



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-2020-00032-DCH

January 19, 2022

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

REQUEST TO IMPACT 1.2 ACRE OF WATERBOTTOMS IN CONJUNCTION WITH
THE CONSTRUCTION OF SEGMENTED OFFSHORE BREAKWATERS IN MOBILE
BAY, MOBILE, MOBILE COUNTY, ALABAMA

TO WHOM IT MAY CONCERN: This District has received an application for a Department of the Army 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 36605

LOCATION: The proposed project is located within Mobile Bay, at 4616 Dauphin Island Parkway; within Section 40, Township 5 South, Range 1 West; Latitude 30.569359° North, Longitude -88.086316° West; in Mobile, Mobile County, Alabama.

PROJECT PURPOSE: The purpose of this project is to protect the shoreline from erosion, enhance and protect marsh habitat, and restore ecosystem function in Mobile Bay.

PROPOSED WORK: The applicant proposes to construct up to 2,640 linear feet of rock offshore breakwater structures placed approximately 250-300 feet waterward of and parallel to the mean high water (MHW) shoreline. Each breakwater will be approximately 170 feet long and spaced at least 105 feet apart. The minimum breakwater crest elevation after settlement is approximately 1.8 feet above the plane of mean high water. Actual crest level at construction will be 4.6 feet above the plane of mean high water with a minimum crest width of 7 feet. Construction activities will include the placement of 10,500 cubic yards of riprap rock within 1.2 acres of waterbottoms.

AVOIDANCE AND MINIMIZATION: The applicant has indicated the proposed project has been designed to avoid impacts to any submerged aquatic vegetation (SAV) that may be present within the project area and will enhance/protect existing marsh habitat. Furthermore, Best Management Practices (BMPs) will be implemented to prevent water

quality impacts within Mobile Bay during project implementation. 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: Compensatory mitigation would not be required because the activity consists of construction of structures that would not adversely impact special aquatic sites.

WATER QUALITY / COASTAL ZONE MANAGEMENT: The applicant has applied for certification from the State of Alabama in accordance with Section 401(a)(1) of the Clean Water Act and for Coastal Zone Management (CZM) consistency concurrence in accordance with the Alabama Coastal Area 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).

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 as well as portions of the uplands used for staging and access. The National Register of Historic Places will be consulted for properties listed in or eligible for the National Register, which are known to exist and would be affected by the proposed work. The Mobile District is seeking comment from the State Historic Preservation Officer regarding the existence, or the potential for existence, of significant cultural and historic properties within the permit area. The permit area described above is currently under review by District Archaeologists to provide a determination on the potential for existence of significant cultural and historic properties.

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 impact approximately 52,000 square feet (1.2 acres) of unvegetated estuarine substrate utilized by various life stages of multiple marine species. This proposal is described above is currently under review by the U.S. Army Corps of Engineers (USACE), Mobile District. Our final determination is subject to review by and coordination with the National Marine Fisheries Service and/or the U.S. Department of Interior, and the U.S. Fish and Wildlife Service (USFWS).

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 proposed activity will have no effect on the following listed endangered or threatened species with the potential to exist within the watershed of the permit area: West Indian manatee (T), wood stork (T), Alabama red-bellied turtle (E), Kemp's ridley sea turtle (E), loggerhead sea turtle (T), and Gulf sturgeon (T). There is no designated critical habitat within the project action area.

Review of this proposed activity for potential effects on the above list of threatened or endangered species has been accomplished by use of species-specific Standard Local Operating Procedures for Endangered Species (SLOPES). The USACE, Mobile District's review has indicated the proposed activity will have no effect on the Kemp's ridley sea turtle, loggerhead sea turtle, and wood stork. The review also found the activity may affect, but is not likely to adversely affect the Alabama red-bellied turtle, West Indian manatee, and Gulf sturgeon. Details of the proposed activity are being provided to federal and state agencies via this Public Notice for receipt of any relevant comments regarding potential effects of the proposed project on the listed species.

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-2020-00032-DCH**, and should be directed to the project manager, Ms. Lacey M. Leaptrott by e-mail at lacey.m.leaptrott@usace.army.mil, or to the USACE, Mobile District, Regulatory Division, Attention: Ms. Lacey M. Leaptrott, Post Office Box 2288, Mobile, Alabama 36628-0001. Copies of all comments should be furnished to the Alabama Department of Environmental Management 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

Attachments

SAM-2020-00032-DCH

HELEN WOOD PARK LIVING
SHORELINE PROJECT

PREPARED FOR

THE NATURE CONSERVANCY

The Nature
Conservancy



MOBILE COUNTY, ALABAMA

DRAWINGS

For Information regarding this project contact:

DAVID STEJSKAL,
25 W. CEDAR SREET, SUITE 350
PENSACOLA, FL. 32502
(850) 941-7278

JACOBS®

25 W. CEDAR SREET, SUITE 350
PENSACOLA, FL. 32502

PROJECT No: D3269100

MARCH 2021

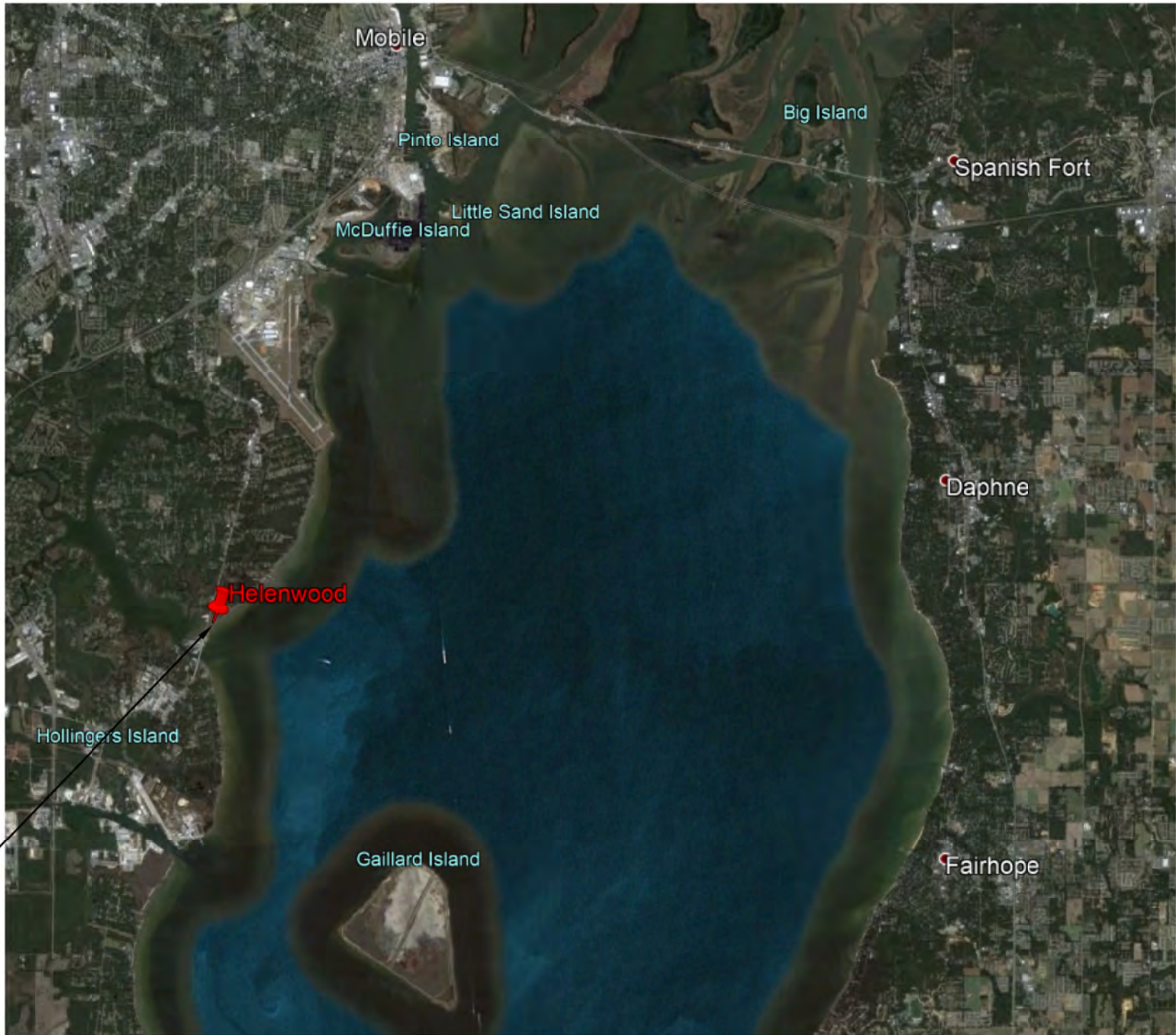
60% DESIGN DOCUMENTS

INDEX OF DRAWINGS

| SHEET NO. | | GENERAL | |
|-----------|--|-----------|--|
| 1 | | G-101 | TITLE SHEET |
| 2 | | G-102 | VICINITY MAP, LOCATION MAP, SHEET INDEX AND LEGEND |
| 3 | | G-103 | GENERAL NOTES |
| 4 | | G-104 | OVERALL PLAN |
| | | SITE PLAN | |
| 5 | | C-301 | SITE PLAN (1 OF 3) |
| 6 | | C-302 | SITE PLAN (2 OF 3) |
| 7 | | C-303 | SITE PLAN (3 OF 3) |
| 8 | | C-201 | REEF STRUCTURE - PLAN VIEW |
| 9 | | C-202 | REEF STRUCTURE - TYPICAL CROSS SECTIONS |

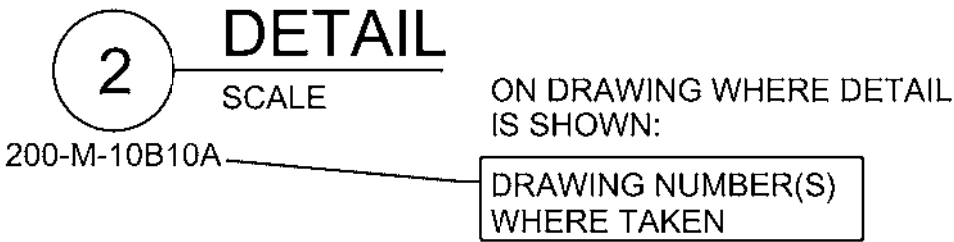
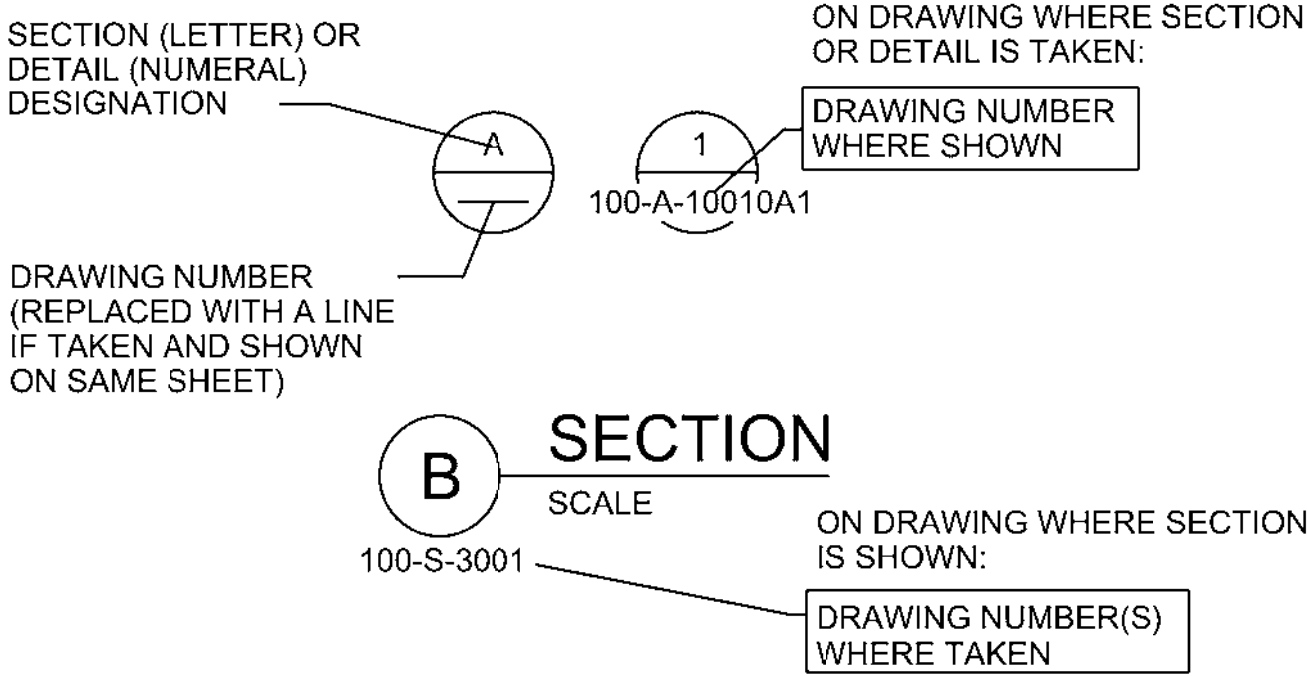


PROJECT LOCATION MAP
NTS



PROJECT VICINITY MAP
NTS

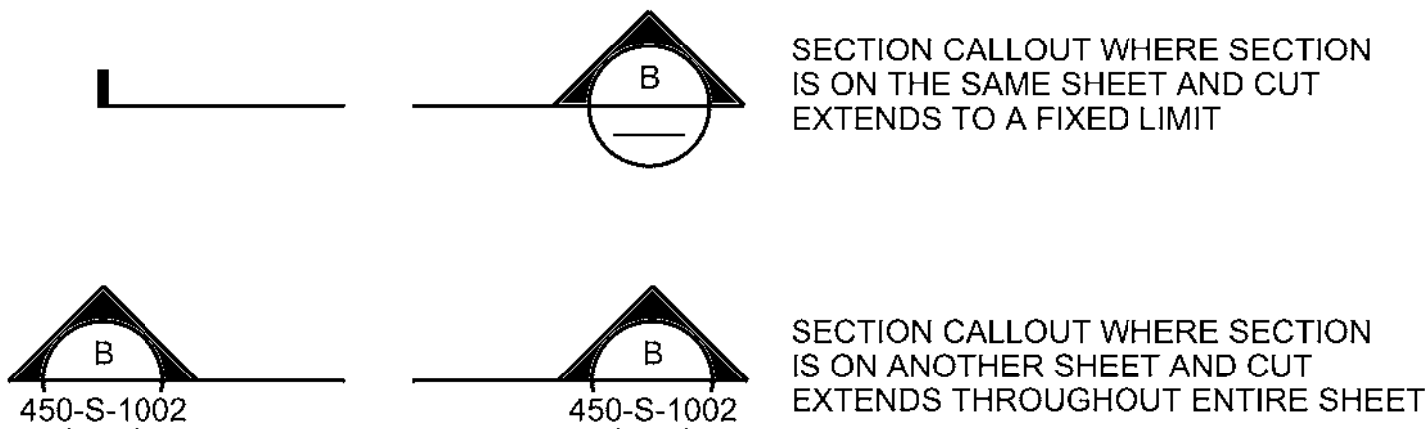
SECTION / DETAIL DESIGNATIONS



DRAWING TITLE

SCALE

ON DRAWING WHERE ONLY A TITLE IS REQUIRED WITH NO REFERENCE (eg: ELEVATIONS)



- 1 GRID LINE INDICATOR
- 1 KEYNOTE NUMBER
- REVISION / ADDENDA NUMBER
- NORTH ARROW; CAN BE MODIFIED TO INCLUDE MAGNETIC NORTH ALONG WITH PROJECT NORTH

DESIGN DETAIL DESIGNATION

DESIGN DETAIL DESIGNATION (NUMERAL)

SHOWN ON DESIGN DETAIL DRAWING(S)

1234-567

- NOTES:
1. ALL DESIGN DETAILS ARE TYPICAL AND MUST BE USED IF DESIGN DETAIL DESIGNATION IS NOT SHOWN
2. THE TERM STANDARD DETAIL, OR A FORM OF IT, IS SYNONOMOUS WITH DESIGN DETAIL. THE DESIGN DETAILS REPRESENT THE CHARACTER AND NATURE OF THE WORK REQUIRED THROUGHOUT THE PROJECT. ALL ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH THE DESIGN DETAILS SHOWN WHETHER THE DETAILS ARE SPECIFICALLY REFERENCED OR NOT.

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502



Jacobs

GENERAL

VICINITY MAP, LOCATION MAP, SHEET INDEX AND LEGEND

| | |
|--------------------------------------|------------|
| VERIFY SCALE | |
| BAR IS ONE INCH ON ORIGINAL DRAWING. | |
| DATE | MARCH 2021 |
| PROJ | D3269100 |
| DWG | G-102 |
| SHEET | 2 of 10 |

GENERAL NOTES

- ELEVATIONS OF BATHYMETRY AND TOPOGRAPHY ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), US FOOT.
- COORDINATES SHOWN ON PLANS ARE NAD83 ALABAMA STATE PLANE, WEST ZONE, US FOOT.
- NORTHING AND EASTING COORDINATES FOR REFERENCE POINTS ALONG THE CREST OF EACH REEF ARE PROVIDED.

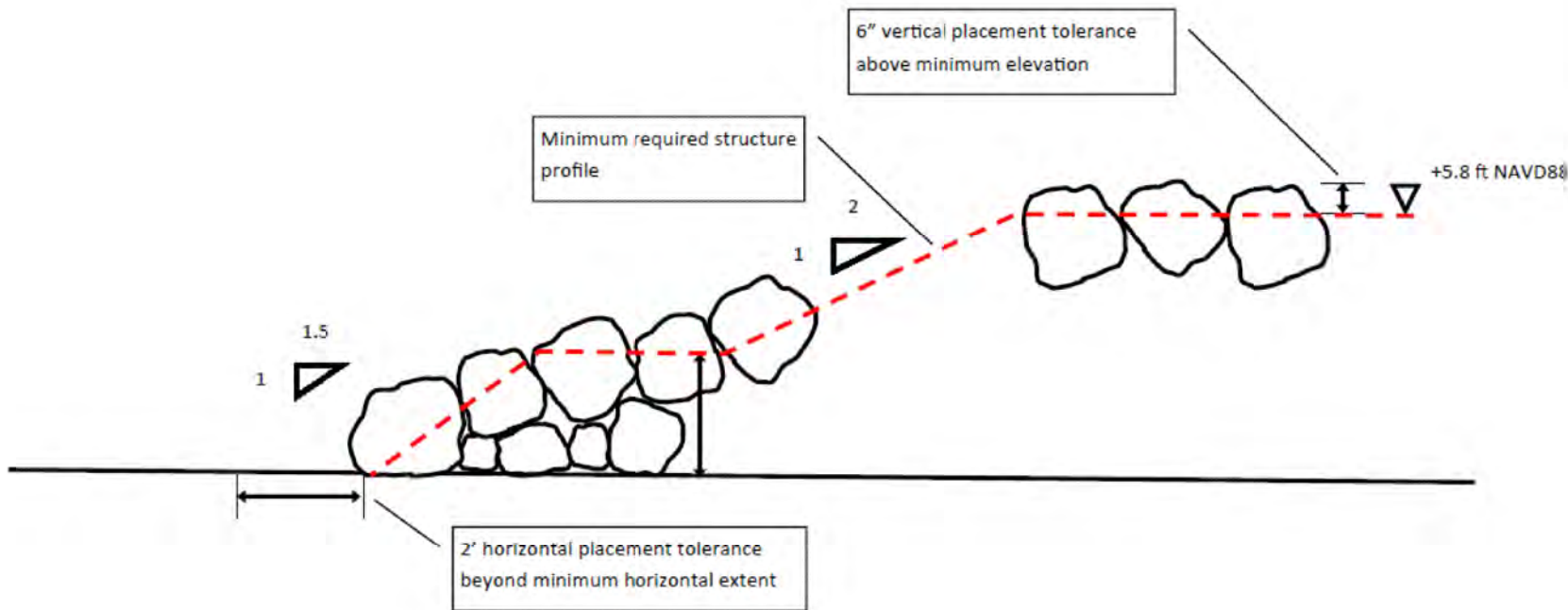
DESIGN ASSUMPTIONS

- MEAN SEA LEVEL (MSL) IS ASSUMED TO BE 0.46 FT NAVD88 AND IS BASED ON THE GAUGE RECORDS AT DOG RIVER.
- THE RIPRAP REEF HEIGHT IS TO BE HIGHER THAN THE SUM OF CURRENT MEAN HIGH WATER ELEVATION (1.2 FT) AND PREDICTED SEA LEVEL RISE (1.8 FT) AFTER 25 YEARS. THIS EQUATES TO A MINIMUM LIMESTONE REEF CREST ELEVATION OF 3 FT NAVD 88.
- FINISHED STRUCTURE ELEVATION IS DEFINED ON THE CROSS-SECTION; RIPRAP LAYER THICKNESSES TO VARY AS REQUIRED TO ACHIEVE THE STATED ELEVATIONS.
- MINIMUM PLAN EXTENTS FOR EACH MATERIAL ARE INCLUDED IN THE PLAN VIEW; A +2 FT HORIZONTAL TOLERANCE ON ALL PLAN EXTENTS AND A VERTICAL TOLERANCE OF +6 INCHES ON ALL ELEVATIONS WILL BE ACCEPTED. DIMENSIONS SHOWN ARE MINIMUM THAT MUST BE MET.
- CONTRACTOR SHALL PROVIDE HIS OWN SURVEY VERIFICATION ON THE PROJECT SITE BATHYMETRY PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE A SURVEY PLAN SUBMITTAL AT THE PRE-INSTALLATION MEETING FOR LOCATING THE REEFS PRIOR TO CONSTRUCTION, DURING CONSTRUCTION AND FOR QA/QC AND AS-BUILT DRAWINGS AFTER CONSTRUCTION.
- GEOTEXTILE EXTENT SHOWN ON PLAN VIEW IS THE MINIMUM EXTENT; GEOTEXTILE MUST MEET OR EXTEND BEYOND THIS. THERE MUST BE AN OVERLAP OF ALL GEOTEXTILE SECTIONS AS REQUIRED BY THE MANUFACTURER - WITH ALL INTERIOR OVERLAPS SEWN AND ALL GEOTEXTILE ENDS STAPLED.
- FINISHED ELEVATIONS AND SLOPES SHOWN FORM THE MINIMUM PROFILE TO BE CONSTRUCTED, REFER TO ADJACENT SKETCH. FOR ACCEPTANCE SLOPE CONFIGURATION. CONSTRUCTED SLOPES MAY BE SHALLOWER AS LONG AS MINIMUM LEVELS AND EXTENTS ARE MET.
- THE TOE WIDTH AND SLOPE IN THE REEF CROSS-SECTIONS FINISHED LEVELS AND SLOPES SHOWN FORM THE MINIMUM PROFILE TO BE CONSTRUCTED, REFER TO ADJACENT SKETCH FOR ACCEPTABLE SLOPE CONFIGURATION. CONSTRUCTED SLOPES MAY BE SHALLOWER AS LONG AS MINIMUM LEVELS AND EXTENTS MAY BE MET. MAY BE REVISED DURING CONSTRUCTION WITH THE ENGINEER'S APPROVAL.
- WHERE RECYCLED CONCRETE GIRDERS ARE APPROVED FOR USE BY THE ENGINEER, A MINIMUM RIPRAP LAYER THICKNESS OF 4 FEET AROUND THESE SHALL BE ACHIEVED TO ENSURE ADEQUATE INTERLOCKING FOR STABILITY, SEE SPECIFICATION.

MATERIALS

- GEOTEXTILE SHALL BE IN ACCORDANCE WITH ALDOT SECTION 810 AND SPECIFICATION SECTION 31 32 19.16B.
- REEF MATERIAL SHALL BE ROCK OR RECYCLED CONCRETE, COMPLIANT WITH ALDOT CLASS IV RIPRAP WITH A MINIMUM SG OF 2.2, IN ACCORDANCE WITH SPECIFICATION SECTION 31 37 00, ALDOT SECTION 814 AND FDOT SPECIFICATION (2019) 530 AND 904.
- ALL STORED MATERIALS SHALL COMPLY WITH ALDOT SPECIFICATION SECTION 106.
- LENGTHS OF RECYCLED CONCRETE GIRDER MAY BE USED AT THE CORE OF THE REEF WITH THE ENGINEER'S APPROVAL (SEE DESIGN ASSUMPTIONS NOTE 10).
- RECYCLED CONCRETE TO BE DELIVERED BY ANOTHER CONTRACTOR IN ACCORDANCE WITH ALDOT BRIDGE DEMOLITION CONTRACT SPECIFICATION.

REPRESENTATIVE RIPRAP PROFILE
NOT TO SCALE



SEQUENCE OF CONSTRUCTION

- THE REFERENCE POINTS SHALL BE IDENTIFIED AND MARKED WITH PVC POLES BY A LICENSED ALABAMA SURVEYOR PRIOR TO INSTALLATION OF THE GEOTEXTILE. REFERENCE POINTS SHALL BE MAINTAINED DURING THE CONSTRUCTION OF THE REEF
- THE STAKE LOCATIONS SHOULD BE IDENTIFIED BY THEIR CORRESPONDING POINT NUMBER AND STATE PLANE COORDINATES.
- GEOTEXTILE SHOULD BE INSTALLED BEFORE INSTALLATION OF THE BEDDING STONE.
- BEDDING STONE SHOULD BE INSTALLED BEFORE INSTALLATION OF THE LIMESTONE REEF.
- METHOD OF TRANSPORTATION TO INSTALL MATERIALS ON SITE IS EXPECTED TO BE BY AMPHIBIOUS EXCAVATORS ALONG THE ACCESS ROUTES BOUNDARY SHOWN ON THE PROJECT LOCATION MAP.
- CONTRACTOR SHALL VERIFY TIDE LEVELS AT THE SITE PRIOR TO STARTING WORK.

ABBREVIATIONS

- | | |
|--------|------------------------------------|
| FT | FOOT |
| MSL | MEAN SEA LEVEL |
| NAD83 | NORTH AMERICAN DATUM 1983 |
| NAVD88 | NORTH AMERICAN VERTICAL DATUM 1988 |
| SG | SPECIFIC GRAVITY |

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL 32502

Jacobs



GENERAL
GENERAL NOTES

HELEN WOOD PARK LIVING
SHORELINE PROJECT

VERIFY SCALE

BAR IS ONE INCH ON
ORIGINAL DRAWING.
0 1"

DATE MARCH 2021

PROJ D3269100

DWG G-103

SHEET 3 of 10

60% DESIGN DOCUMENTS

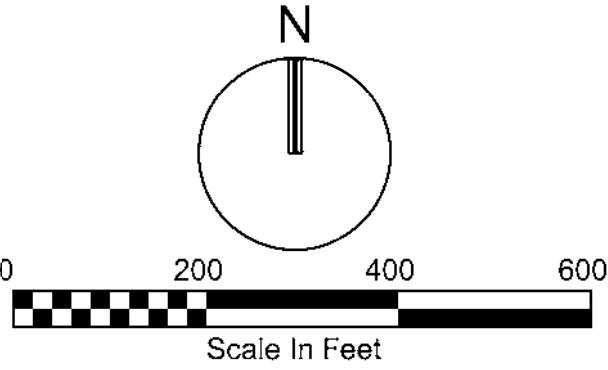
REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

M.POTEMPA
CHK
APVD

BY
APVD

© JACOBS 2020. ALL RIGHTS RESERVED.

- NOTES:
- COORDINATES SHOWN ON PLANS ARE NAD83 ALABAMA STATE PLANE, WEST ZONE, US FOOT.
 - ELEVATIONS AND BATHYMETRY ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), US FOOT.
 - THE MINIMUM REQUIRED SPACING BETWEEN REEFS IS 105 FEET. REEF SPACING AND ORIENTATION VARIES AND TAKES INTO ACCOUNT VARIATIONS IN THE BATHYMETRY, SHORELINE ORIENTATION AND REEF DISTANCE FROM THE SHORELINE.



OVERALL PLAN
1"=200'



| No. | NORTHING | EASTING | SHEET No. |
|-----|-----------|----------|-----------|
| 1 | 1784453.1 | 207965.6 | C-301 |
| 2 | 1784558.7 | 208088.4 | C-301 |
| 3 | 1784657.8 | 208204.1 | C-301 |
| 4 | 1784763.4 | 208326.9 | C-301 |
| 5 | 1784902.3 | 208442.7 | C-301 |
| 6 | 1785040.8 | 208526.7 | C-301 |
| 7 | 1785169.0 | 208646.0 | C-302 |
| 8 | 1785281.3 | 208762.8 | C-302 |
| 9 | 1785418.1 | 208897.6 | C-302 |
| 10 | 1785538.1 | 209006.4 | C-302 |
| 11 | 1785659.7 | 209103.6 | C-302 |
| 12 | 1785778.8 | 209213.5 | C-302 |
| 13 | 1785920.2 | 209303.3 | C-303 |
| 14 | 1786034.6 | 209417.9 | C-303 |
| 15 | 1786174.3 | 209540.9 | C-303 |
| 16 | 1786279.0 | 209664.6 | C-303 |

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502

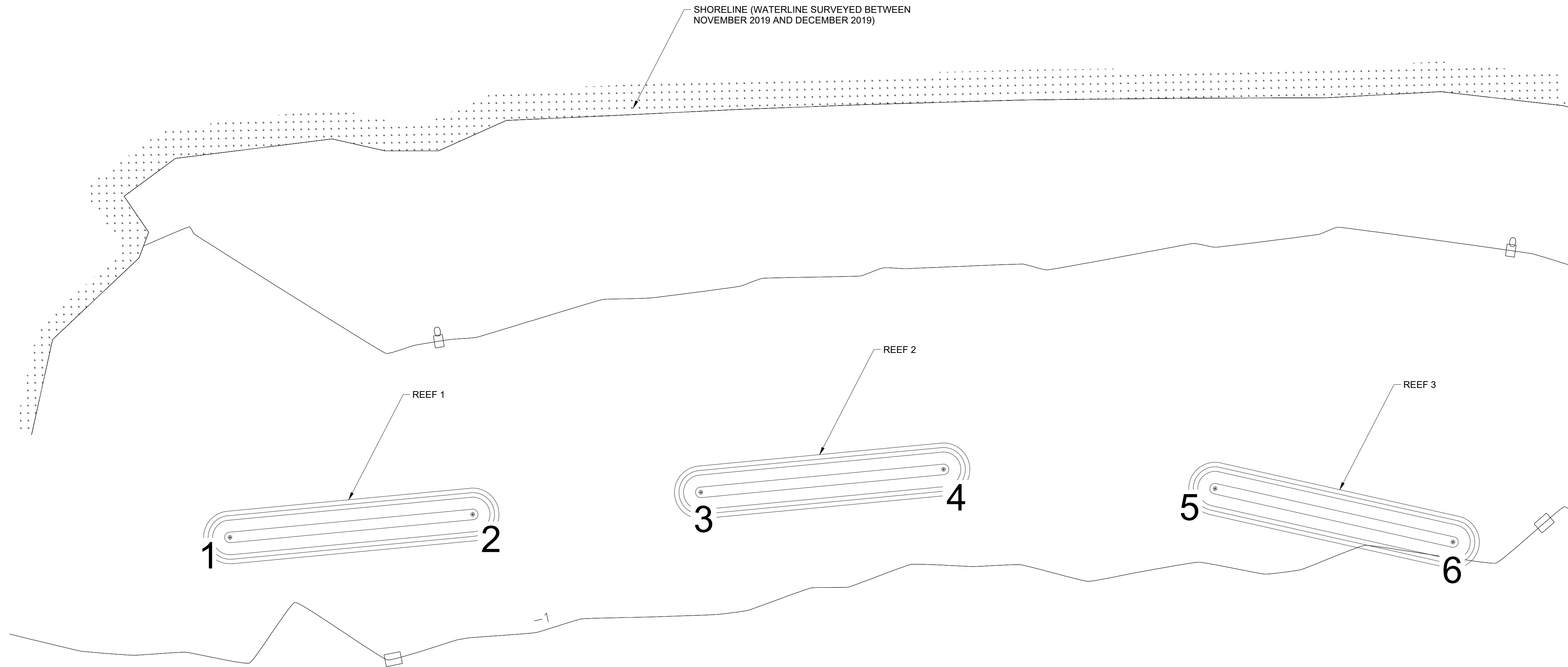


HELEN WOOD PARK LIVING
SHORELINE PROJECT

Jacobs

CIVIL
OVERALL PLAN

| | |
|--------------------------------------|--|
| 1"=200' | |
| VERIFY SCALE | |
| BAR IS ONE INCH ON ORIGINAL DRAWING. | |
| DATE MARCH 2021 | |
| PROJ D3269100 | |
| DWG G-104 | |
| SHEET 4 of 10 | |



| No. | NORTHING | EASTING |
|-----|-----------|----------|
| 1 | 1784453.1 | 207965.6 |
| 2 | 1784558.7 | 208088.4 |
| 3 | 1784657.8 | 208204.1 |
| 4 | 1784763.4 | 208326.9 |
| 5 | 1784902.3 | 208442.7 |
| 6 | 1785040.8 | 208526.7 |

[illegible]

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502

HELEN WOOD PARK LIVING
SHORELINE PROJECT

REUSE OF DOCUMENTS:

CREATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF
FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

© JACOBS 2020. ALL RIGHTS RESERVED.

60% DESIGN DOCUMENTS

Jacobs.

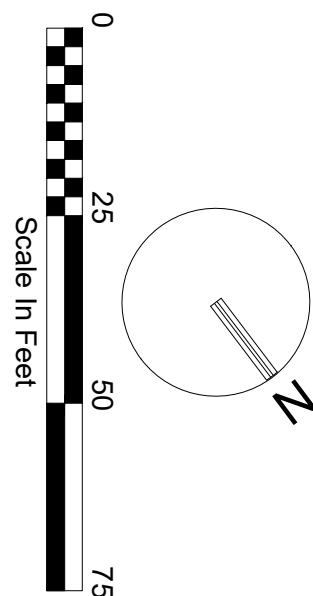
CIVIL
SITE PLAN
(1 OF 3)

"=40'
FY SCALE
ONE INCH ON
AL DRAWING.
1"

| | |
|-------|------------|
| DATE | MARCH 2021 |
| PROJ | D3269100 |
| DWG | C-301 |
| SHEET | 5 of 9 |

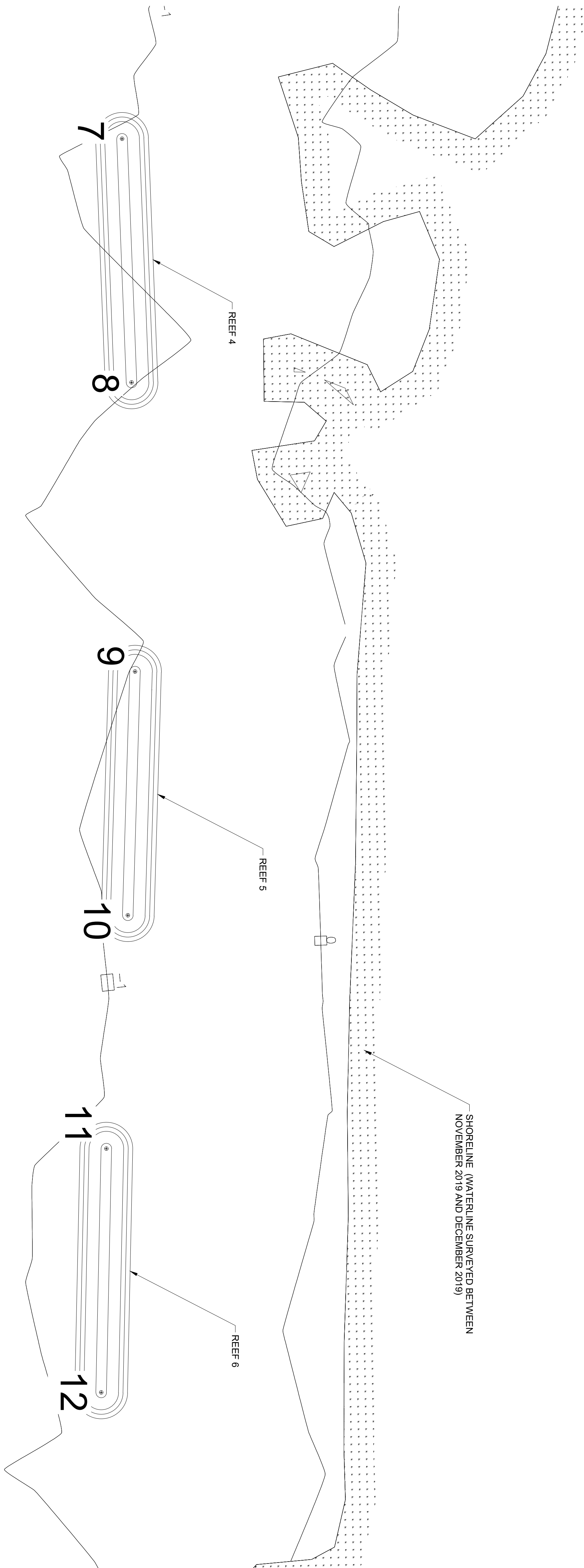
SAM-2020-00032-DCH

SITE PLAN

 $1''=40$ 

et

- NOTES:
 1. ELEVATIONS AND BATHYMETRY IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), US FOOT.
 2. COORDINATES SHOWN ON PLANS ARE NAD83 ALABAMA STATE PLANE, WEST ZONE, US FOOT.
 3. REFER TO C-201 AND C-202 FOR DETAILED PLAN VIEW AND CROSS-SECTION.



| No. | NORTHING | EASTING |
|-----|-----------|----------|
| 7 | 1785169.0 | 208646.0 |
| 8 | 1785281.3 | 208762.8 |
| 9 | 1785418.1 | 208897.6 |
| 10 | 1785538.1 | 209006.4 |
| 11 | 1785659.7 | 209103.6 |
| 12 | 1785778.8 | 209213.5 |

Jacobs

CIVIL
SITE PLAN
(2 OF 3)

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502



HELEN WOOD PARK LIVING SHORELINE PROJECT

| | | | | | | |
|------|------------|----------|-----------|-----|--|---------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| NO. | DATE | REVISION | | | | BY APVD |
| DSGN | O.ROWLANDS | DR | M.POTEMPA | CHK | | APVD |

| | |
|--------------|--|
| 1"=40' | |
| VERIFY SCALE | BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1" |
| DATE | MARCH 2021 |
| PROJ | D3269100 |
| DWG | C-302 |
| SHEET | 6 of 9 |

| | |
|-------|------------|
| DATE | MARCH 2021 |
| PROJ | D3269100 |
| DWG | C-302 |
| SHEET | 6 of 9 |

SET

9

\$PWURL

\$PWPA TH

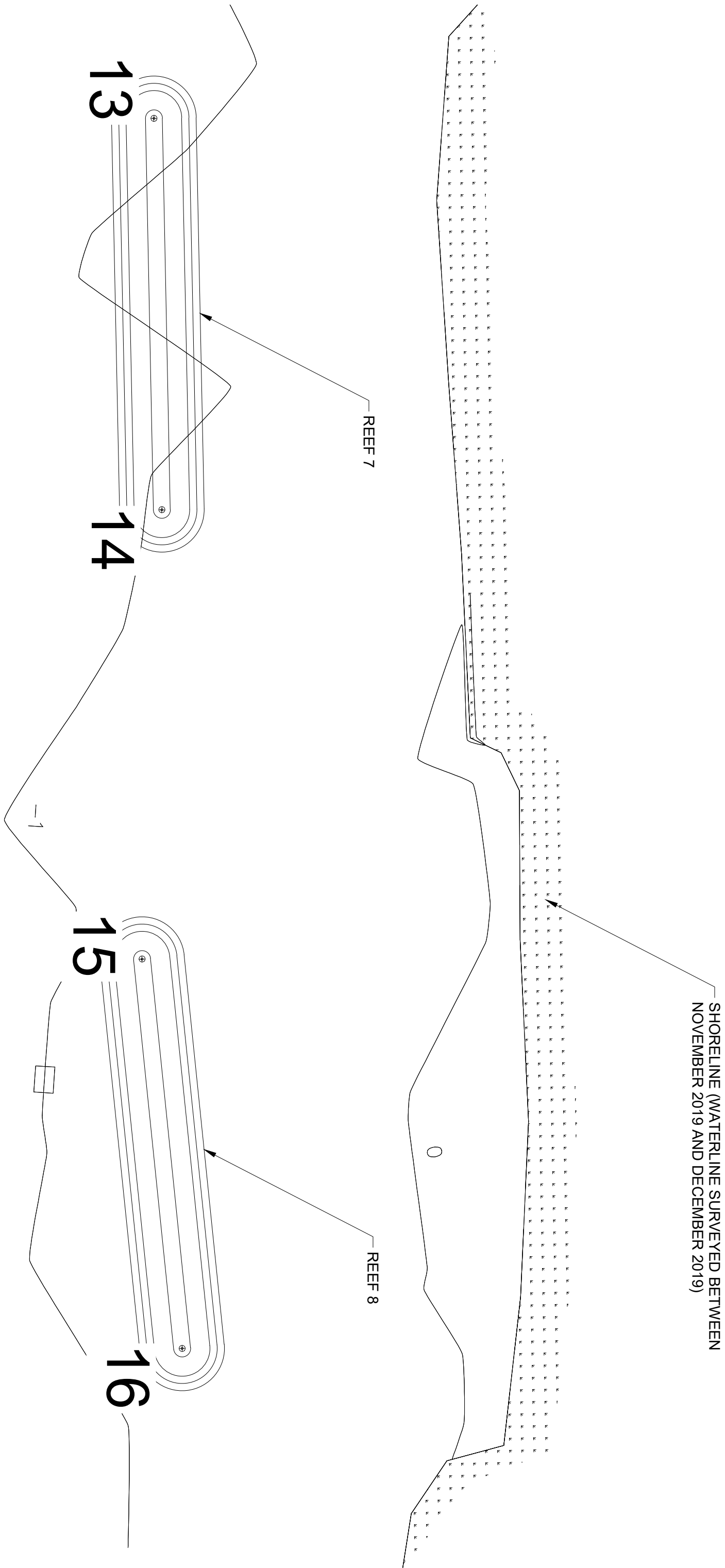
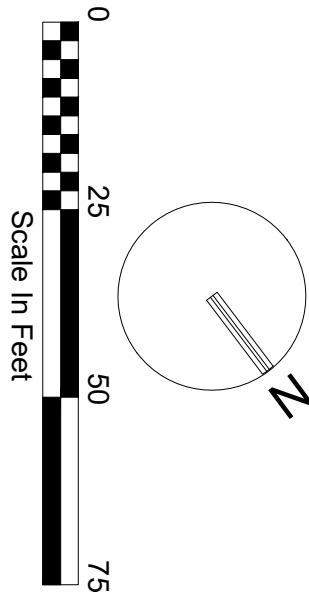
FILENAME: 001-C-301_C-302_C-303-D3269100.dwg

PLOT DATE: \$PLOTDATE

PLOT TIME: \$PLOTTIME

- NOTES:
- ELEVATIONS AND BATHYMETRY IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), US FOOT.
 - COORDINATES SHOWN ON PLANS ARE NAD83 ALABAMA STATE PLANE, WEST ZONE, US FOOT.
 - REFER TO C-201 AND C-202 FOR DETAILED PLAN VIEW AND CROSS-SECTION.

SITE PLAN
1"=40'



| No. | NORTHING | EASTING |
|-----|-----------|----------|
| 13 | 1785920.2 | 209303.3 |
| 14 | 1786034.6 | 209417.9 |
| 15 | 1786174.3 | 209540.9 |
| 16 | 1786279.0 | 209664.6 |

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502

The Nature Conservancy

HELEN WOOD PARK LIVING
SHORELINE PROJECT

Jacobs

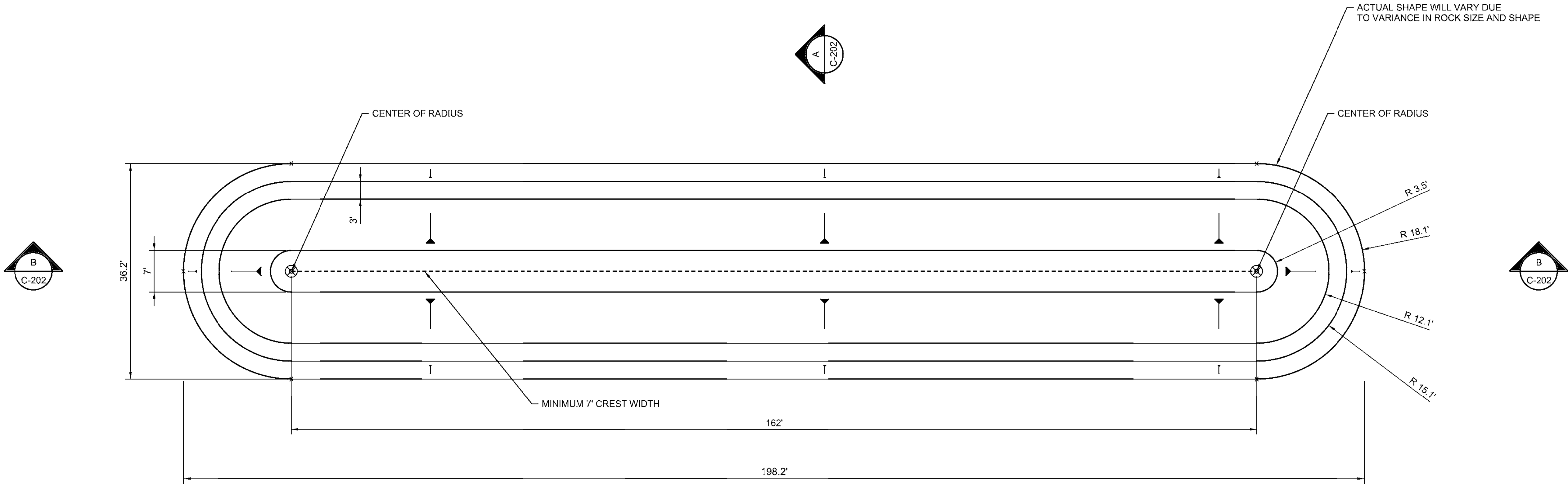
CIVIL
SITE PLAN
(3 OF 3)

| |
|---|
| 1"=40' |
| VERIFY SCALE |
| BARS ONE INCH ON SCREEN SHOWN 0 [redacted] 1" |
| DATE MARCH 2021 |
| PROJ D3269100 |
| DWG C-303 |
| SHEET 7 of 9 |

| | | | | |
|------------|------|-----------|----|------|
| NO. | DATE | REVISION | BY | APVD |
| DSGN | | CHK | | |
| O.ROWLANDS | | M.POTEMPA | | |

- NOTES:
1. MINIMUM RIPRAP CREST WIDTH OF 7 FEET.
 2. SEE DRAWING G-103 AND G-104 FOR SETTING OUT DETAILS.
 3. SEE DRAWING C-202 FOR CROSS-SECTIONS.
 4. REEF FOOTPRINT DIMENSIONS SHOWN ARE APPROXIMATE AND WILL DEPEND ON BATHYMETRY ON SITE DURING CONSTRUCTION.
 5. THE RADIUS DIMENSIONS GIVEN ARE INTENDED TO BE AN AID FOR SETTING OUT. A 2' HORIZONTAL TOLERANCE WILL BE APPLIED AT THE LOCATIONS MARKED WITH AN 'X'.

PLAN VIEW
1"=10'



25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502



HELEN WOOD PARK LIVING
SHORELINE PROJECT

Jacobs

CIVIL
REEF STRUCTURE-
PLAN VIEW

1"=10'

VERIFY SCALE

BAR IS ONE INCH ON
ORIGINAL DRAWING.

DATE MARCH 2021

PROJ D3269100

DWG C-201

SHEET 8 of 9

60% DESIGN DOCUMENTS

© JACOBS 2020. ALL RIGHTS RESERVED.

THIS DOCUMENT, AND THE DEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

A

B

C

D

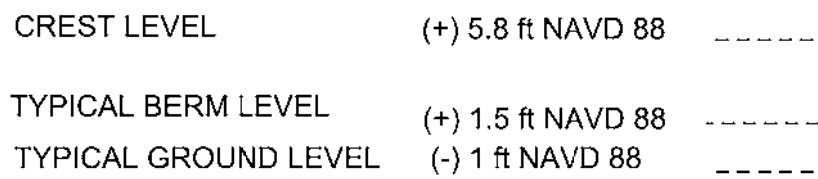
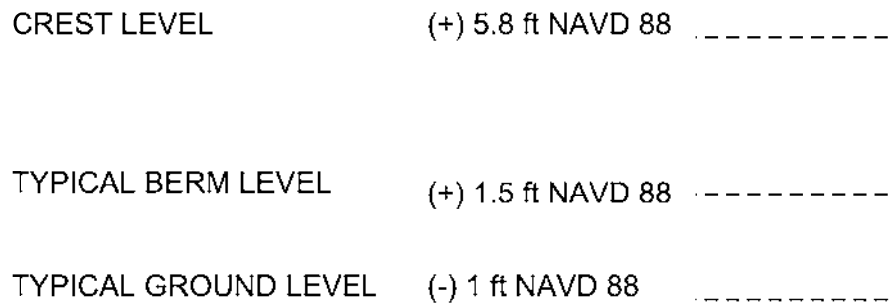
\$PWURL

\$PWPATH

FILENAME: 001-C-201-D3269100_1.dgn

PLOT DATE: 2021/03/30

PLOT TIME: 1:47:56 PM



1. FINISHED STRUCTURE ELEVATION IS DEFINED ON THE CROSS-SECTION; RIPRAP LAYER THICKNESS TO VARY AS REQUIRED TO ACHIEVE STATED LEVELS.
2. STATED ELEVATIONS ARE MINIMUM LEVELS; VERTICAL TOLERANCE OF UP TO 6 INCHES ABOVE STATED LEVELS TO BE ACCEPTABLE.
3. STATED HORIZONTAL EXTENTS ARE MINIMUM EXTENTS; HORIZONTAL TOLERANCE OF UP TO 2 FEET BEYOND THESE EXTENTS TO BE ACCEPTABLE.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH PLAN VIEW (C201).
5. GROUND SURFACE FOR EACH REEF DETAIL IS DEPICTED AS UNIFORM AND FLAT FOR CLARITY AND MAY NOT REPRESENT ACTUAL CONDITIONS AT EACH REEF LOCATION. CONTRACTOR SHALL FIELD VERIFY GROUND SURFACE CONDITIONS AT EACH REEF LOCATION AND RECOMMEND ADJUSTMENTS TO EACH REEF'S BASE PROFILE FOR THE ENGINEER'S APPROVAL, PRIOR TO CONSTRUCTION.
6. TYPICAL DETAILS SHOWN TO BE CONFIRMED AT DETAILED DESIGN.
7. REEF FOOTPRINT DIMENSIONS SHOWN ARE APPROXIMATE AND WILL DEPEND ON BATHYMETRY ON SITE DURING CONSTRUCTION.
8. TOE PROFILE AND SLOPE IS A MINIMUM LINE TO BE ACHIEVED; REFER TO SKETCH ON G-103 FOR EXAMPLE.

[illegible]

25 W. CEDAR STREET, SUITE 350
PENSACOLA, FL. 32502



The Nature Conservancy

Jacobs

CIVIL
REEF STRUCTURE -
TYPICAL CROSS SECTIONS

 $1''=5'$

VERIFY SCALE

BAR IS ONE INCH OF
ORIGINAL DRAWING

| | |
|------|-----------|
| DATE | MARCH 202 |
|------|-----------|

| | |
|------|---------|
| PROJ | D326910 |
|------|---------|

DWG C-20

SHEET 9 of 9