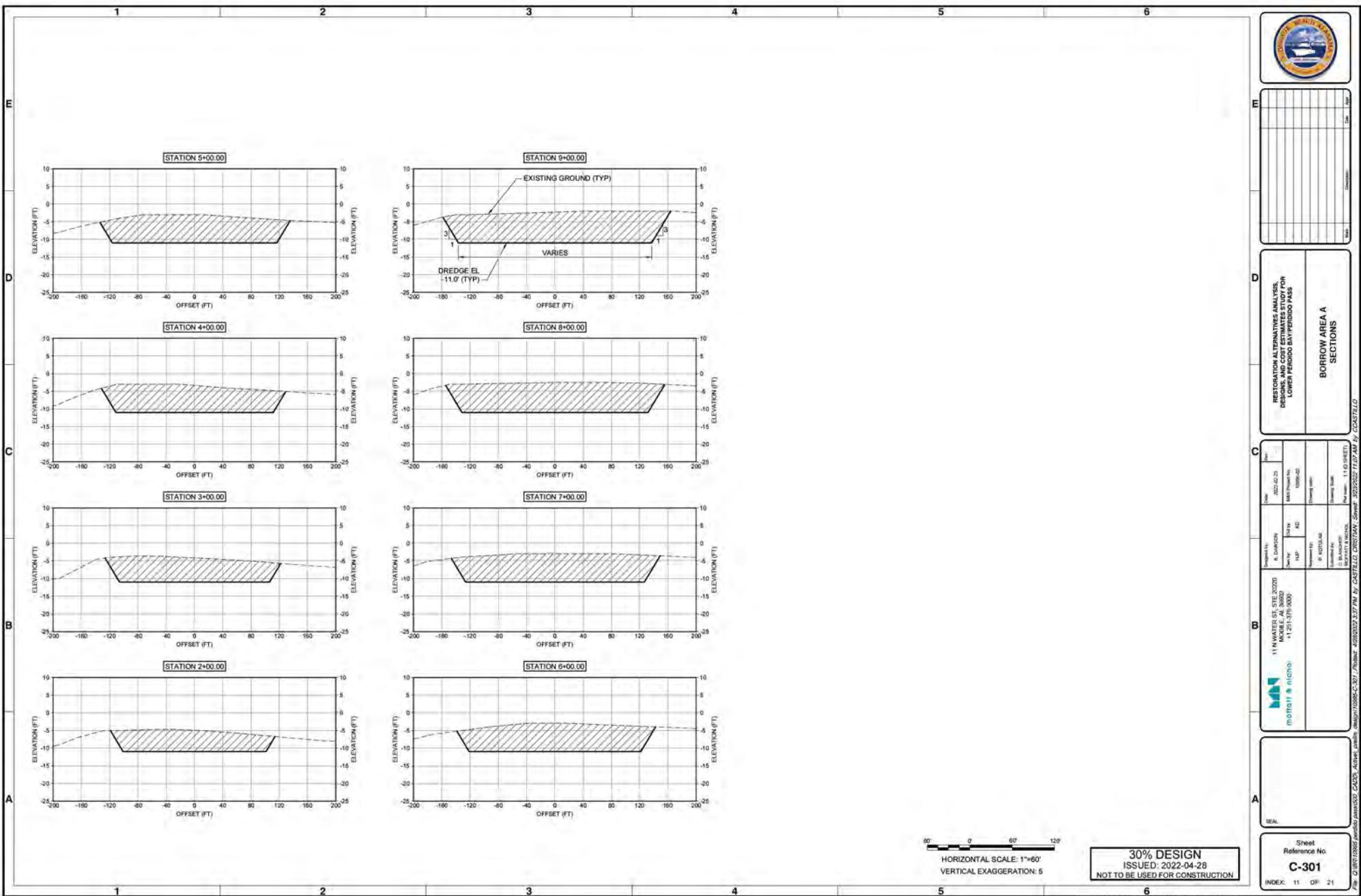
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1 **2** **3** **4** **5** **6**



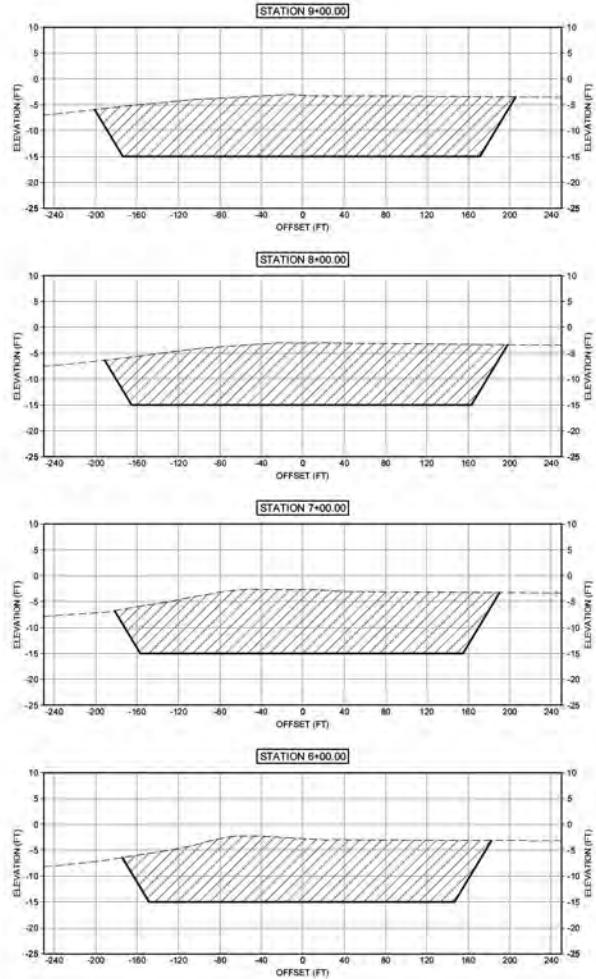
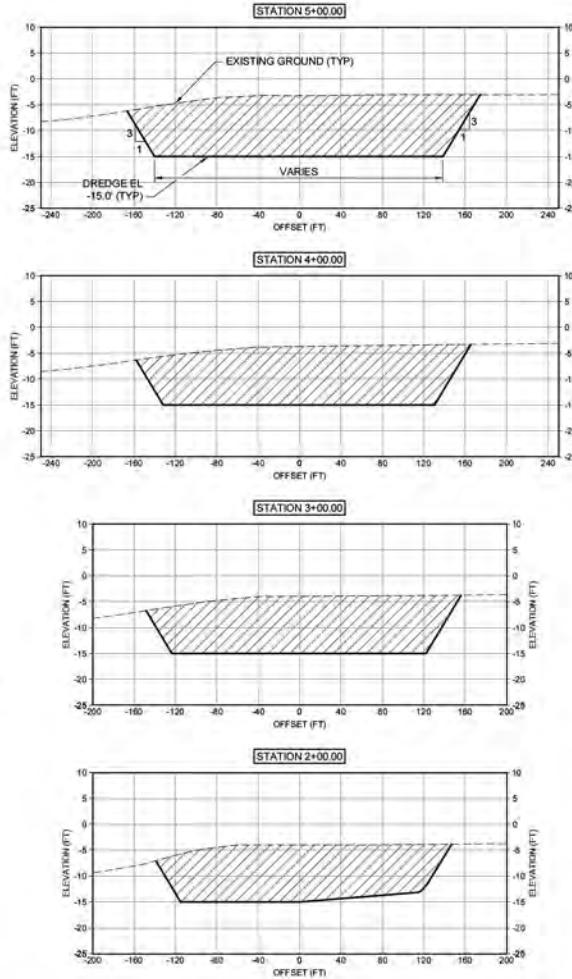
DRAWING SCALES SHOWN BASED ON 22" x 34" DRAWING





30% DESIGN
ISSUED: 2022-04-28
TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"X36" DRAWING



HORIZONTAL SCALE: 1"=60'
VERTICAL EXAGGERATION: 5

30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"X34" DRAWING



BORROW AREA B
SECTIONS (1 OF 3)

**BORROW AREA B
SECTIONS (1 OF 3)**

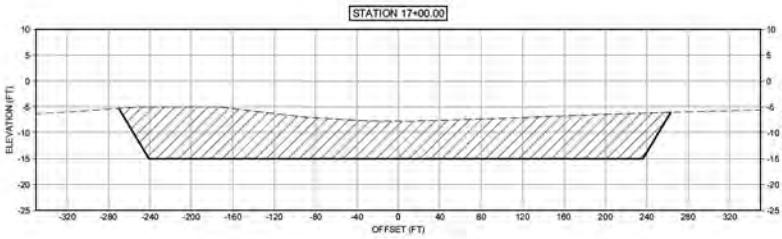
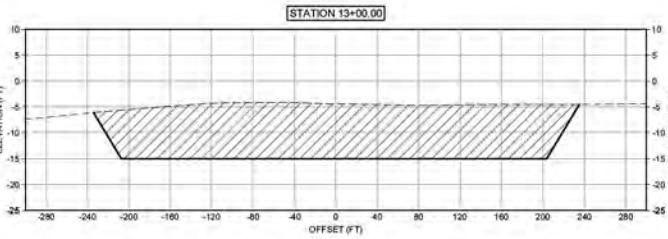
	11 WATERS ST, STE #2020 MOBILE, AL 36602 +1 205-791-9000	Request Date 10/16/2020	Time 2020-10-23 10:00 AM	Ref.
moffatt + nichol	Debra H.A.P.	MM Project ID 102006-42		
	Request ID P-10201346			
		Comments		
			Debra, thank you for your response. D. Burchett	

1

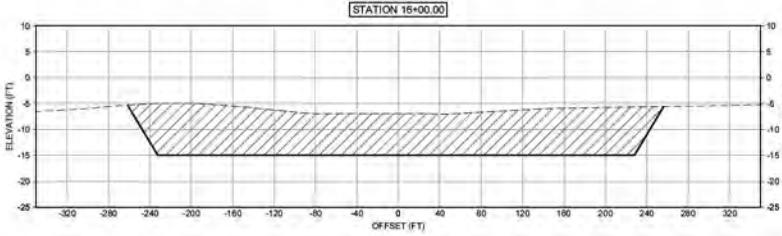
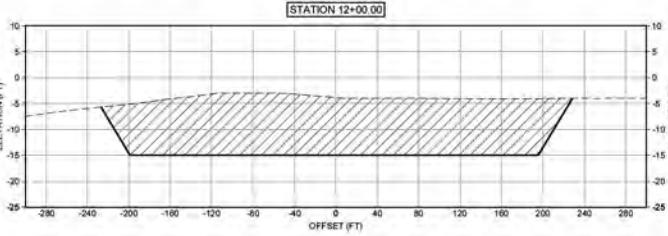
Sheet
Reference No.
C-302

1 2 3 4 5 6

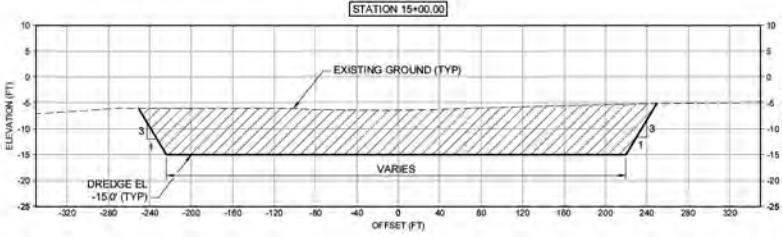
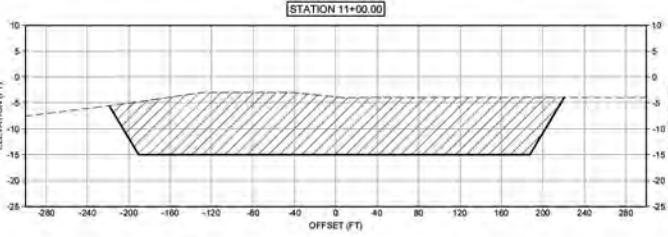
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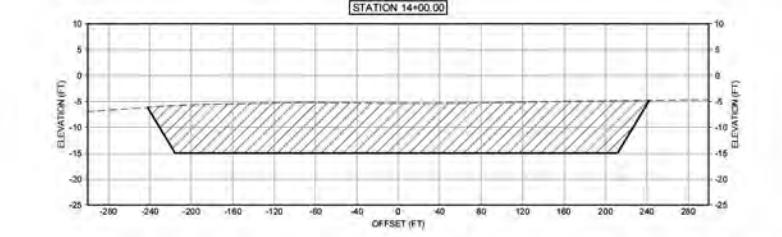
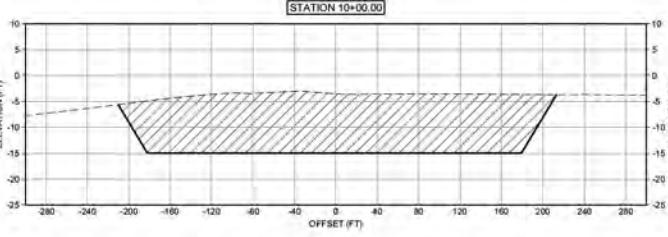
D



C



B



A



E	SECTION A-A
D	SECTION D-D
C	SECTION C-C
B	SECTION B-B
A	SECTION A-A

RESTORATION ALTERNATIVES ANALYSIS,
DESIGN, AND COST ESTIMATES FOR
LOWER PERIODIC BAY PERIODIC PASS

**BORROW AREA B
SECTIONS (2 of 3)**

11 N WALTER ST, STE 2020
MOBILE, AL 36602
411-251-3776 (PHONE)
411-251-3776 (FAX)
MAIL: P.O. BOX 602
Drawing date:
Drawing number:
Drawing title:
Submitted by:
D. BANCHEON
BANCHEON & SONS
Date: 2022-04-28
Drawing No.: 11-034411
Project No.: 30203022-02474-2A
By: CASTILLO, CHRISTIAN, B.S.C.E.

SECTION A-A

11 N WALTER ST, STE 2020 MOBILE, AL 36602 411-251-3776 (PHONE) 411-251-3776 (FAX) MAIL: P.O. BOX 602 Drawing date: Drawing number: Drawing title: Submitted by: D. BANCHEON BANCHEON & SONS Date: 2022-04-28 Drawing No.: 11-034411 Project No.: 30203022-02474-2A By: CASTILLO, CHRISTIAN, B.S.C.E.
--

SECTION B-B

11 N WALTER ST, STE 2020 MOBILE, AL 36602 411-251-3776 (PHONE) 411-251-3776 (FAX) MAIL: P.O. BOX 602 Drawing date: Drawing number: Drawing title: Submitted by: D. BANCHEON BANCHEON & SONS Date: 2022-04-28 Drawing No.: 11-034411 Project No.: 30203022-02474-2A By: CASTILLO, CHRISTIAN, B.S.C.E.
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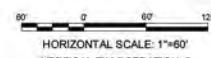
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--

SECTION D-D

11 N WALTER ST, STE 2020 MOBILE, AL 36602 411-251-3776 (PHONE) 411-251-3776 (FAX) MAIL: P.O. BOX 602 Drawing date: Drawing number: Drawing title: Submitted by: D. BANCHEON BANCHEON & SONS Date: 2022-04-28 Drawing No.: 11-034411 Project No.: 30203022-02474-2A By: CASTILLO, CHRISTIAN, B.S.C.E.
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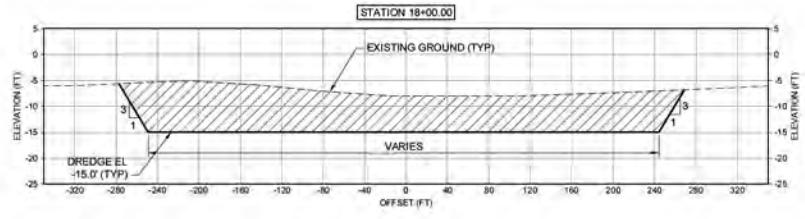
1 2 3 4 5 6



30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION.

DRAWING SCALES SHOWN BASED ON 22'x34' DRAWING

Sheet
Reference No.
C-303
INDEX: 13 OF 21



STATION 18+00.00

EXISTING GROUND (TYP.)

MAR

9
OFFSET (FT)

EVALUATION (EUTY)

-20

80 0 60

HORIZONTAL SCALE: 40-500

HORIZONTAL SCALE: 1 $\frac{1}{2}$ MILES
VERTICAL EXAGGERATION: 6

30% DESIGN
ISSUED: 2022-04-28



100

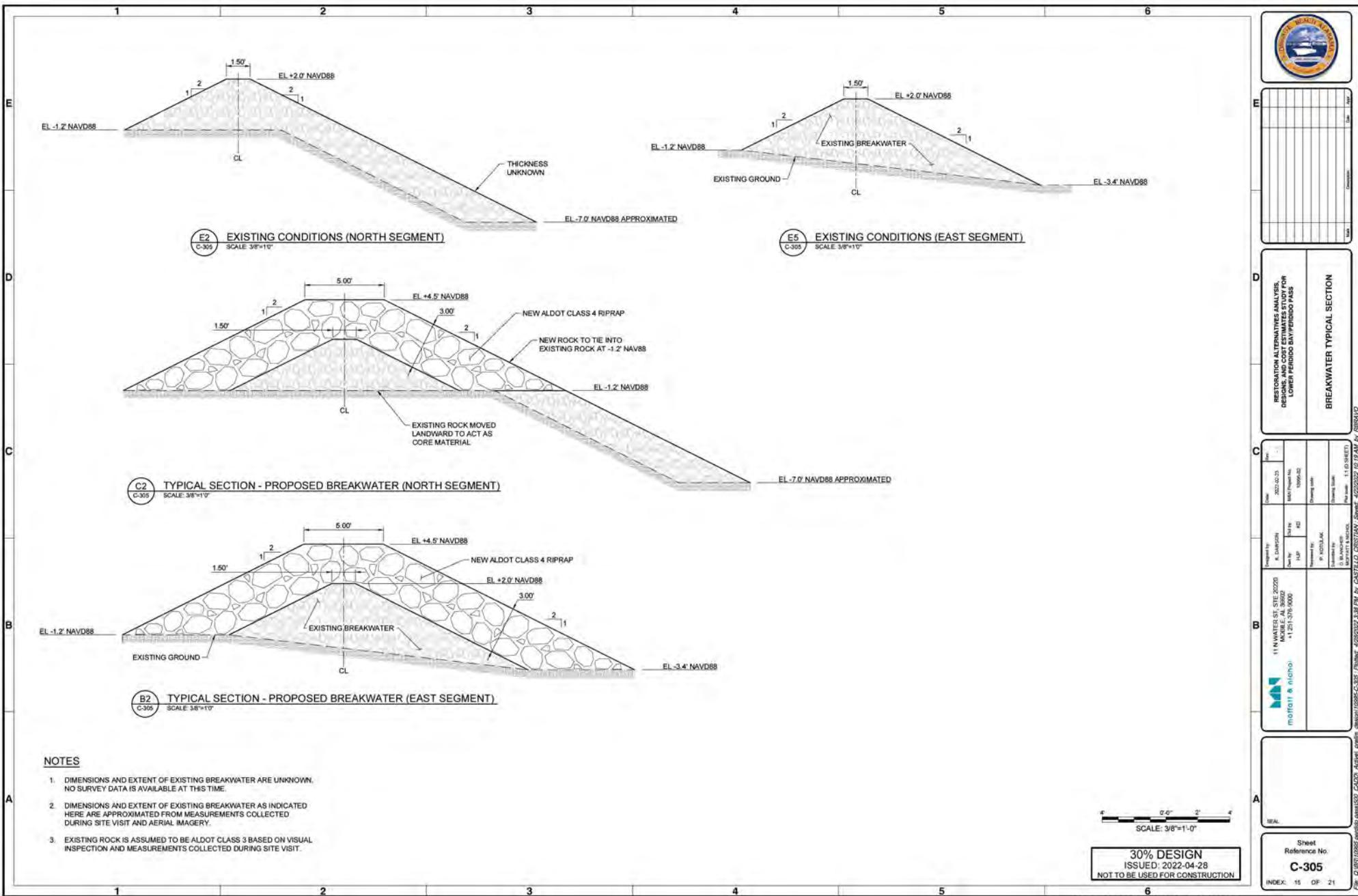
BORROW AREA B
SECTIONS (3 OF 4)

Date	Time	Year
2022-07-25	-	-
Mr. Pramod Pal		
(2500-40)		
Pramod Pal		
Pramod Pal		

111 WATER ST STE 2020		Deposited by:
MOBILE, AL 36602		D. Dufresne
+125-379-9000		Date:
	MOTTATT & NICHOLS	14-2020
		14-2020
		RECEIVED BY:
		D. Dufresne
		D. Bouchard

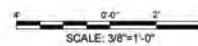
SEAL

Sheet
Reference No.
C-304
INDEX: 14 OF 21



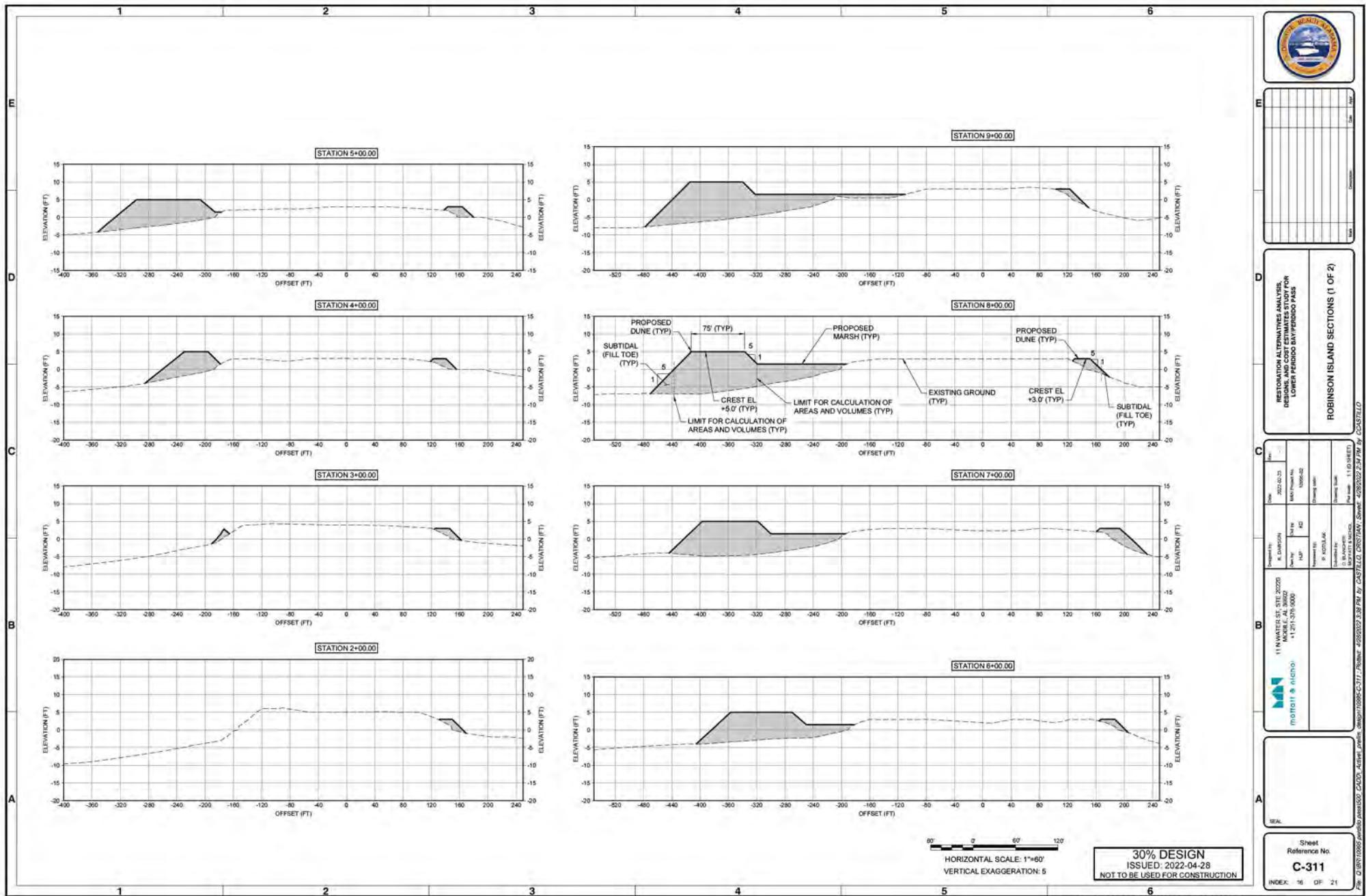
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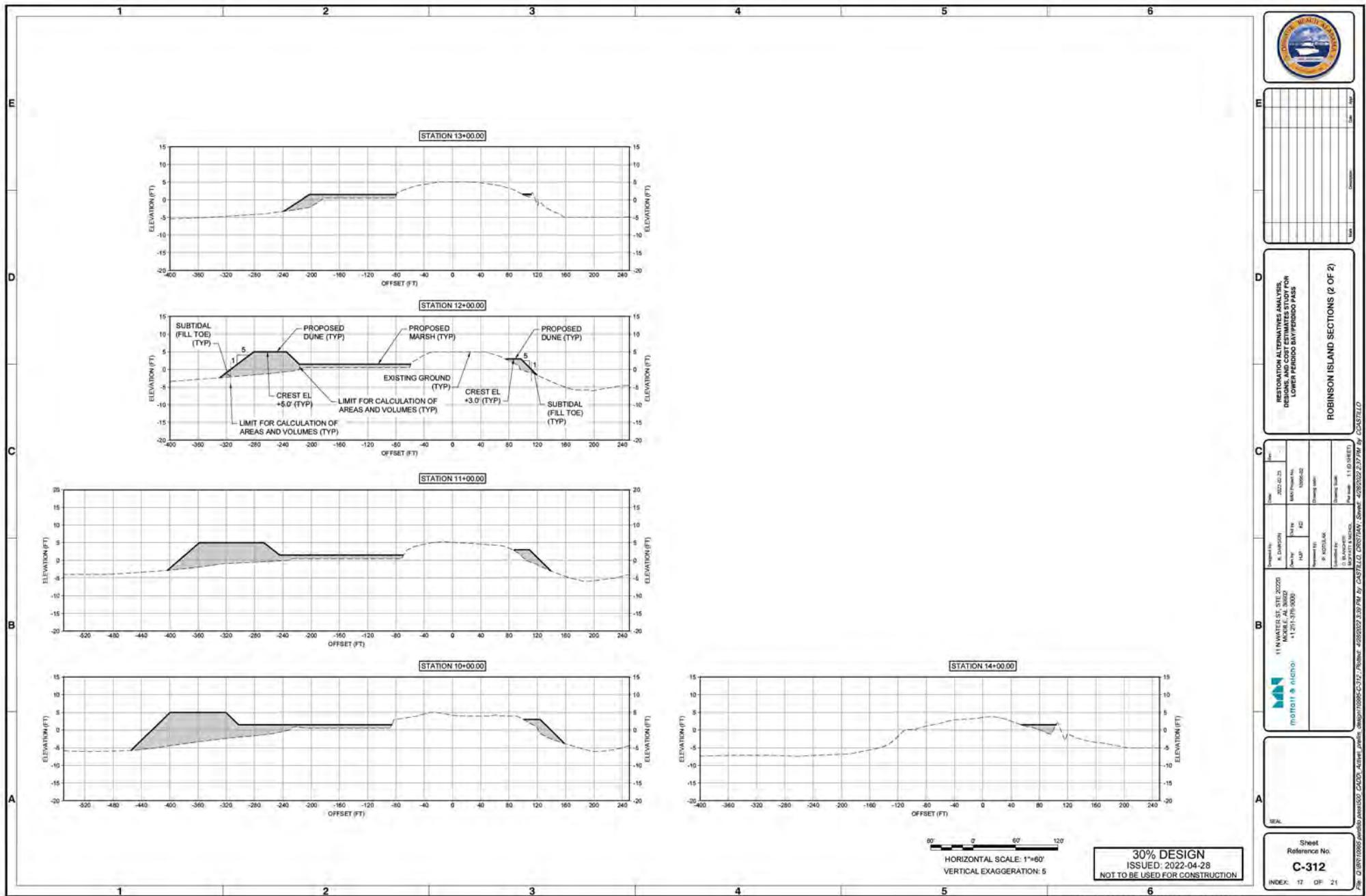
1. DIMENSIONS AND EXTENT OF EXISTING BREAKWATER ARE UNKNOWN. NO SURVEY DATA IS AVAILABLE AT THIS TIME.
 2. DIMENSIONS AND EXTENT OF EXISTING BREAKWATER AS INDICATED HERE ARE APPROXIMATED FROM MEASUREMENTS COLLECTED DURING SITE VISIT AND AERIAL IMAGERY.
 3. EXISTING ROCK IS ASSUMED TO BE ALDOT CLASS 3 BASED ON VISUAL INSPECTION AND MEASUREMENTS COLLECTED DURING SITE VISIT.

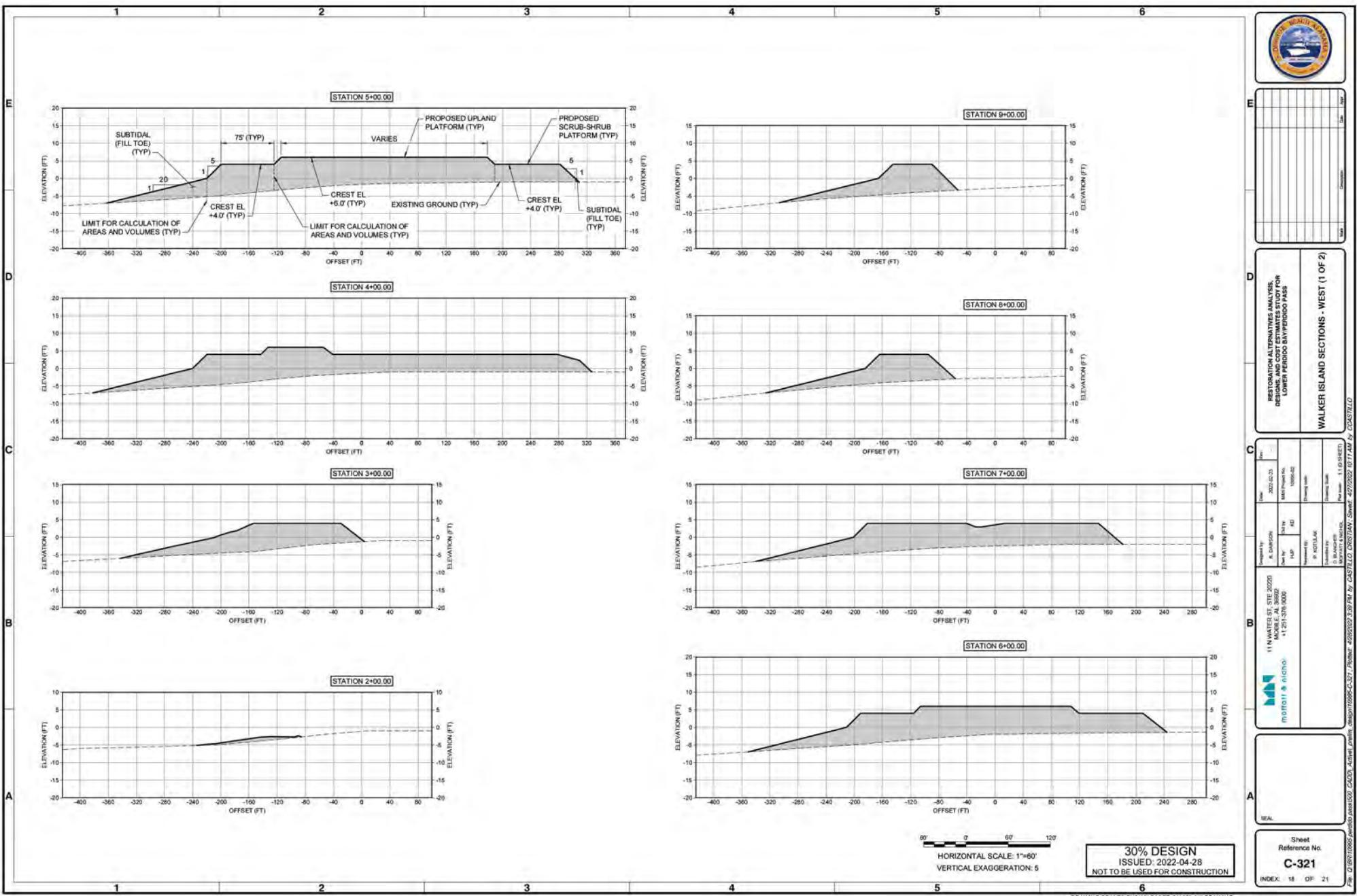


30% DESIGN
ISSUED: 2022-04-28
NOT TO BE USED FOR CONSTRUCTION

Sheet
Reference No.
C-305
INDEX: 15 OF 21





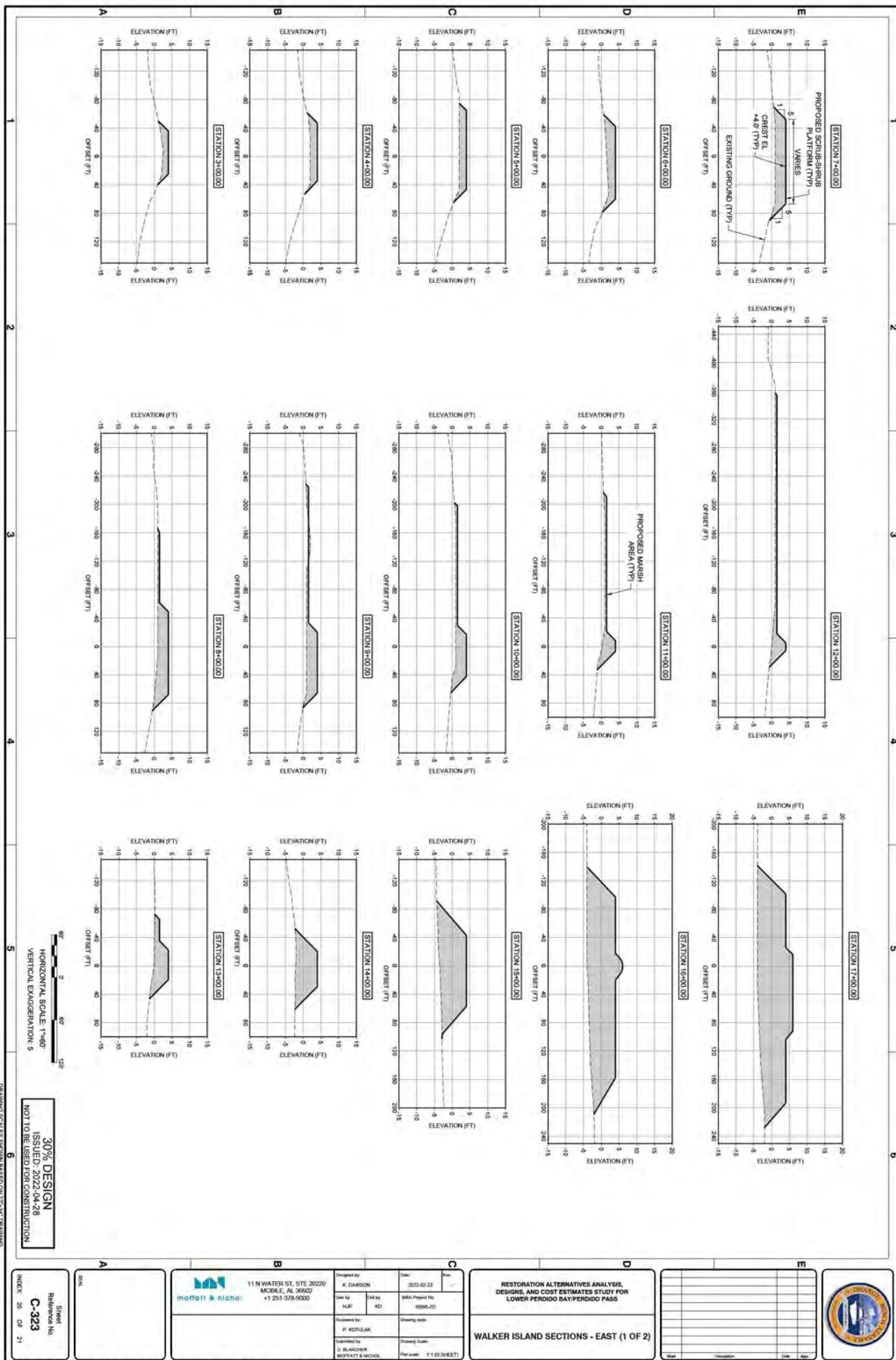


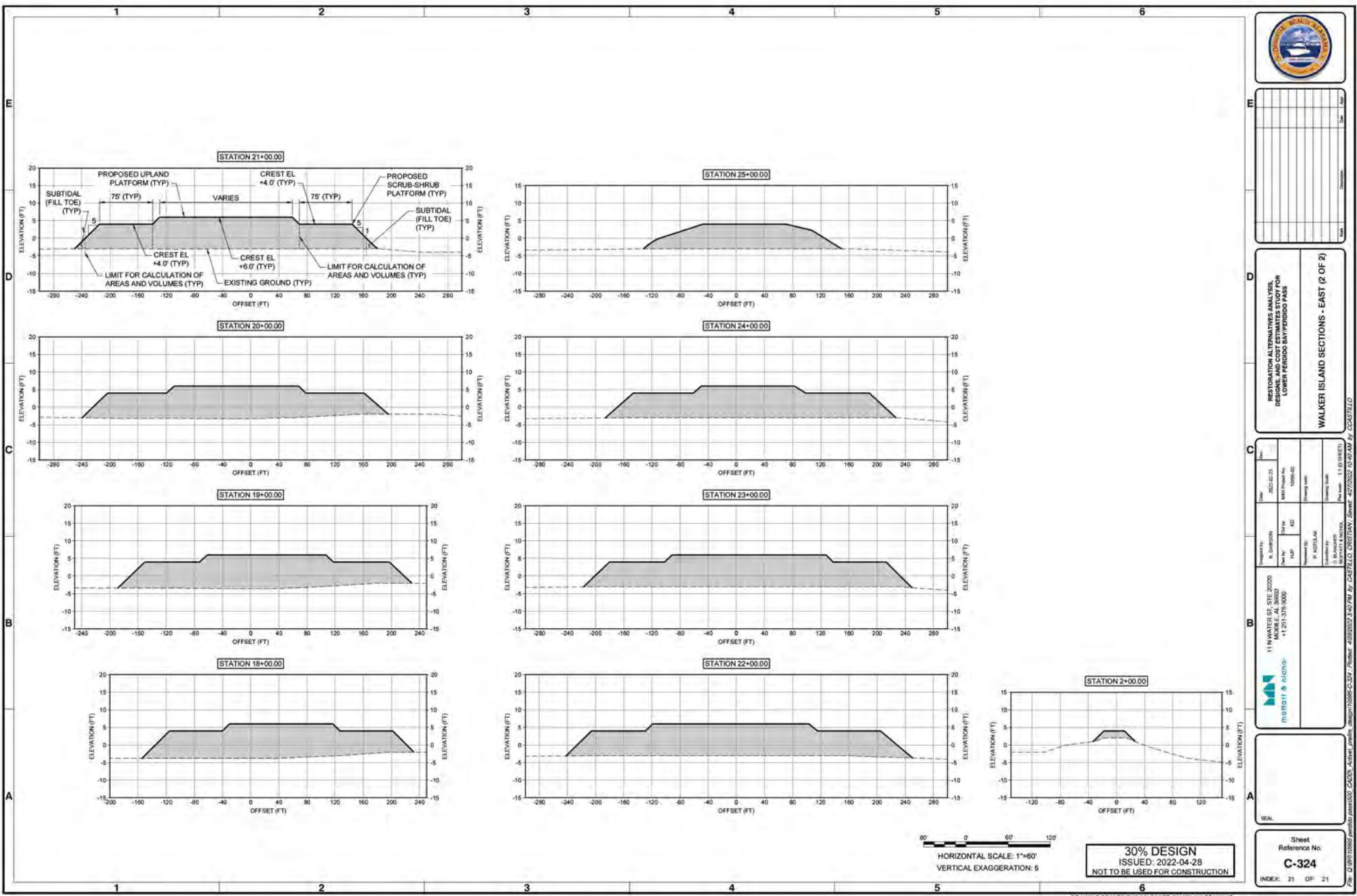
WALKER ISLAND SECTIONS - WEST (1 OF 2)

100

1251-37

Sheet
Reference No.
C-321
EX: 18 OF 21





WALKER ISLAND SECTIONS - EAST (2 OF 2)

Motarri & nichoi					
Mobile, AL 36502 +1 205-370-9000			Dobrev H&P ACI		
Management:			R. KOTLAK Dobrev, H&P, ACI Dobrev, H&P, ACI Dobrev, H&P, ACI		
Business:			Dobrev, H&P, ACI Dobrev, H&P, ACI Dobrev, H&P, ACI		
Phone:			1-130 (1 SHETEL)		

1

Sheet
Reference No.
C-324
EX: 21 OF 21