



Fort Myers Beach Town Council

**Council Chambers
2525 Estero Blvd.
Fort Myers Beach, FL 33931**

Agenda

Monday, May 16, 2022

9:00 AM

ORDER OF BUSINESS

- I. CALL TO ORDER**
- II. INVOCATION**
- III. PLEDGE OF ALLEGIANCE**
- IV. APPROVAL OF FINAL AGENDA**
- V. PUBLIC COMMENT**
- VI. LOCAL ACHIEVEMENTS AND RECOGNITIONS**
 - A. Mulholland Stewardship Award
- VII. ADVISORY COMMITTEES ITEMS AND REPORTS - MARINE RESOURCES TASK FORCE (MRTF)**
- VIII. APPROVAL OF MINUTES**
 - A. May 2, 2022 Town Council
 - B. May 5, 2022 Management & Planning Session
- IX. CONSENT AGENDA**
 - A. Historic Preservation Advisory Board Appointment
Appointment of Karyn Slomski to the Historic Preservation Advisory Board (HPAC)
 - B. Resolution 22-20; Mound House / Bay Oaks Donations
Approve Resolution 22-20 accepting donations from the Fort Myers Beach Community Foundation, Kiwanis Club and Friends of Bay Oaks and directing the Town Manager to appropriate the donations to be used for Mound House Summer Camp Scholarships and Bay Oaks Teen and Youth programs including summer camp scholarships.

X. PUBLIC HEARINGS**A. Ordinance 22-11, Sea Turtle Conservation**

First Reading and Public Hearing: AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA AMENDING ARTICLE V OF CHAPTER 32 OF THE CODE OF ORDINANCES OF THE TOWN OF FORT MYERS BEACH ENTITLED "SEA TURTLE CONSERVATION", PROVIDING FOR SEVERABILITY; CODIFICATION; SCRIVENER'S ERRORS; CONFLICTS OF LAW AND AN EFFECTIVE DATE. Open the first public hearing and schedule for second reading and final adoption on June 6, 2022 at 9:00 a.m.

XI. ADMINISTRATIVE AGENDA**A. 2022 Citizen of Distinction**

The Town has received the nomination of Patrick (Pat) McKeown for the annual Fort Myers Beach Citizen of Distinction Award in the area of Arts and Culture for his authoring of the history of the Mound House book *"Crown Jewel of Fort Myers Beach The Mound House"*.

B. Audit Committee Appointments

The Audit Committee currently has three vacancies on their 7 member board. Fort Myers Beach residents Michael Hauser, Jack Leson, Sherry Misgen and Barbara Puffer are each requesting to be appointed to one of the seats.

C. Resolution 22-21; Laguna Shores Channel Dredge Assessment

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA PROPOSING THE ESTABLISHMENT AND FUNDING OF THE LAGUNA SHORES DREDGING ASSESSMENT AREA WITHIN THE AREA OF THE TOWN DESCRIBED HEREIN FOR THE PURPOSE OF PAYING THE COST OF THE LAGUNA SHORES CANAL DREDGING PROJECT; PAYING OTHER PROJECT, FINANCING AND COLLECTION COSTS; MAKING CERTAIN FINDINGS AND DETERMINATIONS OF SPECIAL BENEFIT AND THE LOGICAL RELATIONSHIP BETWEEN THE DREDGING PROJECT AND THE BENEFIT RECEIVED; SPECIFYING THE TOTAL ESTIMATED CAPITAL COST OF THE DREDGING PROJECT; SPECIFYING THE UNIT OF MEASUREMENT FOR, AND THE ESTIMATED MAXIMUM AMOUNT OF SAID ASSESSMENT TO BE LEVIED AGAINST EACH PARCEL WITHIN THE DESCRIBED AREA; SPECIFYING THE NUMBER OF YEARS SAID ASSESSMENT IS TO BE LEVIED; ALLOWING FOR THE PREPAYMENT OF THE SPECIAL ASSESSMENT; PROVIDING FOR ANNUAL ADJUSTMENTS TO THE AMOUNT OF THE ASSESSMENT IF NECESSARY; PROVIDING FOR CERTAIN OTHER AUTHORIZATIONS AND DELEGATIONS OF AUTHORITY IN RELATION THERETO; AND PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE.

- D. ITB-22-10-EN; Laguna Shores Channel Dredge Contract
Authorize the Town Manager to enter into an Agreement with Arbor Tree & Land, Inc., the low, responsive, and responsible bidder to ITB-22-10-EN to perform the Laguna Shores Channel Dredge Project ("Project") in an amount not to exceed \$585,905.00, and expend budgeted funds for the Project.
- E. 2022 Estero Island Beach Monitoring
Approve Supplemental Task Authorization #14 with Coastal Engineering Consultant's Inc., in the amount of \$47,013 for Professional Engineering Services to conduct annual monitoring of beach profiles along the shoreline of Estero Island, and authorizing the Town Manager to execute the Supplemental Task Authorization and expend budgeted funds.
- F. BORC Additional Services
Approve Supplemental Task Authorization #14, in the not to exceed amount of \$109,886 for additional work on the Bay Oaks Redevelopment project and Community Pool and authorize the Town Manager to execute the Supplemental Task Authorization with DRMP Inc.

XII. FINAL PUBLIC COMMENT

XIII. TOWN MANAGER'S ITEMS

XIV. TOWN ATTORNEY'S ITEMS

XV. COUNCILMEMBERS ITEMS AND REPORTS

- A. Annual Review of Town Manager

XVI. ADJOURNMENT

NOTE: THIS MEETING IS TELEVISED LIVE ON COMCAST CHANNEL 98.

IF A PERSON DECIDES TO APPEAL A DECISION MADE BY THE COUNCIL IN ANY MATTER CONSIDERED AT THIS MEETING/HEARING, SUCH PERSONS MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDING IS MADE, TO INCLUDE THE TESTIMONY AND EVIDENCE UPON WHICH ANY SUCH APPEAL IS TO BE BASED.

	For special accommodations, please notify the Town Clerk's Office at least 72 hours in advance. (239) 765-0202		Help for the hearing impaired is available through the Assistive Listening System. Receivers can be obtained from the Town Clerk's Office.
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In accordance with the Americans with Disabilities Act (ADA), persons needing a special accommodation to participate in the Board's proceedings should contact the Town Clerk's Office not later than three days prior to the proceedings.

1. **Requested Motion:**

Meeting Date: May 16, 2022

Cindy Johnson is the 2022 recipient of the Mulholland Stewardship Award

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

LOCAL ACHIEVEMENTS AND
RECOGNITIONS

3. **Requirement/Purpose:**

4. **Submitter of Information:**

5. **Background:**

Cindy was nominated for her involvement with Turtle Time, the MRTF Pop-Up Booth and being

Attachments:

1. johnson mulholland (002)

Financial Impact:

6. **Alternative Action**

7. **Management Recommendations:**

8. **Recommended Approval:**

Amy Baker, Town Clerk
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/6/2022
Approved - 5/9/2022
Approved - 5/10/2022
Final Approval - 5/10/2022

TOWN OF FORT MYERS BEACH

Mayor John Mulholland
Stewardship Award Nomination

Application Deadline:
March 31st



Stewardship is the voluntary conservation of natural habitat and wildlife by concerned citizens.

The Marine Resources Task Force, an advisory board to the Fort Myers Beach Town Council regarding awareness, education and preservation of the community's natural resources, is pleased to announce its annual request for nomination for this award.

Practicing good natural resources stewardship means:

- ⇒ Using your property carefully
- ⇒ Reporting hazards or violations
- ⇒ Recognizing your relationship and responsibilities to protecting natural resources

Do you know of any individual, business or organization which promotes awareness, education and preservation of our community's natural resources? Then please fill out this nomination form to acknowledge those individuals who continue to make a difference.

Award Categories are:

Individual

Business

Non Profit / Organization

My Nomination is:

Name

Cindy Johnson

Address

City, State, Zip

Fort Myers Beach, FL

Phone

614 581-6773

Email address

Kokomuncie@msn.com

Please fill out the additional information on the next page.

Nominated by:

Bill Veach

Phone:

307 286 4687

Email address:

BillyVeach@gmail.com

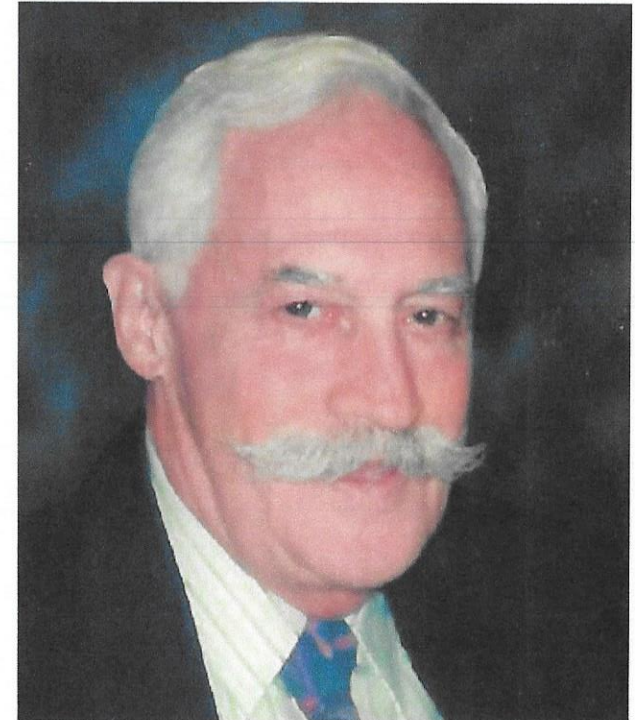
Describe the project or contribution, including benefits to the environment, local community, economy, and education. Add additional sheets if needed.

MAKING A DIFFERENCE

Mayor John Mulholland

Stewardship Award

Cindy has volunteered for Turtles Time for
years, is listed on their permit, and helps
with the MRTF pop up events. But, more
importantly, she is ~~with~~ ~~taxes~~ the taxes
the time to research, talk to experts, and
becomes extremely knowledgeable on the
top subjects she speaks about. And she is ~~an~~
is a determined and vocal advocate for
the island's environment.



Mail or drop off your application to:

Town Hall

2525 Estero Boulevard

Fort Myers Beach, FL 33931

Download an application at:

www.fmbgov.com

For further information call Town Hall: 239-765-0202

Town of Fort Myers Beach
Marine Resources Task Force



Fort Myers Beach Town Council

**Council Chambers
2525 Estero Blvd.
Fort Myers Beach, FL 33931**

Minutes

Monday, May 2, 2022

9:00 AM

ORDER OF BUSINESS

DRAFT

I. CALL TO ORDER

Members present: Mayor Murphy, Vice Mayor Hosafros, Council Member Allers, Council Member Atterholt and Council Member Veach.

II. INVOCATION

Town Clerk Baker.

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF FINAL AGENDA

Council Member Veach moved to approve the final agenda; second by Vice Mayor Hosafros.

Council Member Allers stated that he filed paperwork to recuse himself from discussing and voting on proposed Ordinance 22-06.

Motion carried unanimously.

V. PUBLIC COMMENT

John R. King, Board of Directors for Islands End, discussed the 15% tinted glass and noted that only two manufacturers produced the glass and had trouble getting the product. He commented that he should not be penalized due to the actions of his neighbors. He suggested the town work with FGCU (Florida Gulf Coast University) regarding protecting sea turtles. He thought the town should scrap the ordinance and start over.

Dave Nausbaum, President of Island Winds Condominiums, submitted a letter from Bob Lorier, Board member of Mariner's Boathouse & Beach Resort, and a report from FWC (Fish & Wildlife Conservation) regarding six turtle disorientations last year. Mr. Nausbaum stated that Mariner's Boathouse & Beach Resort missed the 15% window tint cutoff by one week. He noted the 45% tinted windows were ready to be installed, but the resort had to go back to zero tint due to the new ordinance. He commented that education and participation were key to keeping

the turtles safe, not an ordinance that kept residents in darkness all year. He questioned why condominiums were singled out regarding submitting a plan. Bill Althoff, President of Shamron Beach Condominiums, requested that Town Council reconsiders the 15% tinted glass requirement and repeal the ordinance. He stated their building was planning to replace the windows but the 15% glass added significant costs to their project. He supported protecting the sea turtles but noted the 15% tint requirement was not consistent with state guidelines, which required 45% tint.

George Repetti, Islands End Condominiums, commented on the last MRTF (Marine Resources Task Force) meeting, which discussed the 15% window tint. He stated that imposing a moratorium for a year or two would not make a difference. He suggested that Environmental Project Manager Chadd Chustz take pictures of the hotels, motels and restaurants that had lights on all night long.

Bob Galvanoni, President of Carlos Point Beach Club, discussed the 15% tinted glass and described how owners were educated regarding light pollution during turtle season. He stated their Board recently passed a resolution that allowed the Board to pass through any light fines to violating owners. He discussed how the citations should be handled so the Board could inform the renters as soon as possible. He wanted enforcement to be applied equally.

Ginger Weber, owner of Mid-Island Water Sports, discussed part of the new turtle ordinance and requested that the Town compromise on removing all man-made objects on sandy areas. She noted that she sent an email to Council Members with suggestions.

Sue O'Brien, Sand Caper Condominiums, commented that education concerning the lights was the most important part of turtle season. She agreed with previous comments.

Jan Coyne, Sand Caper Condominiums, agreed and shared the concerns of previous commenters. She supported the efforts of the town to protect turtles. She discussed the availability and price of the 15% windows and noted many owners would be forced to keep their 40-year-old windows rather than replace them. She requested that the Council reconsider the ordinance.

Sharon Faircloth, owner of Holiday Water Sports, requested that Town Council add a review of beach furniture and obstructions in the turtle lighting ordinance. She read part of an email she previously sent to Council Members regarding the new language added to Chapter 14. She noted it was stricter than the previous ordinance and there was no public comment regarding the change. Ms. Faircloth stated that MRTF refused to revisit the language despite MRTF's mission statement.

VI. LOCAL ACHIEVEMENTS AND RECOGNITIONS

Vice Mayor Hosafros recognized people on the Island who volunteered with Building for Habitat and contributed over 500 hours of work this year.

Council Member Atterholt noted that he and his wife spent a day with the same group of people a couple of years ago and commended Vice Mayor Hosafros for recognizing the organization.

Council Member Veach described engaging with FGCU students at their Eagle X day this year.

No items from other members.

VII. ADVISORY COMMITTEES ITEMS AND REPORTS

Chair of CELCAB (Cultural and Environmental Learning Center Advisory Board) Barbara Hill, reported that the Mound House and Newton Beach Park enjoyed many visitors due to new programs and events. She indicated that the Mound House was one of the top three attractions in Lee County from October to December 2021, according to the Lee County Visitors and Convention Center. She noted that CELCAB recommended replacing the bocce ball court with two swing sets at Newton Beach Park and replacing the entrance sign on Estero Blvd. CELCAB also recommended that the price of admission to the Mound House be increased by \$5.00. Chair Hill commented that CELCAB's feedback was positive concerning merging three advisory boards into one and they would discuss it at their meeting later in the month. BORCAB (Bay Oaks Recreational Campus Advisory Board) will discuss the issue at their May 3, 2022 meeting. She suggested that Town Council delay its decision until the advisory boards could weigh in. Cultural Parks & Recreation Director Alison Giesen stated that she would provide the numbers and research regarding the fee increase recommendation.

VIII. PROCLAMATIONS

A. Safe Boating Week

The U.S.Coast Guard Auxiliary respectfully requests May 21- May 27, 2022 be designated as "Safe Boating Week" in the Town of Fort Myers Beach

Mayor Murphy read and presented the proclamation to Past Flotilla Commander Nick Kaveski and Financial Officer Ted Lawwill of the U.S. Coast Guard Auxiliary Flotilla 91.

IX. APPROVAL OF MINUTES

A. April 18, 2022 Town Council

Council Member Veach moved to approve the minutes; second by Vice Mayor Hosafros.

Motion carried unanimously.

X. PUBLIC HEARINGS

A. Ordinance 22-10 Restructuring Advisory Committees

1st Reading and Public Hearing on proposed Ordinance 22-10 entitled: AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA AMENDING SECTION 2-94 "QUALIFICATIONS AND APPOINTMENTS OF MEMBERS" OF ARTICLE IV "BOARDS, COMMISSIONS, COMMITTEES AND OTHER AGENCIES", CHAPTER 2 OF THE CODE OF ORDINANCES, TOWN OF FORT MYERS BEACH, FLORIDA, DISSOLVING THE BAY OAKS RECREATIONAL CAMPUS ADVISORY BOARD ("BORCAB"), COMMUNITY RESOURCE ADVISORY BOARD ("CRAB"), AND CULTURAL AND ENVIRONMENTAL LEARNING CENTER ADVISORY BOARD ("CELCAB"); ESTABLISHING A NEW ADVISORY BOARD TO TAKE OVER THE FUNCTIONS OF BORCAB, CRAB, AND CELCAB; RENAMING THE MARINE RESOURCE TASK FORCE ("MRTF"); AND PROVIDING FOR CODIFICATION; CONFLICTS; SCRIVENER'S ERRORS; SEVERABILITY AND AN EFFECTIVE DATE.

Open the first public hearing and schedule for second reading and final adoption on May 16, 2022 at 9:00 AM

Mayor Murphy read the title of the ordinance. Town Attorney Herin, Jr. reviewed the reason for the proposed ordinance. Council Member Veach submitted suggested language.

Council Member Allers moved to delay Ordinance 22-10 until June to give the advisory committees a chance to discuss the topic.

Vice Mayor Hosafros suggested that they delay the second hearing to June to allow the committees to provide input. Council Member Allers agreed and withdrew his motion.

Town Manager Hernstadt stated that the Audit Committee requested their membership be reduced from seven to five. He questioned whether Council wanted to incorporate the topic into the discussion. Town Attorney Herin, Jr. revealed that the ordinance did not address how many members were required for the Audit Committee. Consensus was reached to address the Audit Committee on May 16, 2022.

Vice Mayor Hosafros moved to schedule the proposed ordinance for a second hearing on June 6, 2022; second by Council Member Atterholt.

Town Attorney Herin, Jr. indicated that Town Clerk Baker found that Ordinance 18-06 set the Audit Committee Board membership at seven. Town Attorney Herin, Jr. stated that the ordinance was in effect even though it was not codified (or published by Municode).

No public comment.

Motion carried unanimously.

B. Ordinance 22-06; Tuckaway Cafe CPD Amendment

Second Reading and Public Hearing for proposed Ordinance 22-06: AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA REPLACING TOWN OF FORT MYERS BEACH RESOLUTION NO. 12-07, AND AMENDING THE SCHEDULE OF USES FOR THE COMMERCIAL PLANNED DEVELOPMENT ZONING FOR THE PROPERTY LOCATED AT 2301, 2307 & 2311 ESTERO BLVD. AND 111 & 121 MANGO ST., FORT MYERS BEACH; AMENDING THE MASTER CONCEPT PLAN FOR THE RESTAURANT USE(S); PROVIDING FOR REVISIONS TO CONDITIONS OF APPROVAL, AND OTHER CLARIFICATIONS AS NECESSARY; PROVIDING FOR CONFLICTS OF LAW, SCRIVENER'S ERRORS, SEVERABILITY AND PROVIDING FOR AN EFFECTIVE DATE.

Mayor Murphy read the title of the ordinance and noted that Council Member Allers was recused. Town Attorney Herin, Jr. swore in those providing testimony for this hearing and VAR20220021. Ex parte communications: Town Council Members disclosed their familiarity with the property. The Mayor stated he had no ex parte communications to disclose. Community Development Planner Sarah Propst reviewed the request. She noted that staff recommended approval with conditions.

Tre Gillet, applicant, explained why he wanted to add a brewing operation to his restaurant.

Council Member Veach moved to approve Ordinance 22-06; second by Vice Mayor Hosafros.

Public comment:

Ronald McClarin supported the request.

Public comment closed.

Motion carried 4-0 by roll call vote with Council Member Allers recused.

C. VAR20220021 -- 292 Ohio Ave. -- Pool Setback

Approve/Approve with Conditions/Deny VAR20220021. Jesse Hallman, owner of the property at 292 Ohio Ave., is seeking a 5-foot variance from LDC Sec.34-1174(d)(1)(d), to allow an in-ground pool closer to a side-yard property line than allowed for under current LDC requirements.

Mayor Murphy read the title of the variance.

Community Development Director Jason Green stated the applicant provided an updated site plan on page 68. He noted that staff recommended denial because there was room in the back for the pool. He added that the applicant did not provide information concerning tiebacks to the seawall. Attorney Beverly Grady from Roetzel & Andress represented the applicant. She utilized visual aids for her presentation. Slides included: Request Variance; Legislative History of Ordinance 22-01; Memos to LPA; Ordinance 20-19; LDC 34-1174 Accessory Setbacks; Review of 292 Ohio Avenue; Variance Criteria; Gulf-Bay-View Subdivision Plat; Site Plan; Bayview Yacht Basin Site Plan; Approving an Inground Pool in Side Yard; Boundary Survey and LPA approval. Jesse Hallman, applicant, explained why he wanted the pool on the side of

his house and why he did not want to cut the tiebacks to the seawall. He stated his neighbor agreed with the side pool. Mark Levitson, resident, helped to renovate Mr. Hallman's home. He described expenses incurred during the process and explained why there was no alternative for the pool placement.

Director Green clarified that an alternative layout design in the rear yard was provided by Pacific Pools at some point and would meet all setbacks.

Mr. Hallman stated that he had no idea the alternate rear design would be attached to the application for submittal.

No public comment.

Vice Mayor Atterholt moved to approve Variance 20220021 as approved by the LPA with a variance of five feet for a setback of six feet; second by Mayor Murphy.

Motion carried unanimously.

XI. ADMINISTRATIVE AGENDA

A. Mulholland Stewardship Award

Select the recipient of the 2022 Mayor John Mulholland Stewardship Award. The MRTF, at their April 13, 2022 meeting, recommended Cindy Johnson for the 2022 Mulholland award by a vote of 5-0 with one member recused. If awarded, the recipient will be recognized at the June 6th Town Council meeting.

Council Member Veach stated that Cindy Johnson was awarded the Mulholland Stewardship Award based on her advocacy for the environment. She will be unavailable on June 6 and will be presented with the award on May 16, 2022.

B. Purchase of AC unit for Bay Oaks Recreation Center

Authorize the award of a contract to Page Mechanical Group, LLC to install a new AC unit for Bay Oaks Recreation Center, as the low, responsive and responsible bidder, in response to ITB-22-13-PR "Air Conditioner Replacement at Bay Oaks Recreational Campus" in the amount of \$43,900.00; authorizing the Town Manager to execute the contract documents and expend FY22 budgeted Capital funds on behalf of the Town, and to waive the DBE participation form which is not required for this project.

Vice Mayor Hosafros moved to authorize the award of the contract; second by Council Member Veach.

Motion carried unanimously.

C. Resolution 22-18; FDOT Maintenance Agreement

Adopt Resolution 22-18; Approving a Maintenance Agreement with FDOT for dinghy dock and features within the leased area under the Matanzas Pass Bridge and allowing for all associated documents to be executed by the Town Mayor and/or Town Manager or his designee.

Council Member Veach moved to adopt Resolution 22-18; second by Vice Mayor Hosafros.

Motion carried unanimously.

D. Special Event - Hands Across the Sand

Sierra Club is requesting permission to hold an event in Times Square and on the Beach - Hands Across the Sand. Requesting waiver of the permit fee.

Council Member Veach moved to approve; second by Vice Mayor Hosafros. Motion carried unanimously.

E. Ordinance 21-03: Sea Turtle Conservation

Review the Marine Resources Task Force (MRTF) recommendations and discuss modifying:

AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA AMENDING ARTICLE V OF CHAPTER 32 OF THE CODE OF ORDINANCES OF THE TOWN OF FORT MYERS BEACH ENTITLED "SEA TURTLE CONSERVATION" ESTABLISHING AN IMPLEMENTATION SCHEDULE FOR THE FIFTEEN PERCENT (15%) TINTED GLASS LIGHT TRANSMITTANCE VALUE; PROVIDING FOR CODIFICATION; CONFLICTS OF LAW; SCRIVENER'S ERRORS; SEVERABILITY; AND AN EFFECTIVE DATE.

Town Manager Hernstadt noted changes could be made to the ordinance. Vice Mayor Hosafros agreed with the recommendations by MRTF. Environmental Project Manager Chadd Chustz described a spectrometer and indicated it was not a useful tool to determine light violations from interior lights. He stated that one's eyesight was the best way to identify light violations on the beach and explained how turtle disorientations occur.

Council Member Atterholt supported passing an ordinance with a 45% tint. He felt that the ordinance assumed residents who lived on the beach were bad actors who had to be punished. He supported protecting the turtle population and acknowledged that the problem was real. He preferred tougher enforcement and stated people had to close their blinds. People who refuse to comply should be held accountable and fined.

Project Manager Chustz stated that he inspected lights all over the island, not only on the south end.

Mayor Murphy felt that condominiums should have an internal plan on how to handle their property without the Town telling them what to do, as long as the end result was positive. Project Manager Chustz indicated he could handle enforcement without help.

Council Member Allers felt that a darker tint might cause people to open their windows without thinking about what they were doing. He supported the education efforts of the condominiums. He was in favor of going back to the 45% tint and continuing to educate the community.

Project Manager Chustz explained how violators were notified.

Council Member Atterholt stated that the 15% tint was Draconian and would affect the quality of life for condo owners. He described alternate options.

Council Member Veach described the difficulty of multiple condominium owners educating renters. He felt that a year-long moratorium might encourage people to install the 15% tinted glass.

Vice Mayor Hosafros described the email that identified nine condominiums that were violating the light ordinance during turtle season. She suggested that owners visit the beach at night and address violations from their buildings.

Vice Mayor Hosafros moved to implement the recommendations from MRTF; second by Council Member Veach.

Council Member Veach suggested that condominium associations create a management plan with teeth to manage rentals violating the light ordinance.

Council Member Atterholt did not think a one-year moratorium would solve the problem. He preferred to comply with the state guideline at 45% and continue to enforce and educate. Council Member Veach questioned whether Council Members had been in a unit with 15% glass. None had.

Council Member Allers noted that it took over one year to get windows even before the pandemic.

Vice Mayor Hosafros amended her motion to make it clear that should a person receive a permit and prove that they ordered the glass to replace the windows within that year, even though the product had not arrived, they would still be good; second by Council Member Veach.

Motion failed 3-2 with Mayor Murphy and Council Members Allers and Atterholt dissenting.

Council Member Atterholt moved that they reinstate the 45% designation in the ordinance and couple that with additional enforcement and education initiatives; second by Council Member Allers.

Mayor Murphy stated there had to be strict enforcement equally for everyone on the gulf front.

Motion carried 3-2 with Vice Mayor Hosafros and Council Member Veach dissenting.

XII. FINAL PUBLIC COMMENT

Dave Nausbaum, Island Winds, thanked Council for going back to the 45% tint. He discussed education efforts in his building and suggested scheduling a MRTF pop-up event at Santini Plaza. He stated that they were trying to be stewards of the beach and educate visitors. He committed to addressing violators as quickly as possible.

Robert Galvanoni, Carlos Point, thanked Council. He noted he would text his renters every night to remind them to close their drapes.

George Repetti, Islands End, thanked Council. He supported strict, honest and fair enforcement. He brought up hotel and motel violations.

John R. King, Islands End, thanked the Mayor for emphasizing equal enforcement.

XIII. TOWN MANAGER'S ITEMS

Town Manager Hernstadt reported that the Fourth of July parade started at 10:00 a.m. Council Members interested in riding the float should be at the Bay Oaks pool parking lot at 9:00 a.m. He stated that he would spend time with the Town Attorney to discuss the parasailing and jet ski ordinance. He planned to bring it back for input.

Town Manager Hernstadt suggested that condo owners be proactive and police their buildings by walking on the beach at night. He described how he dealt with violations at hotels and motels.

XIV. TOWN ATTORNEY'S ITEMS

Town Attorney Herin, Jr. stated that he helped staff prepare light violation cases for the Special Magistrate and most were related to specific turtle disorientations. He described audits by the FWC for light violations. He stated that the town staff were very vigilant and worked closely with property owners.

Town Attorney Herin, Jr. reported that the four-plus hours of mediation with Mr. Rood was unsuccessful. Mr. Rood did not mention an alleged ADA claim once. The case will move forward and outside council felt confident regarding the outcome.

Town Manager Hernstadt noted that Project Manager Chustz's workload would be adjusted to allow him to spend more nights on the beach.

XV. COUNCILMEMBERS ITEMS AND REPORTS

Council Member Veach noted they had not discussed lighting side streets. Vice Mayor Hosafros stated that she suggested waiting on side streets so they could focus on lighting Estero Blvd. and work it into budget discussions to get something accomplished. Council Member Veach questioned whether they wanted to separate side streets from Estero Blvd. Council Member Allers supported lighting Estero Blvd. before the side streets.

Council Member Atterholt questioned whether the town ticketed people with a disability plate if they violated the time limit on the meter. Town Manager Hernstadt replied that the town followed state law.

He stated there were handicapped spots with no meter, handicapped spots with a meter and handicapped spaces with a two-hour limit. He explained that the two-hour duration was created by businesses on Old San Carlos Blvd. to encourage turnover. He remarked that Council could modify a parking spot. Council Member Atterholt suggested that anyone with a disabled veteran license plate not be required to move their car every two hours.

Vice Mayor Hosafros replied that the disabled veteran he referred to was an employee at a business and would get a free parking spot all the time. Town Manager Hernstadt stated that handicapped people with placards or plates who don't pay to park in a metered spot typically are not given citations unless they exceed the time limit. He added that handicapped spots were available for the employee, but they were a little further away. Vice Mayor Hosafros reiterated that handicapped license plate owners already had free parking. Council Member Atterholt discussed pushing the Times Square project to after Easter of 2023 due to the timing of obtaining a \$2 million grant. He reported that the Times Square merchants agreed to delay the start date and read other comments concerning the project. Town Manager Hernstadt noted the goal was to implement the project with minimal disruptions.

Vice Mayor Hosafros addressed questions in the Public Works monthly report and suggested they discuss the items at the next M&P. She received support.

Council Member Allers stated that residents close to Lenell Rd. complained about the dangerous crosswalk. He questioned whether Council was okay with the Fire Chief writing a letter requesting a flashing beacon at the crosswalk. Town Manager Hernstadt replied that if the Fire Department requested a device at the crosswalk, the County was obligated to do something. Council Member Atterholt indicated that a beacon for the Fire Station was different from the pedestrian safety issue. Council Member Allers suggested that a beacon for the fire department would also help with pedestrian safety in the crosswalk. Vice Mayor Hosafros revealed that the Town Council unanimously requested help at the intersection six years ago, but the County refused. She stated the town had to hire a crossing guard to assist people with crossing. Consensus was reached for Council Member Allers to contact the Fire Chief.

Mayor Murphy congratulated Jackie Liszak and staff for a successful taste of the beach event. He congratulated Janine Paulauskis and the crew at the Beach Theater on a successful beach film festival. Town Manager Hernstadt thanked local community groups who contributed money to the film festival.

XVI. ADJOURNMENT

Council Member Allers moved to adjourn; second by Mayor Murphy.
Motion carried unanimously.

The meeting was adjourned at 12:38 p.m.



Fort Myers Beach Management & Planning Session

**Council Chambers
2525 Estero Blvd.
Fort Myers Beach, FL 33931**

Minutes

Thursday, May 5, 2022

9:00 AM

ORDER OF BUSINESS

DRAFT

I. CALL TO ORDER

Members present: Mayor Murphy, Vice Mayor Hosafros, Council Member Allers, Council Member Atterholt and Council Member Veach.

II. PLEDGE OF ALLEGIANCE

III. ITEMS FOR DISCUSSION

Brandon Prince, Project Manager with DeAngelis Diamond, provided an update regarding construction at Margaritaville. He invited Council Members to tour the construction site over the next month. He confirmed an opening date of September 2023, weather permitting.

A. Workforce Housing

Discuss on-island workforce housing options

Community Development Planner Sarah Propst presented several strategies. She described a Community Land Trust (CLT) and noted it would be a non-profit run by a board and manage workforce housing units, land, sales, leasing and eligibility requirements. She explained how it could be encouraged by changes to the Land Development Code (LDC) and Comprehensive Plan (Comp. Plan). Planner Propst indicated that the Lee County Housing Authority had different options and it made more sense for them to develop off the island due to costs, but the town and the Lee County Housing Authority could work together.

Vice Mayor Hosafros questioned whether an interlocal could be created with Lee County to get them to agree to a tax reduction on the property. Town Attorney Herin, Jr. replied that provisions in the state law were in place to petition the property appraiser to reduce the tax assessment. Vice Mayor Hosafros supported pursuing everything in Planner Propst's document.

Council Member described Sanibel's land trust. He noted that a land trust was unnecessary if the town wanted the property owned by an entity that

Council Member Veach described Sanibel's land trust. He noted that a land trust was unnecessary if the town wanted the property owned by an entity that rented the units exclusively.

Planner Propst discussed how they could build on the property behind Town Hall by addressing density and height issues and providing initial building layouts for developers. Marcus Goodson, Executive Director of Lee County Housing Authority, stated they could craft a relationship with the town to help with management and determine an ownership structure. He indicated that the town could pursue funds through Lee County. He noted that he was unaware of local businesses helping with housing needs, but national organizations have.

Council Member Veach explained why he preferred to condominize the units. Vice Mayor Hosafros mentioned that the Esterra building had been for sale for years and could be turned into one-bedroom efficiencies. Mayor Murphy noted the owner did not seem to be motivated to sell. Mr. Goodson agreed the building was beautiful and there was an opportunity for a joint venture with Lee County. Council Member Veach brought up local businesses adopting units for their employees. Town Manager Hernstadt discussed funding options. Mr. Goodson felt that Lee County would try to help and he explained how tax credits worked.

Planner Propst stated the next step was to work on the Comprehensive Plan. She questioned whether they wanted to include minimum and maximum unit sizes. There was no consensus on setting a minimum size. Town Manager Hernstadt encouraged developers to contact the town regarding workforce housing opportunities.

Town Council supported moving forward.

B. Tree Protection Code

Discussion of MRTF suggested changes to Tree Protection Code

Vice Mayor Hosafros stated they needed to do something about clear-cutting on the island. Town Manager Hernstadt indicated that language could be added that would require property owners to schedule a free tree inspection by the town before any tree was removed. Council Member Allers questioned whether they could require owners to contribute to a tree fund if they were not interested in having any trees on their property. Town Manager Hernstadt replied it was up to Town Council. Vice Mayor Hosafros did not want to allow property owners to remove all the trees on their property. Mayor Murphy did not want to encourage people to cut down their trees either. Town Council Members agreed to incorporate three major points from the cover page.

Council Member Allers felt the tree fund needed to be clarified. Vice Mayor Hosafros commented that one of the previous samples included more detail. Environmental Project Manager Chadd Chustz pointed out a reference for determining the mitigation value of roadside vegetation.

Town Manager Hernstadt remarked that he would incorporate their input and bring it back for a first reading.

C. FY23 Budget Discussion

FY22 budget and preliminary discussion for planning of FY23 budget including service priorities.

Town Manager Hernstadt reviewed the overall budget and indicated the town was in good financial shape. He noted the job market was challenging and staff was looking at ways to help employees.

Vice Mayor Hosafros suggested adding more money toward landscaping on Estero Blvd. and a line item for Estero Blvd. streetlights. She mentioned adding parking on the land behind Town Hall.

Council Member Veach wanted to change the short-term rental fee structure and add a per bedroom charge to help fund workforce housing. He requested a budget for the combined advisory committees if the merger was approved. He brought up removing the drive-through at Town Hall to add more parking. Mayor Murphy suggested adding a story or two above it to increase the size of Town Hall. Council Member Allers supported building it out to store and protect expensive equipment.

Council Member Allers suggested putting money aside for lighting the rest of the island and adding community policing.

Council Member Atterholt suggested adding two swingsets at Newton Beach Park. Town Manager Hernstadt commented that it would be an item on the add-on list.

IV. AGENDA MANAGEMENT

A. May 2022

Add protection from sea-level rise study.

Add discussion of the property behind Town Hall.

Add discussion requiring bicyclists to get off their bikes when passing pedestrians.

Add parking garage discussion.

Add discussion for a plan regarding the blocked off turn lane on San Carlos Blvd.

Town Attorney Herin, Jr. stated that Attorney Sanabria would attend the May 16, 2022 meeting in his absence.

V. ADJOURNMENT

Mayor Murphy adjourned the meeting at 10:42 a.m.

1. **Requested Motion:**

Meeting Date: May 16, 2022

Appointment of Karyn Slomski to the Historic Preservation Advisory Board (HPAC)

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

CONSENT AGENDA

3. **Requirement/Purpose:**

4. **Submitter of Information:**

5. **Background:**

The Historic Preservation Advisory Board currently has two vacancies on their 7 member board. Fort Myers Beach resident Karyn Slomski is requesting to be appointed to one of the seats.

Attachments:

Financial Impact:

6. **Alternative Action**

7. **Management Recommendations:**

8. **Recommended Approval:**

Amy Baker, Town Clerk
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/6/2022
Approved - 5/10/2022
Approved - 5/11/2022
Final Approval - 5/11/2022

1. Requested Motion:

Meeting Date: May 16, 2022

Approve Resolution 22-20 accepting donations from the Fort Myers Beach Community Foundation, Kiwanis Club and Friends of Bay Oaks and directing the Town Manager to appropriate the donations to be used for Mound House Summer Camp Scholarships and Bay Oaks Teen and Youth programs including summer camp scholarships.

Why the action is necessary:

What the action accomplishes:

2. Agenda:

CONSENT AGENDA

3. Requirement/Purpose:

4. Submitter of Information:

5. Background:

The Fort Myers Beach Community Foundation awarded Mound House \$1,000, and \$1,000 to Bay Oaks to be used for scholarships for summer camps. The Kiwanis Club awarded \$500 to the Mound House to be used for scholarships for summer camp. The Friends of Bay Oaks submitted \$18,000 to the Town Council at the meeting on January 11, 2021 to be used for Teen and Youth Programs. This resolution accepts the donations and appropriates the funds to be used for the programs that they were intended for.

Attachments:

1. Resolution 22-20 Accepting Donations and Appropriating Funds

Financial Impact:

6. Alternative Action

7. Management Recommendations:

8. Recommended Approval:

Alison Giesen, Director of Cultural, Parks & Recreation
Alison Giesen, Director of Cultural, Parks & Recreation
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/9/2022
Approved - 5/9/2022
Approved - 5/10/2022
Approved - 5/11/2022
Final Approval - 5/11/2022

RESOLUTION NUMBER 22-20

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA ACCEPTING THE DONATION OF \$2,000 FROM THE FORT MYERS BEACH COMMUNITY FOUNDATION; ACCEPTING THE DONATION OF \$1,000 FROM THE KIWANIS CLUB AND ACCEPTING THE DONATION OF \$18,000 FROM THE FRIENDS OF BAY OAKS; ALLOCATING THE DONATIONS TO HELP FUND TEEN AND YOUTH PROGRAMS, INCLUDING SUMMER CAMP SCHOLARSHIPS AT BAY OAKS AND SUMMER CAMP SCHOLARSHIPS AT THE MOUND HOUSE; PROVIDING FOR SEVERABILITY, AND AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Article X of the Town Charter of the Town of Fort Myers Beach (“Town”) empowers the Town to adopt, amend, or repeal such ordinances and resolutions as may be required for the proper governing of the Town; and

WHEREAS, the Fort Myers Beach Community Foundation wishes to donate \$2,000 to the Town; the Kiwanis Club wishes to donate \$1,000 to the Town, and The Friends of Bay Oaks wishes to donate \$18,000 to the Town (“Donations”); and

WHEREAS, the Town believes it is in the best interest of the Town’s business owners, residents, and visitors to accept the Donation and approve the appropriation of the Donations to help fund teen and youth programs, including summer camp scholarships at Bay Oaks and summer camp scholarships at the Mound House.

NOW, THEREFORE, BE IT HEREBY RESOLVED, BY THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA AS FOLLOWS:

Section 1. The above recitals are true and correct, and incorporated herein by this reference and are hereby adopted as the legislative and administrative findings of the Town Council.

Section 2. The Donations from the Fort Myers Beach Community Foundation, the Kiwanis Club and The Friends of Bay Oaks are accepted and the Town Manager is directed to appropriate the Donations to help fund teen and youth programs, including summer camp scholarships at Bay Oaks and summer camp scholarships at the Mound House

Section 3. If any section or portion of a section of this Resolution proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidate or impair the validity, force, or effect of any other section or part of this Resolution.

Section 4. This resolution shall take effect immediately upon its adoption.

The foregoing Resolution was adopted by the Town Council upon a motion by _____ and seconded by _____, and upon being put to a vote, the result was as follows:

Raymond P. Murphy, Mayor	_____
Rexann Hosafros, Vice Mayor	_____
Dan Allers, Council Member	_____
Jim Atterholt, Council Member	_____
Bill Veach, Council Member	_____

ADOPTED this 16th day of May 2022 by the Town Council of the Town of Fort Myers Beach, Florida.

TOWN OF FORT MYERS BEACH

Raymond P. Murphy, Mayor

ATTEST:

Amy Baker, Town Clerk

**APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE
AND RELIANCE OF THE TOWN OF FORT MYERS BEACH ONLY:**

John R. Herin, Jr., Town Attorney

This Resolution was filed in the Office of the Town Clerk on this ____ day of May 2022.

1. Requested Motion:

Meeting Date: May 16, 2022

First Reading and Public Hearing: AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA AMENDING ARTICLE V OF CHAPTER 32 OF THE CODE OF ORDINANCES OF THE TOWN OF FORT MYERS BEACH ENTITLED "SEA TURTLE CONSERVATION", PROVIDING FOR SEVERABILITY; CODIFICATION; SCRIVENER'S ERRORS; CONFLICTS OF LAW AND AN EFFECTIVE DATE. Open the first public hearing and schedule for second reading and final adoption on June 6, 2022 at 9:00 a.m.

Why the action is necessary:

Beachfront Condominium owners feel Ord. 21-03 requirement to install new and replacement windows with 15 percent light transmittance places an undue hardship on them.

What the action accomplishes:

Recognizes FL Fish & Wildlife Conservation Commission Sea Turtle Biologist guidance that windows with light transmittance greater than 15% may require additional window treatments such as opaque curtains to be in compliance with local ordinance.

Changes the requirement for new and replacement window light transmittance from 15% to 45%.

Adds definition of certified wildlife lighting.

Adds an additional strategy to use long wavelength, shielded interior lighting as a strategy to mitigate interior light pollution onto the beach.

Adds beach renourishment construction as an activity for temporary workzone lighting.

2. Agenda:

PUBLIC HEARINGS

3. Requirement/Purpose:

Ordinance

4. Submitter of Information:

5. Background:

FWC Guidance:

Impacts from interior lighting State rules require that tinted glass or film with a visible light transmittance value of forty-five (45) percent or less (inside to outside) must be used on all glass windows, doors and walls within line of sight of the beach, usually the seaward and shore-perpendicular sides of the structure. However, since those rules were passed, there are now better options because of advances in tinting and more information on sea turtle disorientations. Window tints/film with transmittance values lower than 45% are available that are energy efficient, pleasing and easily seen through. The best option for minimizing lighting impacts to sea turtles is 15% transmittance, with 25-30% transmittance the most popular. Many local lighting ordinances require that interior lights cannot be visible from the beach; therefore, the use of higher transmittance tints (such as 45%) often requires installation of additional window treatments (opaque curtains, shutters, blinds) to achieve compliance with the ordinance.

Attachments:

1. 22-11, Sea Turtle Protections
2. 62B-55_ModelLightingOrdinance_NPR_0

3. SEE PAGE 4 - FWC Guidelines 2018
4. Turtles orient towards more intense light - Witherington Bjorndal Copeia 1991
5. 2022 WEEK 1 Light Issue Images

Financial Impact:

None

6. Alternative Action

Do not approve amendments to Sea Turtle Conservation Ordinance to ensure inadvertent violations do not occur due to lesser tinting.

7. Management Recommendations:

8. Recommended Approval:

Chadd Chustz, Environmental Services
Daphnie Bercher, Community Services Administrator
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/10/2022
Approved - 5/10/2022
Approved - 5/11/2022
Approved - 5/11/2022
Final Approval - 5/11/2022

ORDINANCE NO. 22-11

AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA AMENDING ARTICLE V OF CHAPTER 32 OF THE CODE OF ORDINANCES OF THE TOWN OF FORT MYERS BEACH ENTITLED "SEA TURTLE CONSERVATION" TO SPECIFY A FORTY-FIVE PERCENT (45%) OPACITY OF TINTED GLASS TO REDUCE THE INSIDE TO OUTSIDE LIGHT TRANSMITTANCE VALUE, PROVIDING FOR SEVERABILITY; CODIFICATION; SCRIVENER'S ERRORS; CONFLICTS OF LAW AND AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Article X of the Town Charter of the Town of Fort Myers Beach empowers the Town to adopt, amend, or repeal such ordinances and resolutions as may be required for the proper governing of the Town; and

WHEREAS, the Town of Fort Myers Beach, Florida ("Town") recognizes that artificial lighting and other human activities on the beach and upland areas have a detrimental effect on the life cycle and nesting activities of sea turtles, which are an endangered species protected by federal and state law, and therefore subject to reasonable regulations as proposed herein; and

WHEREAS, the Town also recognizes that both its economy and the quality of life of its residents are enriched by a healthy sea turtle population; and

WHEREAS, the Town also recognizes that Florida Fish and Wildlife Conservation Commission biologists have determined that glass tints/film with light transmittance values of 15 percent or less are required to prevent unshielded interior lights from being visible from the beach without the installation of additional darkening window treatments such as shades, blinds, or curtains; and

WHEREAS, the Town desires to minimize the detrimental impact on nesting sea turtle populations, and other listed sensitive wildlife by implementing a system of rules and regulations that reduces the amount of artificial light intentionally or unintentionally visible from beaches; and

WHEREAS, on May 16, 2022, the Town Council held a first reading of this proposed Ordinance; and

WHEREAS, on June 6, 2022, the Town Council held a second reading of this proposed Ordinance.

NOW THEREFORE IT IS HEREBY ORDAINED BY THE TOWN OF FORT MYERS BEACH, FLORIDA:¹

Section 1. The above recitals are true and correct, and incorporated herein by this reference and are hereby adopted as the legislative and administrative findings of the Town Council.

Section 2. Article V of Chapter 32 of the Code of Ordinances of the Town of Fort Myers Beach entitled "Sea Turtle Conservation" is hereby amended to read as follows:

CHAPTER 32 - WATERWAYS AND BEACHES

ARTICLE V. - SEA TURTLE CONSERVATION

Sec. 32-101. - Article purpose and objectives.

The purpose of this article is to protect nesting and hatchling sea turtles on the beaches in the Town of Fort Myers Beach ("town") by ensuring that their nesting habitat is not degraded by artificial light. The objective of the article is to ensure artificial light does not interfere with sea turtle nesting and hatching events through the appropriate design and implementation of coastal lighting systems. ~~In order to~~ To further the objective of full implementation, this article also includes provisions designed to educate residents and beach users in the town on the benefits of appropriate coastal lighting and provides for weekly inspections to ensure compliance with the acceptable lighting standards.

Sec. 32-102. - Applicability.

The provision of this article shall apply to all properties within the town that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties; and to all buildings and related infrastructure, including landscaping, as well as all other activities that may adversely impact sea turtles.

Sec. 32-103. - Definitions.

For the purposes of this article, the following words and phrases will have the meanings respectively ascribed to them by this section unless the context clearly indicates otherwise:

Artificial light means the light emanating from any human-made

^{1/} Additions to existing text are shown by underline, changes to existing text on second reading are shown by double underline, and deletions are shown as ~~striketrough~~.

device.

Beach means the zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation.

Certified Wildlife Lighting means lighting fixtures and bulbs reviewed and approved with conditions of use through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process and published at <https://myfwc.com/conservation/you-protect/conservation/lighting/criteria/certified/>.

Cumulatively visible means light from numerous artificial light sources on a single property that as a group are directly or indirectly visible to an observer standing anywhere on the beach.

Directly visible means visibility of the glowing elements, lamps, globes, or reflectors of an artificial light source by an observer standing anywhere on the beach.

Disorientation means an event caused by direct, indirect, or cumulative artificial lighting on sea turtle nesting habitat resulting in the disruption in the ability of nesting sea turtle females and sea turtle hatchlings to find the sea from the beach.

Footcandle means the English unit for measuring illuminance; the uniform illumination of a surface one foot away from a point source of one candela; one lumen per square foot equal to 10.76 lux.

Frontal dune means the first natural or man-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

Full cutoff means a lighting fixture constructed in such a manner that no light emitted by the fixture, either directly from the lamp or a diffusing element or indirectly by reflection or refraction from any part of the luminaire, is projected at or above 90 degrees as determined by photometric test or certified by the manufacturer.

Fully shielded means a lighting fixture constructed in such a manner that the glowing elements, lamps, globes, or reflectors of the fixture are completely covered by an opaque material to prevent

them from being directly visible from the beach. Any structural part of the light fixture providing this shielding must be permanently affixed.

Indirectly visible means visibility of reflected light because of as a result of glowing elements, lamps, globes, or reflectors of an artificial light source which is visible to an observer standing anywhere on the beach without the light source being directly visible.

Lighting plan means plan view and cross section drawings describing location, number, wattage, wavelength, elevation, orientation, fixture cut sheets, and all types of proposed exterior artificial light sources, including, but not limited to, artificial lighting affixed to permanent structures, outdoor lighting, pool lighting, and internally or externally lighted signs.

Long wavelength means a luminaire emitting light wavelengths of 560 nanometers or greater and absent wavelengths below 560 nanometers. Lamps that meet the definition of long wavelength ~~through the use of~~ using filters, gels, or lenses are not permitted.

New Construction means all new construction of or additions and alterations to buildings, pools, pavement, other structures, landscape areas or lighting systems, including the change or resumption of land use.

Nesting season means the nesting period for sea turtles is from May 1 through October 31 of each year. Nesting season may be extended before or after these dates on an annual basis based on nesting activity observed in the Town of Fort Myers Beach.

Nighttime means the locally effective time ~~period~~ between sunset and sunrise.

Non-egress lighting means lighting that is not being used to light a distinct path or meet minimum requirements for emergency egress, including but not limited to, decorative lights (e.g., Christmas lights, strobe lights, string lights, etc.), balcony lights, ceiling fan lights, landscape lights, and up-lights.

Outdoor area means any portion of a property that could have an artificial light source not attached to a permanent structure, including but not limited to, pathway lighting, landscape lighting, pool lighting, etc.

Sea turtle means any turtle, including all life stages from egg to adult, of these species: Green (*Chelonia mydas*), Leatherback (*Dermochelys coriacea*), Loggerhead (*Caretta caretta*), Hawksbill (*Eretmochelys imbricata*), and Kemp's Ridley (*Lepidochelys kemp*i). For the purposes of this article, the term sea turtle is synonymous with marine turtle.

Sea turtle nesting habitat means all sandy beaches adjoining the waters of the Atlantic Ocean, the Gulf of Mexico, and the Straits of Florida in all coastal counties and all inlet shorelines of those beaches. Nesting habitat includes all sandy beach and unvegetated or vegetated dunes immediately adjacent to the sandy beach and accessible to nesting female turtles.

Take means an act that ~~actually~~ kills or injures marine turtles, and includes significant habitat modification or degradation that kills or injures marine turtles by significantly impairing essential behavioral patterns, such as breeding, feeding, or sheltering.

Temporary lighting means any non-permanent light source that may be hand-held or portable including, but not limited to, tiki torches, lanterns, flashlights (including cell phone flashlights), candles, flash photography, etc.

Tinted glass means glass modified via tinting, film, or other material to reduce the inside to outside light transmittance value to ~~15~~ 45 percent.

Sec. 32-104. - Annual public notice.

At least 30 days prior to the commencement of every sea turtle nesting season, the town shall provide written notice summarizing the provisions contained in this article.

Sec. 32-105. - Exterior and interior lighting affixed to new structures, new construction, and improvements to existing structures.

- (a) All artificial lighting affixed to the exterior of new permanent structures, construction or additions shall be long wavelength, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible to achieve the required footcandles.

- (b) As an exception to (a) above, all non-egress lighting may be affixed to the landward exterior of permanent structures provided that the fixtures are fitted with a long wavelength source and are shall not be directly, indirectly, or cumulatively visible from any portion of the beach.
- (c) Lighting at egress points shall be limited to the minimum number of fixtures and footcandles necessary to meet federal, state, and local safety requirements.
- (d) Locations including, but not limited to, stairwells, elevators, parking garages, or courtyards shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach. Window film, tinting, light screens, shades, or curtains shall be used to block visibility of interior lights from the beach. Light screens shall be used on open or enclosed staircases on the seaward or shore-perpendicular side of a building or for parking garages to limit visibility of lights from the nesting beach.
- (e) All glass windows, walls, railings, and doors on the seaward and shore-perpendicular sides included in any new construction, alteration, or window replacement for structures within direct line of sight from the beach shall utilize glass with an inside to outside light transmittance value of ~~15~~ 45 percent or less. Glass windows, walls, railings, and doors with light transmittance values greater than 15 percent may require additional window coverings to be compliant with requirement for interior light to not directly, indirectly, or cumulatively illuminate the beach.
- (f) Emergency lights shall be on a separate circuit and activated only during power outages or other situations in which emergency lighting is necessary for public safety.
- (g) Prior to issuance of a development order ~~and/or~~ building permit for all new structures, new construction, and improvements to existing structures seaward of the Coastal Construction

Control Line as defined by F.S. § 161.053, a town approved lighting plan meeting the provisions of this article and Chapter 34. Article IV, Division 20. - Lighting Standards is required.

- (h) Prior to issuance of a development order ~~and/or~~ building permit for all multifamily, commercial, and industrial new structures, new construction, and improvements to existing structures landward of the Coastal Construction Control Line as defined by F.S. § 161.053, a town approved lighting plan meeting the provisions of this article and Chapter 34. Article IV, Division 20. - Lighting Standards is required.
- (i) Prior to the issuance of a certificate of occupancy (CO) or a certificate of completion (CC), the exterior and interior lighting of new development shall be inspected after dark by the town, with all exterior and interior lighting turned on, to determine compliance with the approved lighting plan and this article. In addition, all manufacturer specification stickers shall remain affixed to all glass windows, walls, railings, and doors on the seaward and shore-perpendicular sides of any new construction to determine compliance with the approved window and door specifications and plan.

Sec. 32-106. - Existing exterior and interior lighting.

- (a) Existing artificial lighting affixed to the exterior of permanent structures shall not be directly, indirectly, or cumulatively visible from any portion of the beach during sea turtle nesting season.
- (b) Appropriate techniques for existing exterior lighting to achieve compliance with the provisions of this article include, but are not limited to:
 - (1) Reposition, modify, or remove existing lighting fixtures so that the point source of light or any reflective surface of the light fixture is no longer directly, indirectly, or cumulatively visible from the beach;
 - (2) Replace fixtures having an exposed light source with fully shielded fixtures;

- (3) Replace any light source, light bulb or lamp that is not long wavelength (e.g., incandescent, fluorescent, or high intensity lighting) with the lowest wattage long wavelength (e.g., LED₁ or low-pressure sodium) light source or lamp available for the specific application;
 - (4) Replace non-directional fixtures with directional fixtures that point down and away from the beach;
 - (5) Provide shields for fixtures visible from the beach and not practical to immediately be replaced. Beachside shields are to cover 270 degrees and extend below the bottom edge of the fixture on the seaward side so that the light source or any reflective surface of the light fixture is not visible from the beach;
 - (6) Replace pole lamps with low-profile, low-level luminaries so that the light source or any reflective surface of the light fixture is not visible from the beach;
 - (7) Plant or improve vegetation buffers between the light source and the beach to screen light from the beach;
 - (8) Construct a ground level barrier to shield light sources from the beach. Ground-level barriers must not interfere with sea turtle nesting or hatchling emergence, or cause short- or long-term damage to the beach and dune system;
 - (9) Permanently remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards;
 - (10) Televisions shall be shielded or positioned such that they are not directly, indirectly, or cumulatively visible from the beach.
- (c) Interior lighting shall not be directly, indirectly, or

cumulatively visible from any portion of the beach during sea turtle nesting season.

- (d) Appropriate techniques to achieve compliance for interior lighting with the provisions of this article include, but are not limited to ÷-T the following measures ~~can~~ to reduce or eliminate the negative effects of interior light emanating from doors and windows within line-of-sight of the beach:
 - (1) Apply window tint or film that ~~meets the~~ reduces the inside to outside light transmittance standards for tinted glass to 15 percent or less;
 - (2) Rearrange lamps and other moveable fixtures away from windows;
 - (3) Use opaque shades or room darkening window treatments (e.g., blinds, curtains, screens) to shield interior lights from the beach.
 - (4) Use artificial lighting that is long wavelength and shielded from the beach.
 - (5) A combination of the above techniques may be required to achieve compliance with this article.

Sec. 32-112. - Special events, vehicles, raking and temporary lighting.

- (a) All special events or construction taking place on or adjacent to the beach require a permit from the town; and may require a permit from the Florida Department of Environmental Protection.
- (b) Lighting associated with a special event that may directly, indirectly, or cumulatively be visible from any portion of the beach shall not be authorized at nighttime during sea turtle nesting season.
- (c) The operation of all vehicles, except emergency and

law enforcement vehicles or those permitted on the beach for sea turtle conservation in accordance with F.S. § 379.2431 (I), or other research and conservation, shall be prohibited on the beach at nighttime during sea turtle nesting season. Excepted, non-emergency vehicles shall affix red filter to their headlights when operating on sea turtle nesting habitat at nighttime.

- (d) Beach raking activities during sea turtle nesting season, if permitted by the town, shall not:
 - (1) Operate at nighttime;
 - (2) Begin before 9:00 a.m. or before the completion of daily monitoring for turtle nesting activity by the Florida Fish and Wildlife Conservation Commission (FWC) authorized marine turtle permit holder, whichever occurs first;
 - (3) Occur within ten feet of any marked sea turtle nest.
- (e) Within sea turtle nesting season, temporary work zone lighting for roadway construction, beach renourishment construction, and during declared emergencies shall be directed away from the beach to avoid illumination of or direct visibility from the beach. Work zone luminaires shall be shielded to avoid lighting areas outside of the immediate construction area.
- (f) All other temporary construction lighting shall be:
 - (1) Inclusive of all the standards herein, including utilizing fixtures that are long wavelength, downward directed, full cutoff, and fully shielded so light is not directly or indirectly visible from the beach, and
 - (2) Turned off during nighttime in sea turtle nesting season, or if temporary lighting is deemed necessary during sea turtle nesting season it shall only be allowed from 6:00 a.m. to 9:00 p.m., must be restricted to the

minimal amount necessary, and shall incorporate all the standards herein, and

- (3) Mounted less than eight feet above the adjacent floor or deck, measured from the bottom of fixture, and
- (4) Restricted to the minimal number of footcandles necessary to conform to the applicable construction safety regulations.

Section 3. The Town Council intends that the provisions of this ordinance be made a part of the Fort Myers Beach Code of Ordinances, and that sections herein may be renumbered or re-lettered and the words or phrases herein may be changed to accomplish codification; regardless, typographical errors that do not affect intent may be corrected with notice to and authorization of the Town Manager without further process.

Section 4. Whenever the requirements or provisions of this ordinance conflict with the requirements or provisions of any other lawfully adopted ordinance or statute, the most restrictive shall apply.

Section 5. If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason, declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision will not affect the validity of the ordinance, or any part thereof, other than the part so declared.

Section 6. This ordinance shall become effective upon adoption by the Town Council.

The foregoing Ordinance was adopted by the Town Council upon a motion by Councilmember _____ and seconded by _____ and upon being put to a roll call vote, the result was as follows:

Raymond P. Murphy, Mayor	_____
Rexann Hosafros, Vice Mayor	_____
Dan Allers, Council Member	_____
Jim Atterholt, Council Member	_____
Bill Veach, Council Member	_____

ADOPTED this ____ day of _____, 2022, by the Town Council of the Town of Fort Myers Beach, Florida.

TOWN OF FORT MYERS BEACH

Raymond P. Murphy, Mayor

ATTEST:

Amy Baker, Town Clerk

**APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE
AND RELIANCE OF THE TOWN OF FORT MYERS BEACH ONLY:**

John R. Herin, Jr., Town Attorney

City/County of _____, Florida

Chapter ____.

MODEL LIGHTING ORDINANCE FOR SEA TURTLE PROTECTION

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ORDINANCE NUMBER 20__-__
LAND DEVELOPMENT CODE

AN ORDINANCE OF THE CITY/COUNTY OF _____ AMENDING CITY/COUNTY CODE CHAPTER _____
PROVIDING FOR AMENDMENTS TO ADOPT MODEL LIGHTING REQUIREMENTS; PROVIDING FOR REPEAL OF
ORDINANCES; PROVIDING FOR TERRITORY EMBRACED; PROVIDING FOR SEVERABILITY; PROVIDING FOR
INCLUSION INTO THE CODE OF ORDINANCES; PROVIDING FOR EFFECTIVE DATE.

SECTION ____-1. – BASIS OF ORDINANCE

Sec. ____-1.1. - Findings of Fact

***Whereas, the City/County of _____** recognizes that light pollution of beaches is a serious threat to sea turtles and other species inhabiting its beaches; and

***Whereas, the City/County of _____** recognizes that nesting adult and hatchling sea turtles are negatively affected by light pollution created by artificial light visible from any portion of the beach; and

***Whereas, the City/County of _____** recognizes that sea turtles are protected by federal and state law; and

***Whereas, the City/County of _____** recognizes that both its economy and the quality of life of its residents are enriched by a healthy sea turtle population; and

***Whereas, the City/County of _____** desires to minimize the detrimental effect on nesting sea turtle populations, and other listed sensitive wildlife by implementing a system of rules and regulations that reduces the amount of artificial light intentionally or unintentionally visible from beaches;

**Guidance: These generic Findings of Fact are illustrative only. Findings of Fact should relate to the specific context of the County or City adopting a sea turtle lighting ordinance and may include data on sea turtle nesting, and disorientation/misorientation if available. It may also include information on the qualitative and quantitative value of sea turtles to the specific beachfront economies.*

NOW, THEREFORE, BE IT ORDAINED, BY THE CITY COUNCIL/BOARD OF COUNTY COMMISSIONERS OF THE CITY/COUNTY OF _____ ON THIS ____ DAY OF _____, 20__.

Sec. ____-1.2. - Title of Ordinance

This ordinance shall be referred to as the **City/County of _____** Lighting Ordinance for Sea Turtle Protection.

Sec. ____-1.3. - Ordinance Purpose and Objectives

The purpose of this Ordinance is to protect nesting and hatchling sea turtles on the beaches in the **City/County of _____** by ensuring that their nesting habitat is not degraded by artificial light. The objective of the ordinance is for the appropriate design and implementation of coastal lighting systems to

ensure that light pollution does not interfere with sea turtle nesting and hatching events while at the same time protecting public safety. In order to further the objective of full implementation, this Ordinance also includes provisions designed to educate residents and beach users in the **City/County of _____** on the benefits of appropriate coastal lighting and provides for regular inspections to ensure compliance with the acceptable lighting standards.

Sec. ____-1.4. - Definitions

1. **Artificial Light**: the light emanating from any human-made device.
2. **Beach**: the zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation.
3. **Certified Wildlife Lighting**: lighting fixtures and bulbs reviewed and approved with conditions of use through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process and published at <https://myfwc.com/conservation/you- conserve/lighting/criteria/certified/>.
4. **Cumulatively Visible**: light from numerous artificial light sources that as a group can be seen by an observer standing anywhere on the beach.
5. **Directly Visible**: occurs when glowing elements, lamps, globes, or reflectors of an artificial light source can be seen by an observer standing anywhere on the beach.
6. **Foot-Candle**: the English unit for measuring illuminance; the uniform illumination of a surface one foot away from a point source of one candela; one lumen per square foot; equal to 10.76 lux.
7. **Frontal Dune**: the first natural or man-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.
8. **Full Cutoff**: a lighting fixture constructed in such a manner that no light emitted by the fixture, either directly from the lamp or a diffusing element or indirectly by reflection or refraction from any part of the luminaire, is projected at or above 90° as determined by photometric test or certified by the fixture manufacturer.
9. **Fully Shielded**: a lighting fixture constructed in such a manner that the glowing elements, lamps, globes, or reflectors of the fixture are completely covered by an opaque material to prevent them from being directly visible from the beach. Any structural part of the light fixture providing this shielding must be permanently affixed.
10. **Indirectly Visible**: light reflected from glowing elements, lamps, globes, or reflectors of an artificial light source that can be seen by an observer standing anywhere on the beach without the light source being directly visible.
11. **Long Wavelength**: a lamp or light source emitting light wavelengths of 560 nanometers or greater and absent wavelengths below 560 nanometers.

12. **Nesting Season:** For the **City/County of _____**, the sea turtle nesting period is from _____ of each year.

Guidance: For Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward Counties, the sea turtle nesting period is from March 1 through October 31 of each year. For Bay, Charlotte, Collier, Dade, Duval, Escambia, Flagler, Franklin, Gulf, Lee, Manatee, Monroe, Nassau, Okaloosa, Pinellas, St. Johns, St. Lucie, Santa Rosa, Sarasota, Volusia, and Walton Counties, the sea turtle nesting period is from May 1 through October 31.

13. **Nighttime:** the locally effective time period between sunset and sunrise.
14. **Non-egress Lighting:** exterior lighting that is not being used to light a distinct route or meet minimum requirements for emergency access to or from a building, including but not limited to decorative lights (e.g. strobe lights, string lights, etc.), balcony lights, landscape lights, and uplights.
15. **Outdoor Area:** any portion of a property that could have an artificial light source not attached to a permanent structure, including but not limited to pathway lighting, landscape lighting, pool lighting, etc.
16. **Sea Turtle:** any turtle, including all life stages from egg to adult, of these species: Green (*Chelonia mydas*), Leatherback (*Dermochelys coriacea*), Loggerhead (*Caretta caretta*), Hawksbill (*Eretmochelys imbricata*), and Kemp's ridley (*Lepidochelys kempii*). For the purposes of this ordinance, the term sea turtle is synonymous with marine turtle.
17. **Sea Turtle Nesting Habitat:** all sandy beaches adjoining the waters of the Atlantic Ocean, the Gulf of Mexico, and the Straits of Florida in all coastal counties and all inlet shorelines of those beaches. Nesting habitat includes all sandy beach and unvegetated or sparsely vegetated dunes immediately adjacent to the sandy beach and accessible to nesting female turtles.
18. **Temporary Lighting:** any non-permanent light source that may be hand-held or portable including but not limited to tiki torches, lanterns, flashlights (including cell phone flashlights), candles, flash photography, etc.
19. **Tinted glass:** glass modified via tinting, film or other material to reduce the inside to outside light transmittance value.

SECTION ____-2. - SEA TURTLE LIGHTING DISTRICT

Sec. ____-2.1. - Applicability

1. An overlay district, known as the *Sea Turtle Lighting District*, is hereby established within the **City/County of _____**.
2. The *Sea Turtle Lighting District* shall include all properties within the **City/County of _____**, that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties.

3. The provisions of this Ordinance apply to new and existing artificial lighting visible from the beach from all buildings and related infrastructure, including streetscapes, parking lots, outdoor areas, landscaping, as well as public parks and recreational areas and all other activities within the *Sea Turtle Lighting District*.
4. The provisions of this Ordinance are not intended to prevent the use of any design, materials or method of installation or operation not specifically prescribed herein, provided any such alternate has been approved. The **City/County of _____** may approve any such proposed alternate provided it:
 - a. Provides at least approximate equivalence to the applicable specific requirements of this Ordinance, and;
 - b. Is otherwise satisfactory or complies with the intent of this Ordinance, and;
 - c. Has been designed or approved by a registered lighting or electrical engineer and is supported by calculations showing that the design submitted meets that intent of the Ordinance. This sub-section shall not have the effect of waiving the lumen caps specified in this Ordinance.
 - d. Has been determined to meet requirements for Certified Wildlife Lighting and/or lights that meet FWC's Wildlife Lighting Guidelines, including long wavelength light sources (without the use of filters), full cut-off, and fully shielded fixtures.
5. Any person substantially aggrieved by any decision of the *Beach Lighting Inspector* or the *Building Official* made in administration of this Ordinance has the right and responsibilities of appeal to the *Advisory/Appeals Board* of this jurisdiction.

*Guidance: This Model establishes an Overlay District for the purpose of implementing the ordinance. This ordinance could be applied by simply consolidating (2) and (3) above and making it applicable to "all properties within the **City/County of _____** that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties." However, creating a District may have other benefits which include incorporating other Sea Turtle best management practices not related to lighting, as well as raising awareness through signage, etc.*

Sec. ____-2.2. - Annual Public Notice

At least thirty days prior to the commencement of every sea turtle nesting season, the **City/County of _____** shall provide notice to affected persons within the *Sea Turtle Lighting District* of the provisions contained in this Ordinance.

Declaring an official annual "lights out for sea turtles" day either the first Monday in February or April depending on the county, could also be useful. Another alternative would be designating the responsible department or official for implementing the ordinance and noticing the public.

SECTION ____-3. - LIGHTING PROVISIONS

Sec. ____-3.1. – General

Guidance: In order to provide the highest level of protection for nesting marine turtles and their hatchlings, local governments are encouraged to adopt all of the following standards for artificial beachfront lighting sources.

1. The following standards for artificial light sources are intended to help minimize harmful effects of light pollution in sea turtle nesting areas. The use of Certified Wildlife Lighting will provide the highest level of protection for nesting sea turtles and their hatchlings. Certified Wildlife Lighting refers to lighting fixtures and bulbs reviewed and approved through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process and published at <https://myfwc.com/conservation/you-conserve/lighting/criteria/certified/>. Certified Wildlife Lighting and/or lights that meet FWC's Wildlife Lighting Guidelines, must be installed and maintained according to the approved conditions of use to achieve the light pollution reduction objectives of this Ordinance.

Guidance: The FWC Certified Wildlife Lighting website references the required options and bulleted caveats for each certified fixture. These conditions of approved use are also included in the certification letter issued to the manufacturer for the fixture. FWC Sea Turtle Lighting Guidelines can be accessed at the Sea Turtles and Lights webpage at <https://myfwc.com/wildlifehabitats/wildlife/sea-turtle/lighting/>.

2. New construction refers to all new construction of or additions and alterations to buildings, pools, pavement, other structures, landscape areas or lighting systems, including the change or resumption of land use. The most protective lighting standards apply to new construction visible from the beach.
3. Existing artificial lighting refers to lighting fixtures, sources and systems operating prior to the effective date of this ordinance. Existing lights and light sources that are visible from the beach shall be replaced or modified to conform to standards given in Section -3.7. In order to bring existing lighting systems into future compliance with this Ordinance, standards for new coastal construction shall be applied when permits are sought for new structures or the alteration, movement, enlargement, replacement or installation of new lighting systems.

Sec. ____-3.2. Exterior and Interior Lighting Affixed to New Structures, New Construction and Improvements to Existing Structures

1. All lighting affixed to the exterior of new permanent structures, construction or additions shall be long wavelength, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible to achieve the required foot-candles.
2. As an exception to -3.2.1. above, non-egress lighting may be affixed to the landward exterior of permanent structures provided that the fixtures are fitted with a long wavelength source and are not directly, indirectly, or cumulatively visible from any portion of the beach.

3. Lighting at egress points shall be limited to the minimum number of fixtures and foot-candles necessary to meet federal, state, and local safety requirements.
4. Locations including but not limited to stairwells, elevators, parking garages, or courtyards shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach. Light screens, shades or curtains shall be used to block visibility of interior lights from the beach. Light screens shall be used on open or enclosed staircases on the seaward or shore-perpendicular side of a building or for parking garages to limit visibility of lights from the nesting beach.
5. All glass windows, walls, railings and doors on the seaward and shore-perpendicular sides of any new construction shall use tinted glass with an inside to outside light transmittance value of 45 percent or less.

Guidance: Local governments may apply special considerations to control interior lighting from being directly visible from the beach.

6. Emergency lights are not subject to the above standards if on a separate circuit and activated only during power outtages or other situations in which emergency lighting is necessary for public safety.

Sec. ____-3.3. - Outdoor Areas

1. All lighting of outdoor areas shall be long wavelength, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible to achieve the required foot-candles.
2. Lighting of paths, walks and routes of building access shall use low level fixtures such as step, paver, path, recessed wall or bollard lights. Bollard lights are not to exceed 42 inches in height and other low level fixtures are to meet the height requirements of FWC's Wildlife Lighting Guidelines. Fixtures shall be downward directed and utilize long wavelength lamps and beachside shields.
3. As an exception to -3.3.1. above, non-egress outdoor lighting may be installed landward of buildings or other opaque structures provided that they are fitted with long wavelength light sources and are not directly, indirectly, or cumulatively visible from any portion of the beach.
4. Internally or externally lighted signs shall not be located on the seaward and shore-perpendicular sides of any structures, and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
5. Ponds and fountains on the seaward and shore-perpendicular sides of any structures shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
6. Fire pits located on the seaward and shore-perpendicular sides of any structure shall be shielded with an opaque structure or partition, and positioned such that the flame is not directly, indirectly, or cumulatively visible from any portion of the beach. Bonfires and bonfire pits are prohibited within sea turtle nesting habitat during sea turtle nesting season.
7. Televisions or other illuminated screens shall be located landward of the dune and shall be shielded or positioned such that they are not directly, indirectly, or cumulatively visible from the beach.

Sec. ____-3.4. - Parking Areas and Roadways

1. All lighting of parking areas and roadways shall be long wavelength, downward directed, full cutoff, fully shielded, and mounted to the minimum level required to maintain compliance with federal, state and local law.
 2. Parking area and roadway lighting shall be shielded from the beach via vegetation, natural features, or artificial structures rising from the ground. These shall prevent artificial light sources, including but not limited to vehicular headlights, from producing light that is directly, indirectly, or cumulatively visible from any portion of the beach.
 3. Lighting of roadways and parking areas shall produce no more lighting than the minimum requirement as outlined by federal, state and local law.
 4. Lighting of parking areas and roadways shall consist of either:
 - a. Ground-level downward-directed fixtures, equipped with interior dark-colored, non-reflective baffles or louvers, mounted either with a wall mount, on walls or piles, facing away from the beach, or
 - b. Bollard-type fixtures, which do not extend more than 42 inches above the adjacent floor or deck, measured from the bottom of fixture, equipped with downward-directed louvers that completely hide the light source, and externally shielded on the side facing the beach, or
 - c. Pole-Mounted Lights, if required, shall adhere to the restrictions located in subsection -3.4.5.
 5. Pole-mounted lights shall only be used in parking areas and roadways when mounting the lights at lower elevations cannot practicably comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety. If required, pole-mounted lights shall be:
 - a. Located on the landward sides of buildings and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach,
 - b. Mounted at the minimum height required to meet the minimum light level requirement-, and
 - c. Downward-directed onto non-reflective surfaces.
- Guidance: Roadway and parking area lighting designed pursuant to Section 231.2.1 Wildlife-Sensitive Conventional Lighting of the Florida Department of Transportation (FDOT) Design Manual (January 1, 2020) available at <https://www.fdot.gov/roadway/fdm/default.shtm>, and meeting the requirements of Section 992-2.4.2, Luminaires for Wildlife-Sensitive Conventional Lighting, of the FDOT "Standard Specifications for Road and Bridge Construction (January 2020)," and available at <https://www.fdot.gov/programmanagement/implemented/specbooks/default.shtm>, are expected to meet the minimum standards of this section.*
6. Equipment yards, storage yards, and temporary security lights shall also adhere to the lighting restrictions contained in this Section.

Sec. ____-3.5. - Pool Areas

1. Lighting of pool decks, pool facilities, swimming pools, and spas shall be long wavelength and fully shielded.
2. Lighting of the pool water surfaces and the pool wet deck surfaces shall comply with the minimum light levels set forth in applicable federal and state laws designed to protect public safety.
3. Above-water lighting of pool decks, pool facilities, swimming pools, and spas shall otherwise adhere to the applicable requirements for acceptable light fixtures contained in Section 1 and Section 2 of this Section.
4. Underwater lighting of pools or spa light shall:
 - a. Be mounted horizontally in the wall,
 - b. Not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach, and
 - c. Shall comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety.

Sec. ____-3.6. - Beach Access Points and Dune Walkovers

1. Lighting of beach access points shall be located and configured to only illuminate areas landward of the beach and frontal dune. All lighting of beach access points shall be long wavelength, downward directed, full cutoff and fully shielded and shall not be directly, indirectly, or cumulatively visible from the beach.
2. Lights are allowable on dune walkovers or elevated boardwalks only as required for building code purposes and may only be installed landward of the frontal dune. Walkover lighting shall not be directly, indirectly or cumulatively visible from the beach.

Sec. ____-3.7. – Existing Exterior and Interior Lighting

1. Reduce or eliminate the negative effects of existing exterior artificial lighting through the following measures:
 - a. Reposition, modify or remove existing lighting fixtures so that the point source of light or any reflective surface of the light fixture is no longer directly, indirectly or cumulatively visible from the beach;
 - b. Replace fixtures having an exposed light source with fully shielded fixtures;
 - c. Replace any light source, light bulb or lamp that is not long wavelength (e.g. incandescent, fluorescent, or high intensity lighting) with the lowest wattage long wavelength (e.g. LED or low pressure sodium) light source or lamp available for the specific application;

- d. Replace non-directional fixtures with directional fixtures that point down and away from the beach;
 - e. Provide shields for fixtures visible from the beach and not practical to immediately be replaced. Beachside shields are to cover 270 degrees and extend below the bottom edge of the fixture on the seaward side so that the light source or any reflective surface of the light fixture is not visible from the beach;
 - f. Replace pole lamps with low-profile, low-level luminaries so that the light source or any reflective surface of the light fixture is not visible from the beach;
 - g. Plant or improve vegetation buffers between the light source and the beach to screen light from the beach;
 - h. Construct a ground level barrier landward of the beach and frontal dune to shield light sources from the beach. Ground-level barriers are to be considered a last resort when no other remediation of the light source is feasible. Ground level barriers may be subject to state coastal construction control line regulations under section 161.053, Florida Statutes, and must not interfere with sea turtle nesting or hatchling emergence, or cause short- or long- term damage to the beach and dune system;
 - i. Permanently remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards.
2. Take one or more of the following measures to minimize interior light emanating from doors and windows within line-of-sight of the beach:
- a. Apply window tint or film that meets the light transmittance standards for tinted glass;
 - b. Rearrange lamps and other moveable fixtures away from windows;
 - c. Use opaque shades or room darkening window treatments (e.g., blinds, curtains, screens) to shield interior lights from the beach.

Guidance: In order to provide the highest level of protection for nesting marine turtles and their hatchlings, local governments are directed to adopt all of the above standards for existing artificial beachfront lighting sources.

Sec. ____-3.8. – Pier Structures

- 1. Lighting of pier structures projecting over the beach or over water shall be long wavelength, downward-directed, and fully shielded.
- 2. Lighting of pier structures projecting over the beach, or over water, shall be mounted no higher than 42 inches above the deck surface. These shall be directed onto the deck surface only, preventing light pollution or light spillage beyond the walking surface.
- 3. Lighting of pier structures projecting over the beach or over water shall comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety.

Guidance: Note that the pier light standards do not address light sources from illuminated screens or signage associated with restrooms or bait shops on piers.

Sec. ____-3.9. - Special Events, Motor Vehicles, and Temporary Lighting

1. Lighting associated with a special event that may directly, indirectly, or cumulatively be visible from any portion of the beach shall not be authorized at nighttime during sea turtle nesting season.
2. The operation of all motorized vehicles, except emergency and law enforcement vehicles or those permitted on the beach for sea turtle conservation in accordance with Florida Statute 379.2431 (1), or other research and conservation, shall be prohibited on the beach at nighttime during sea turtle nesting season.
3. Within sea turtle nesting season, temporary work zone lighting for roadway construction and during declared emergencies shall be directed away from the beach to avoid illumination of or direct visibility from the beach. Work zone luminaires shall be shielded to avoid lighting areas outside of the immediate construction area.
4. All other temporary construction lighting shall be:
 - a. Inclusive of all the standards of this Section, including using fixtures that are long wavelength, downward directed, full cutoff, and fully shielded so light is not directly or indirectly visible from the beach, and
 - b. Turned off during nighttime in sea turtle nesting season, or if authorized by the *Beach Lighting Inspector* during sea turtle nesting season, shall only be allowed from 6:00am to 9:00pm, must be restricted to the minimal amount necessary, and shall incorporate all the standards of this Section, and
 - c. Mounted less than eight feet above the adjacent floor or deck, measured from the bottom of fixture, and
 - d. Restricted to the minimal number of foot-candles necessary to conform to the applicable construction safety regulations.
5. Handheld and other portable temporary lighting shall not be directed toward or used in a manner that disturbs sea turtles or other coastal wildlife.

SECTION ____-4. - COMPLIANCE AND ENFORCEMENT PROCEDURES

Sec. ____-4.1. - Beach Lighting Inspector

1. A position, known as the **City/County of _____** *Beach Lighting Inspector*, is hereby established.

Guidance: While the model creates a beach lighting inspector, local governments may choose to identify someone already on staff, such as a code enforcement officer, for the position. It is

most important that the designated individual receive appropriate training.

2. It shall be the duty of the City/County Manager to appoint the *Beach Lighting Inspector*. The *Beach Lighting Inspector* shall have the necessary training, technical knowledge, and resources to enable them to effectively carry out the duties of this office. The *Beach Lighting Inspector* may access resources provided by other local, state or federal agencies such as the *Sample Beach Lighting Survey Worksheet*, training, and other information available from the Florida Fish and Wildlife Conservation Commission.
3. The *Beach Lighting Inspector* shall be responsible for:
 - a. Inspecting the entire beach within the jurisdictional boundaries of the **City/County of _____** regularly during sea turtle nesting season to determine the extent of compliance with this Ordinance.
 - b. In the event of the finding of a violation at a particular public or private property, conducting further inspections at the property at any time beginning on the night after the deadline date given on the written notice of violation. These follow-up inspections shall continue until the lighting has been brought into compliance with this Ordinance.
 - c. *Beach Lighting Inspector* responsibilities may also include preparation of reports, issuance of non-compliance notices, outreach and education, supporting administrative actions before a review board or special magistrate, or attending building permit pre-application and pre-construction conferences.

Guidance: At minimum, night time lighting surveys and compliance inspections are recommended before and during sea turtle nesting season. Compliance inspections that are conducted frequently throughout the nesting season may be beneficial to local governments in identifying and addressing noncompliant lighting.

4. It shall be unlawful for any person to interfere with, or in any manner hinder the *Beach Lighting Inspector*, or any of their assistants, while in the discharge of their duties under the terms of this Ordinance.
5. It shall be unlawful for any person to knowingly conceal or disable any lighting on a property before it has been inspected by the *Beach Lighting Inspector*.

Sec. ____-4.2. - Notice of Violation

1. Upon finding any violation of this Ordinance, the *Beach Lighting Inspector* shall deliver a written notice of the violation of this Ordinance to the property owner and direct said owner to promptly remove or remediate lighting not in compliance with this Ordinance.
2. The time allowed for making the repairs shall be stated in the notice and should the responsible party neglect or refuse to remove or remediate non-compliance within the specified time stated in the notice, the party so offending shall commit a violation of this Ordinance and be penalized as provided in Subsection ____-4.3 of this Ordinance.

Sec. ____-4.3. - Penalties

1. Any person who takes any action or omission in violation of any provision of this Ordinance and fails to resolve such violation after proper notice is provided, shall be subject to a fine of up to \$ ____ per day per violation for initial violations, and \$ ____ per day per violation for repeat violations. All penalties incurred as a result of violation of this Ordinance shall continue to accrue until such violations are cured.
2. The **City/County of** _____ shall have the right to encumber such property in violation of this Ordinance with a lien for an amount equal to the total amount of fines owed at the time such lien is recorded.

Sec. ____-4.4. - Sea Turtle Fund

1. A *Sea Turtle Fund* is hereby established within the **City/County of** _____.
2. All funds collected as a result of the issuance of fines under Section 3 of this Part shall be deposited in the *Sea Turtle Fund*. The funds in this account shall be used for:
 - a. Assistance to property owners for the procurement of light systems equipment and materials that comply with this Ordinance and reduce the amount of artificial beach lighting,
 - b. Educational materials to inform the general public on the threats of artificial lighting to sea turtles, including but not limited to signs, door knockers, pamphlets, stickers, public service announcements, and other awareness campaigns, and
 - c. Equipment, materials and other resources supporting compliance assistance and enforcement by the *Beach Lighting Inspector*.
 - d. Other reasonable efforts to protect the sea turtle population within the **City/County of** _____, including but not limited to research and conservation projects.
3. The **City/County of** _____ may contribute funding from other sources into the *Sea Turtle Fund* for uses consistent with the purposes set forth above.

SECTION ____-5. - OTHER CLAUSES

Sec. ____-5.1. - Conflict with Other Ordinances

If this Ordinance conflicts with any other Ordinance or requirement of the **City/County of** _____, then this Ordinance shall control during sea turtle nesting season. Deviations from this Ordinance shall be subject to the variance procedures as established by this City/County.

Sec. ____-5.2. - Severability

If any Section or Subsection of this Ordinance is invalidated for any reason, the effected portion may be eliminated or modified to correct the reason of invalidation, if feasible without materially altering or negating the Ordinance Goals and the principles of sea turtle lighting.

Sec. ____-5.3. - Effective Date

The **City/County of** _____ Lighting Ordinance for Sea Turtle Protection shall become effective upon recommendation by _____ and approval by the _____.

FWC SEA TURTLE LIGHTING GUIDELINES

These guidelines provide general information for all property owners living adjacent to sea turtle nesting beaches, but they are specifically designed to help property owners required to avoid and minimize lighting impacts to sea turtles as part of the State permitting programs, such as Coastal Construction Control Line (CCCL) permits and Environmental Resource Permits (ERP). In the permitting process, property owners must minimize all lights that may be visible from the beach, including all exterior, structural, decorative, and landscape lighting. This includes interior light visible through glass windows, doors and walls (either facing or perpendicular to the beach) as well as light from pools, fire pits, electronic devices such as televisions, tiki torches, etc.

FWC recommends beachfront property owners follow the **three golden rules**, “**Low-Shielded-Long**” when installing or modifying lights. All three must be used in combination to be effective, as they are all equally important!

KEEP IT LOW

- Fixtures must be mounted as **low as possible** to achieve required light levels.
- Bulbs must produce the **lowest wattage/lumens** necessary for the needed purpose.

KEEP IT SHIELDED

- Fixtures must be completely downward-directed.
- Fixtures must shield the bulb, lamp, or glowing lens from the beach.

BAD EXAMPLE: Unshielded bulb



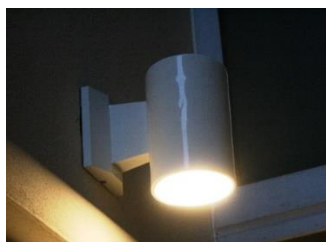
GOOD EXAMPLE: Shielded bulb with Amber LED (long-wavelength, 560 nm or higher)



KEEP IT LONG

- Lamp/Bulb must produce only **long wavelength light** (560 nm or greater, which is amber, orange, or red)
 - **The Best Current Technology:** Red LED, Orange LED, Amber LED, Low Pressure Sodium (LPS)
 - Please note, phosphorus converted bulbs, such as PC amber bulbs are not true long wavelength light sources, since there are wavelength readings below 560 nm.

BAD: Incandescent bulb



GOOD: Amber Bulb (long-wavelength, 560nm or higher)



Acceptable Fixtures

All exterior lights proposed for the seaward or shore perpendicular side of the structure should be well-shielded, full cut-off, downward directed fixtures with a long-wavelength light source (wavelength readings of 560 nanometers (nm) or higher).

If the exterior fixtures on the landward side of the structure are **not** visible directly or indirectly from the beach, they are only required to be downward directed.

How effective are full cut-off fixtures?

Below, look at an unshielded fixture and a full cut-off fixture side-by-side. The acorn light on the left wastes about 60% of the light into the sky. The one on the right is a full-cut off fixture with a recessed bulb, which provides more light on the ground. This is a good example of how full-cut off fixtures are not only good for sea turtles, but also for human safety because they direct light where it is needed, on the ground. To make the full cut-off example even better, it should be fitted with a shield that blocks light on the beachside and a long-wavelength lamp/bulb.



Acceptable Lamps / Bulbs

All fixtures visible from the beach should have a long-wavelength lamp – a bulb that looks amber or red because it only produces light with wavelengths of 560 nm or higher. White light such as metal halide, halogen, fluorescent, mercury vapor and incandescent lamps can disorient nesting sea turtles and their hatchlings, leading them away from the water. The following fixtures will minimize – but not totally remove – the risk of disorientation if properly installed in a well shielded, downward directed fixture.

- Low Pressure Sodium (LPS): 18W, 35W
- Red, Orange or Amber LED (true red, orange or amber diodes, NOT FILTERS)
- True red neon
- Other light sources that produce light of 560 nm or greater

HINT: LEDs tend to be much brighter than incandescent bulbs, so be sure not to over light an area!

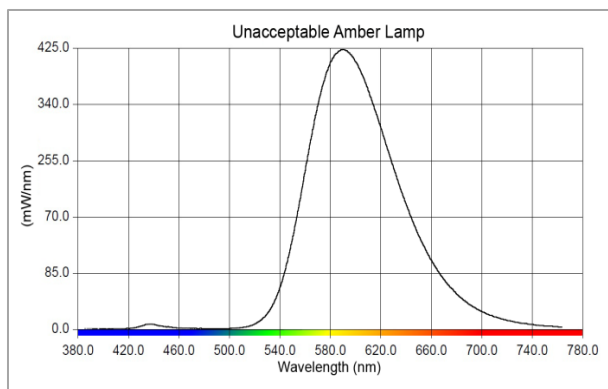
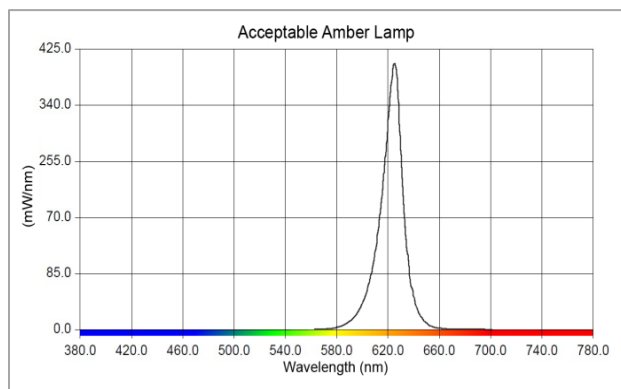
Upon review and approval by FWC, use of shorter wavelength lights may be allowed in limited areas where direct and indirect light or glow would not be visible from the beach.

A list of the Florida Fish and Wildlife Conservation Commission's Certified Wildlife Lighting, which includes acceptable lamps/bulbs for fixtures, can be found [here](#).

How can I tell if it is a long-wavelength light source?

Specifications for the wavelength is available from the manufacturer. Specifically, you can request a spectral distribution graph, as seen below.

The graph on the left displays an **acceptable** wavelength reading for a long-wavelength light source (i.e. amber lamp), with wavelength readings above 560 nm or higher. The graph on the right displays an **unacceptable** wavelength reading, with wavelength readings below the 560 nm cutoff.



Minimizing Light

Even though a fixture/lamp combination may be Low-Shielded-Long, too many fixtures may still result in sea turtles becoming disoriented. In addition to the lowest wattage necessary for safety, light can also be minimized by installing fewer fixtures.

- Use the lowest wattage necessary.
- Use a minimal number of fixtures.
- Use only if needed for safety.

Why do I need to minimize long-wavelength light?

A common misconception is that long-wavelength lighting (i.e. LPS, Red, Orange or Amber LEDs) is not visible to sea turtles. This is FALSE. Long-wavelength lighting is less disruptive than white light, but even long-wavelength lighting that is too bright may cause impacts to sea turtles and their hatchlings! Therefore, we recommend only utilizing lights that may be visible from the beach if there are state or federal requirements for specific light levels to ensure public safety (such as stairs or egress/ingress walkways).

We **do not recommend** the following types of lighting, since they are not needed for safety:

- Private balcony lights
- Pond lights
- Tree Strap Downlights
- Fountain lights on seaward or shore perpendicular side of a structure
- Up lights
- Dune Walk over lights
- Decorative Lighting

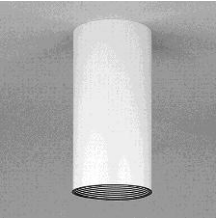
Impacts from interior lighting

State rules require that tinted glass or film with a visible light transmittance value of forty-five (45) percent or less (inside to outside) must be used on all glass windows, doors and walls within line of sight of the beach, usually the seaward and shore-perpendicular sides of the structure. However, since those rules were passed, there are now better options because of advances in tinting and more information on sea turtle disorientations. Window tints/film with transmittance values lower than 45% are available that are energy efficient, pleasing and easily seen through. **The best option for minimizing lighting impacts to sea turtles is 15% transmittance**, with 25-30% transmittance the most popular. Many local lighting ordinances require that interior lights cannot be visible from the beach; therefore, the use of higher transmittance tints (such as 45%) often requires installation of additional window treatments to achieve compliance with the ordinance.

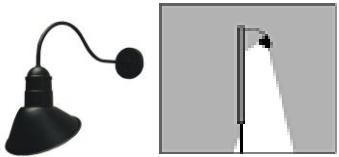
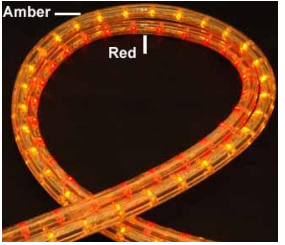
If the information above is followed, your home or building is not expected to adversely impact nesting sea turtles, their hatchlings or their habitat. Thank you for doing your part to protect Florida's sea turtles!

*Please email Wildlifelighting@MyFWC.com if you need additional information or help.

EXAMPLES OF TURTLE FRIENDLY FIXTURES

FIXTURE	LAMP & WATTAGE	MOUNTING TYPE & HEIGHT	LOCATION	COMMENTS and/or ADDITIONAL REQUIREMENT
Ceiling Mount Cylinder (with interior black baffles) 	Red/orange/amber LED	Ceiling Surface	If located on shore perpendicular or beach side of structure allow on <u>ground floor</u> only	Interior Black Baffles
Wall Mount Cylinder Down Light (with interior black baffles) 	Red/orange/amber LED	Wall Mount Downward Directed 8 ft from floor	If located on shore perpendicular or beach side of structure allow on <u>first habitable floor</u> only	Interior Black Baffles Hex cell louvers may be required to decrease wall wash
Recessed Ceiling Canister 	Red/orange/amber LED <u>The following short wavelength lamps may only be used for covered driveway entry on landward side of structures</u> • Halogen lamp • PAR spot lamps • LED lamps • HPS lamps • Compact Fluorescent	Recessed Ceiling	If located on shore perpendicular or beach side of structure allow on <u>ground floor</u> only	Interior black baffles Hex cell (honeycomb) louver

Recessed and Wall Mounted Step Lights (louwered or downward directed) 	Red/orange/amber LED	Wall Mount Maximum height 24 inches on Ground Floor only Above Ground Floor Max height 12 inches	Ground floor, second level, and pool Deck	If on perimeter of pool deck, must be mounted directed away from beach.
Bollard (with downward directed louvers) 	18w LPS Red/orange/amber LED	Maximum height 42 in	Parking areas, commercial walkway, landscape, pathway and pool deck	180° to 270° beach side shields on any fixture on perimeter of pool deck or immediately adjacent to beach.
High Intensity Full Cut Off Pole Lights 	18-35 w LPS (if twin head, maximum of 36w total) Orange/amber LED	Pole - maximum height 12 feet	Parking area Landward side of structure only.	Beach side shields and/or louvers for any fixture within line of sight of beach.
Paver Lights 	Red/orange/amber LED	In ground mount	Parking areas, driveways, pathways, pool decks	

Landscape/Pathway Lighting 	Red/orange/amber LED	Ground mount Maximum height 12 inches	Ground Level, landscape	
Signage 	Red/orange/amber LED	Must be mounted with light directed <u>down</u> on to sign. NOT UP	Sign should be on landward side of structure when possible and mounted perpendicular to the beach.	
Garage Lighting (Phoenix) 	35w LPS Amber/Orange/Red LED	Garage Ceiling	Garage	If a parking garage is not fully enclosed with solid walls, without windows, louvers, or screens so that the interior is not visible from any section of beach, only LPS or amber/orange LED lamps shall be used. Additional shields may be necessary if parking is above ground level.
Channel / Rope Lighting 	Red/orange/amber LED <u>NOT colored plastic tubing with white lights</u> <u>No White LED</u>	Must be mounted recessed under steps, bar, etc. and directed <u>down</u> to assure that light source or reflected light is not visible from beach	Pool deck, steps, pool bars.	

Water Feature Lighting 	Red/orange/amber LED	Light must be downward or horizontally directed <u>DO NOT direct light up</u>	Submerged lights are only allowed on landward side of structure and only if fully shielded from beach by structure	
Underwater Swimming Pool Lighting 	Red/orange/amber LED			
Emergency Egress Lighting 	Red LED Exit signs Full cut off downward directed Emergency egress fixtures may use short wavelength lamps			Short wavelength lamped emergency egress fixtures must be specified on fixture schedule and plans to be on separate circuit that will only illuminate fixtures during power outage

Influences of Wavelength and Intensity on Hatchling Sea Turtle Phototaxis: Implications for Sea-Finding Behavior

BLAIR E. WITHERINGTON AND KAREN A. BJORNDAAL

Visual cues are important to sea turtle hatchlings in determining seaward direction upon emerging from the nest. In this study, we examined the roles that color and intensity play in the sea-finding mechanisms employed by loggerhead (*Caretta caretta*) and green turtle (*Chelonia mydas*) hatchlings. We tested hatchling preference for a standard source of constant intensity and color (1.26×10^{15} photons $s^{-1} m^{-2}$ at 520 nm), versus an adjustable light source (one of five monochromatic colors at each of seven photon intensities), using a two-choice apparatus. Both species oriented toward near-ultraviolet (360 nm), violet (400 nm), and blue-green (500 nm) light but chose the standard light source over yellow-orange (600 nm) and red (700 nm) light. There was a positive relationship between intensity and preference with 360, 400, and 500 nm light. We also examined hatchling choice of either a darkened window or a window lighted by one of eight monochromatic colors at each of two intensities. In these experiments, loggerheads oriented toward 360, 400, and 500 nm light but away from light in the green-yellow to yellow-orange range (560, 580, and 600 nm). Loggerheads oriented toward 700 nm light only at high intensity. Green turtles responded insignificantly to 600 or 700 nm light at either intensity. The contrast of green turtle behavioral responses with published electrophysiological data and the aversion to yellow light observed in loggerheads suggest some level of spectral quality assessment in sea finding for both species.

HATCHLING sea turtles emerge from sub-surface nests on oceanic beaches, primarily at night, and immediately move toward the sea. Hatchlings not entering the ocean expeditiously suffer high mortality from predation, exhaustion, and desiccation. The sea-finding behavior of neonate hatchlings occurs to the exclusion of other predator avoidance behaviors. The robust nature of the sea-finding response in sea turtles makes it an excellent model for the study of animal orientation. A detailed description of hatchling sea-finding behavior in the green turtle (*Chelonia mydas*) is given by Carr and Ogren (1960).

Bilaterally blindfolded green turtle (Carr and Ogren, 1960) and loggerhead (*Caretta caretta*; Daniel and Smith, 1947) hatchlings are unable to orient directly toward the sea, providing the best evidence that hatchling sea finding is dependent on visual cues. Green turtle hatchlings also are attracted to artificial light sources (Mrosovsky and Shettleworth, 1968) and lightly tinted objects (Carr and Ogren, 1960) and will move in those directions irrespective of beach slope. The use of vision by sea-finding hatchlings may include an assessment of any combination of the many properties of light detectable by the eye.

Properties of light studied with respect to hatchling orientation include intensity, color, direction, and shape.

Two models predict that sea-finding hatchlings will move in the brightest direction. Brightness in this sense is a measure of intensity having both the directional and spectral sensitivity properties of the hatchling in question. Models describing the mechanism by which hatchlings orient in the brightest direction involve either phototropotaxis (Mrosovsky and Kingsmill, 1985) or a direction system (Verheijen and Wildschut, 1973; van Rhijn, 1979). A third model involves shape as a visual cue (Parker, 1922; Limpus, 1971; van Rhijn, 1979). This model implies form vision and the ability to recognize differences of pattern in the silhouettes of duneward and seaward horizons. Experiments conducted by van Rhijn and van Gorkom (1983) suggest this system may be distinct from, but complementary to, either of the two previous systems.

Spectral quality assessment, or the use of color as a seaward orientation cue also has been suggested (Hooker, 1911; Mrosovsky, 1972). Differential responses to colors may be because of color discrimination as well as a spectral bias

resulting from physiological spectral sensitivity range. Both light intensity and spectral properties play important roles in each of the visual sea-finding mechanisms above. Previous attempts to elucidate the roles of color and intensity in sea turtle hatchling orientation have been limited (Mrosovsky and Carr, 1967; Mrosovsky and Shettleworth, 1968). Primary limitations have been an inability to isolate narrow bandwidths of spectral light and to measure light intensity (e.g., irradiance) at specific wavelengths. Broad-band filters used in earlier studies allow the transmission of many wavelengths and make the assignment of hatchling response to specific colors questionable.

In this paper, we assess preferences for light intensities and narrow bandwidth color sources in loggerhead and green turtle hatchlings during their sea-finding behavior. We evaluate the spectral quality assessment model for hatchling sea finding and suggest a reassessment of models that predict "brightest direction" orientation.

METHODS

Hatchlings.—Loggerhead and green turtle hatchlings for the experiments were taken from clutches transferred into a secured hatchery near Melbourne Beach, Florida, during the summer nesting season, 1988. We examined hatchery nests for signs of hatchling emergence activity at dusk beginning 50 d into incubation (incubation period approximately 50–57 d). Hatchlings typically lie just beneath the surface of the sand until decreasing nighttime temperatures prompt their emergence en masse (Mrosovsky, 1968). We collected hatchlings just after dusk, when they were ready to emerge, and transported them in darkened buckets to an indoor laboratory within 200 m of the hatchery. We kept hatchlings in the dark to ensure that they remained dark adapted and photically naive for experimental trials. Hatchlings were collected and used in experiments during a time when hatchlings are normally emerging and moving to the sea (2100–0200 h, Witherington et al., 1990). Each hatchling was used for a single trial and released the same night on the beach.

Experimental apparatus.—We used a modified T-maze (V-maze) to determine hatchling preference with respect to photic cues (Fig. 1). This apparatus was a V-shaped wooden box, with each identical arm 78 cm in length. Openings

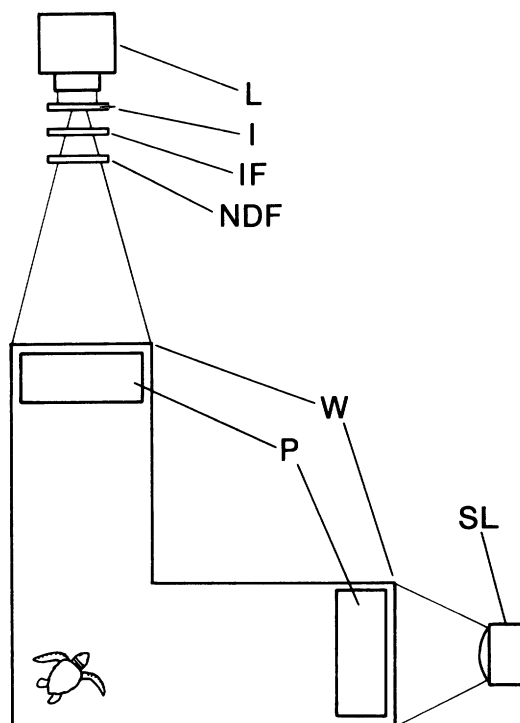


Fig. 1. Schematic diagram of a V-maze used in two-choice, color preference experiments with loggerhead and green turtle hatchlings. L = lamp; I = iris; IF = interference filter; NDF = neutral density filter; W = window; P = pitfall; SL = standard lamp.

at either end of the V-maze were 32×32 cm and covered with windows of diffusing acrylic. Black, flocked paper lined the inside of the box. Hatchlings were introduced into the V-maze through a 32×32 cm opening in the top of the box near the vertex, which was covered with a black cloth curtain. Hatchlings were covered with an opaque cup that was raised after approximately 20 s to release the hatchling for each trial. We placed hatchlings within the cup so that they pointed toward the midpoint between the two windows, although hatchlings often altered their orientation during the time preceding release. Hatchlings walking from the vertex down either alley of the V-maze would fall into a cloth pitfall pocket at the base of either window.

We positioned two light sources so they shone through each of the two windows of the V-maze (Fig. 1). One of the light sources—hereafter termed standard source—emitted light of constant color (peak emission 520 nm) and intensity

(1.26×10^{15} photons $\text{s}^{-1} \text{m}^{-2}$ at 520 nm). This source was a conventional tungsten lamp powered with a 3.0 V DC source and fitted with a blue gel filter. We used the blue filter to reduce intensity of the standard source and to make the color of the source more easily reproduced. This standard source attracted all hatchlings ($n = 20$) of each species to a lighted V-maze window when no other light was presented in pre-trials. A second source—hereafter termed adjustable source—could be varied in color and intensity. Light for this source originated from a 3200 K (manufacturer's specification) tungsten lamp operated at 115 V AC. We regulated spectral emission of the source with narrow band interference filters (Melles Griot, half bandwidth = 10 nm; transmission outside 20 nm bandpass <0.001%). The angle of the light source beam with the filters was 90° for all trials. We regulated intensity by use of an iris aperture and combinations of neutral density filters (Melles Griot, 3.0, 2.0, 1.0, 0.5, 0.3, 0.1, and 0.04 OD). Intensity was measured as photon flux at the hatchling release point with a LICOR LI-1800 spectroradiometer.

We conducted experiments in a room completely darkened except for the standard and adjustable sources. A series of light baffles prevented light of either source from affecting the other window. Line voltage for the sources was monitored and did not vary more than 1% during experiments.

Treatments.—To determine whether hatchling orientation might be biased toward one of the two windows, we released 42 hatchling loggerheads and 23 hatchling green turtles within the V-maze when both light sources were off. The distribution of loggerhead and green turtle hatchlings falling into pitfalls at either window of the V-maze with both light sources off could not be distinguished from random ($\alpha = 0.05$, binomial probability test, $Z = 0.179$ and $Z = 0.133$, respectively).

To determine the relative preference of hatchlings for light of specific color and intensity, we released hatchlings within the V-maze while respective windows were illuminated with the adjustable source and standard source. In these trials—identified as adjustable source versus standard source—the adjustable source varied among five monochromatic colors and six intensities. Treatment colors were 360 nm (near-ultraviolet), 400 nm (violet), 500 nm (blue-green), 600 nm (yellow-orange), and 700 nm

(deep red) peak transmission. We measured treatment intensities as photon flux and assigned values to a logarithmic scale. Intensities were (log values shown parenthetically) 2.50×10^{14} (0.7), 1.27×10^{15} (1.4), 6.31×10^{15} (2.1), 3.17×10^{16} (2.8), 1.58×10^{17} (3.5), and 1.44×10^{19} (5.5) photons $\text{s}^{-1} \text{m}^{-2}$ at respective peak wavelengths. Log intensity 0.7 at 500 nm approximated the illuminance level measured for a moonlit night. Higher light levels are comparable to those at dawn or dusk, times at which hatchlings also must locate the sea. Because of the emission spectrum of the incandescent source, the highest log intensity (5.5) could only be reached at the longest wavelengths (600 and 700 nm). We ran one set of trials for each species with the adjustable source off (intensity = 0.0). Combinations of wavelengths and intensities constituted 28 experimental treatments. Thirty loggerhead hatchlings, each from a different clutch, were used individually for each treatment. Ten green turtle hatchlings were used in each treatment and originated from three separate clutches.

To determine the polarity of hatchling response (attraction or avoidance) to light of specific color and intensity, we released hatchlings within the V-maze with one window illuminated by the adjustable source only. In these trials—identified as adjustable source versus darkened window—the standard source window remained dark. We used eight monochromatic colors for the adjustable source in these treatments: 360, 400, 500, 540 (yellow-green), 560 (green-yellow), 580 (yellow), 600, and 700 nm peak transmission. Adjustable source intensity for one set of eight experimental treatments was 3.5 on the log scale. In a second set of eight treatments, we used maximum source intensity, and log intensity of the source varied according to the maximum emission of the incandescent lamp at each wavelength. Maximum intensity of the source at each wavelength was 3.5 (360 nm), 4.0 (400 nm), 4.8 (500 nm), 5.0 (540 nm), 5.2 (560 nm), 5.3 (560 nm), 5.5 (580 nm), 5.5 (600 nm), and 5.7 (700 nm) log units. We ran additional treatments with the adjustable source off for 17 treatments total. Thirty loggerhead hatchlings, three from each of 10 clutches, were run individually per treatment. We used 20 green turtle hatchlings from a single clutch for only the 600 and 700 nm treatments at maximum intensity.

In all trials, we excluded from the analysis hatchlings not falling into either pitfall within

2 min following their release. Less than 10% of the 1523 loggerhead and 384 green turtle hatchlings were excluded. In one to five trials conducted for each treatment, we observed the behavior of hatchlings within the V-maze through the opening at the top of the box. In treatments with both sources darkened, hatchlings were observed through active system night vision goggles using an infrared source mounted above the opening. Data from these trials were not included in the analysis of source preference. Statistical tests for nominal data were used with a null hypothesis rejection criterion of $\alpha = 0.05$.

RESULTS

Hatchling behavior.—In trials resulting in a hatchling choosing one of the two windows of the V-maze, hatchlings exhibited a head-up posture prior to and during movement. Whereas loggerhead hatchlings typically paused prior to moving, green turtle hatchlings were more active, in some cases appearing to move in whatever direction they initially faced. Loggerhead hatchlings moving toward lighted sources typically made direct movements without circling (27 of 29). In trials with both sources off, hatchlings often circled (6 of 10) and made their way to either pitfall by walking along the walls of the box.

Loggerhead hatchlings that fell into the darkened window pitfall in trials with 600 nm light at the adjustable source window did not travel directly to the darkened window. In all of 35 trials observed, hatchlings appeared to turn away from the 600 nm lighted window and walk against the opposite wall, attempting to climb, until they fell into the dark window pitfall. In 30 additional trials, we placed loggerhead hatchlings halfway from the maze vertex to the 600 nm source window (log intensity 3.5) facing the 600 nm source. All of these hatchlings turned away from the lighted window and moved directly to the opposite wall.

Adjustable source versus standard source.—We found a positive relationship between log intensity and the number of loggerhead hatchlings preferring the adjustable source in the shorter wavelength treatments: 360, 400, and 500 nm (Fig. 2). This relationship did not differ among these three treatments (chi-square = 1.86, df = 8). At longer wavelengths, 600 and 700 nm, the number of hatchlings choosing the adjustable source was not statistically different from zero

(binomial probability test) at all intensity levels. With the adjustable source at log intensity 0, all loggerhead hatchlings chose the standard source.

The behavioral response of green turtle hatchlings to spectral light (Fig. 3) was similar to that of loggerhead hatchlings (Fig. 2). Sample sizes do not allow chi-square comparisons between green turtle and loggerhead distributions. Green turtle hatchlings showed little preference for 600 and 700 nm light at any intensity and increasing preference for 360, 400, and 500 nm light with increasing log intensity (Fig. 3).

Adjustable source versus darkened window.—Loggerhead hatchlings chose the window lighted with 360 nm (binomial probability test, $Z = 6.25$), 400 nm ($Z = 6.25$), or 500 nm ($Z = 5.43$) light at log intensity 3.5 significantly more often than the darkened window (Fig. 4a). Conversely, loggerheads presented 560 nm ($Z = -5.07$), 580 nm ($Z = -5.43$), or 600 nm ($Z = -6.25$) light at 3.5 intensity versus a dark window predominantly chose the dark window (binomial probability test). In the 540 nm ($Z = -1.02$) and 700 nm ($Z = 1.30$) trials, loggerhead hatchling preference for the adjustable source window or dark window could not be distinguished from random (binomial probability test). Loggerhead preference for the two windows, with the adjustable source at maximum intensity, was significantly different from random in all treatments (360 nm, $Z = 6.25$; 400 nm, $Z = 6.25$; 500 nm, $Z = 5.43$; 540 nm, $Z = 3.01$; 700 nm, $Z = 4.56$) except for the 560 nm ($Z = 0.08$) and 580 nm ($Z = 1.35$) trials (Fig. 4b, binomial probability test). In trials with 360, 400, 500, 540, or 700 nm light, the lighted window was significantly preferred, but in 600 nm trials ($Z = -6.25$), all loggerhead hatchlings chose the dark window over the lighted window (binomial probability test).

In the only trials of this type run with green turtles, more hatchlings chose the lighted window when presented 600 nm ($n = 14$ of 20) and 700 nm ($n = 11$ of 20) light at maximum intensity, but the distributions cannot be distinguished from random ($Z = 1.52$ and $Z = 0.471$, binomial probability test). Loggerhead and green turtle preference for either window of the V-maze in trials with both windows darkened was not different from random (loggerheads, $n = 30$, $Z = 0.520$; green turtles, $n = 30$, $Z = 0.252$; binomial probability test).

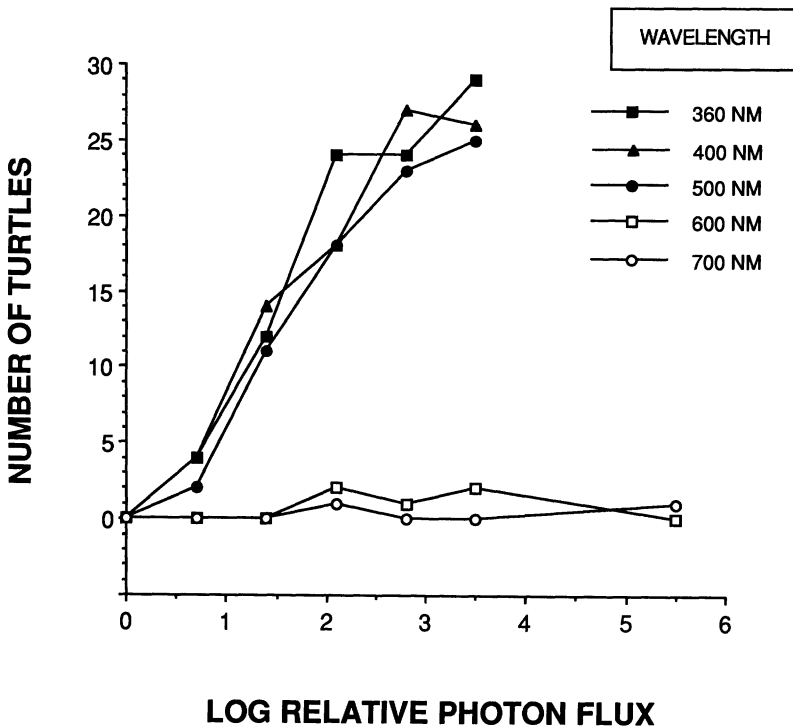


Fig. 2. The number of loggerhead hatchlings out of 30 choosing a light source varying among the wavelengths and intensities specified, over a source of constant color and intensity. All represented hatchlings chose one of the two sources. Colors are near-ultraviolet (360 nm), violet (400 nm), blue-green (500 nm), green (540 nm), green-yellow (560 nm), yellow (580 nm), yellow-orange (600 nm), and deep red (700 nm).

DISCUSSION

Range of spectral sensitivity.—This study gives an indication of a minimal spectral sensitivity range for loggerheads and green turtles. Detailed information on the spectral sensitivity of sea turtles exists only for the green turtle (Ehrenfeld, 1968; Granda and Dvorak, 1977). The action spectrum based on electrophysiological data provided by Granda and O'Shea (1972) shows a greater spectral sensitivity in the shorter wavelengths but does not extend to wavelengths shorter than 400 nm. Work by Ehrenfeld (1968) with green turtles demonstrates that adult females can locate the sea after nesting when fitted with goggles transmitting primarily near-ultraviolet light (300–400 nm). The goggles in these experiments did, however, transmit approximately 1% of the light in the 400 to 700 nm range, a substantial amount for the daytime trials conducted. Because of the narrow spectral bandwidths transmitted by the interference filters we used and the minimal leakage outside

the specified spectral bands, we can assign minimal spectral limits ± 10 nm to green turtle and loggerhead vision. We have shown that green turtle vision extends at least from the near-ultraviolet (360 nm) to green (500 nm). Vision in loggerhead turtles extends minimally from the near-ultraviolet (360 nm) to the red (700 nm).

One cannot quantify physiological spectral sensitivities using our preference data because of possible behavioral bias in the way the turtles react to spectral light. A naive analysis of the first series of treatments (Fig. 2), for instance, may discount the ability of loggerheads to see longer wavelengths (600 and 700 nm), an ability demonstrated by the nonrandom choice of the dark window in trials with 600 nm light (Fig. 4a–b) and the lighted window in trials with 700 nm light (Fig. 4b). The nonrandom response of loggerhead hatchlings to 700 nm light only at log intensity 5.7 may indicate that this wavelength borders the spectral sensitivity range of this animal. It is also possible that hatchlings responded to light of other wavelengths trans-

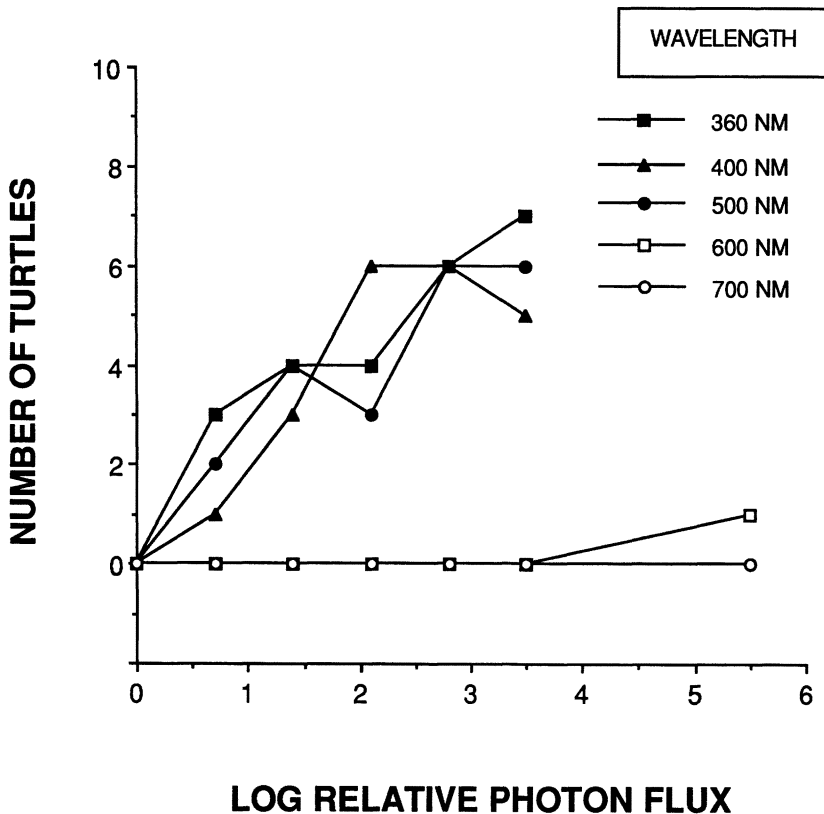


Fig. 3. The number of green turtle hatchlings out of 30 choosing a light source varying among the wavelengths and intensities specified, over a source of constant color and intensity. All represented hatchlings chose one of the two sources.

mitted by the 700 nm filter, although this light would have been more than four orders of magnitude less intense than the 700 nm light.

In comparison with the pond slider *Trachemys scripta*, vision in sea turtles extends farther into the shorter wavelengths (near-ultraviolet) and, at least in the case of the green turtle, diminishes more abruptly in the longer wavelengths (Granda and Dvorak, 1977). Heightened sensitivity in the near-ultraviolet and other short wavelengths might be characterized as an adaptation for vision in seawater where longer wavelength light attenuates more abruptly with depth (Loew and Lythgoe, 1985).

Spectral light and sea-finding.—A comparison of the green turtle action response measured by Granda and O'Shea (1972) with our measurements of behavioral response to spectral light (Fig. 5) reveals a behavioral bias against longer wavelength light. Care should be taken in draw-

ing conclusions from the comparison in Figure 5. The electroretinogram (ERG) and behavioral data were taken in different ways, although each constitutes a spectral sensitivity of sorts. The ERG curves are adapted from work by Granda and O'Shea (1972) and illustrate light intensities at each color necessary to evoke respective high and low criterion voltage responses at the dark-adapted green turtle eye. The behavioral curve is from the present study and illustrates the number of dark-adapted green turtle hatchlings choosing each color at a single intensity over a light source of standard intensity and color. The behavioral curve is from the data of Figure 3 for log intensity 3.5. The trend shown in Figure 5 is similar for all light intensities in the green turtle behavioral experiments we conducted (Fig. 3). That is, whereas both ERG curves show a peak sensitivity surrounding 600 nm, light in the 600 nm range is relatively unattractive to orienting green turtle hatchlings

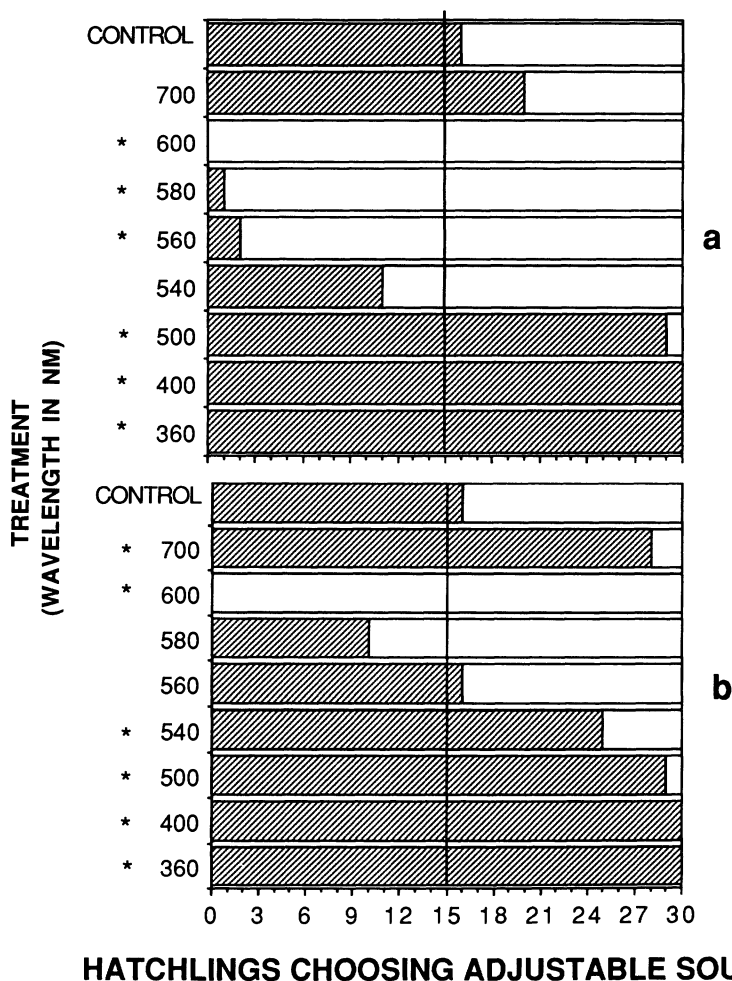


Fig. 4. The number of loggerhead hatchlings choosing an adjustable light source varying among the wavelengths specified, at an intensity of 3.5 log units (a) and at maximum source intensity (b). A darkened window served as the alternate choice. During the control treatment, lighting remained off. All represented hatchlings chose either the darkened window or the light source. Distributions marked with an asterisk (*) are significantly different from random (binomial probability test, $P < 0.05$).

(Fig. 3). This contrast holds when comparisons are made to ERG data taken from light-adapted green turtles as well (Granda and O'Shea, 1972). Mrosovsky (1972), using broad-band blue and red light, also observed discrepancies between behavioral responses of green turtles and the action spectra provided by Granda and O'Shea. Although evidence suggests that green turtle hatchlings use some assessment of spectral quality in sea finding, behavioral experiments that more closely match ERG methods are needed to quantify this pattern.

A phototactic response positively biasing short-wavelength light also has been found

among a variety of anurans (Hailman and Jaeger, 1974). Those workers have rejected the contention of Muntz (1962) that the response is an escape mechanism directly resulting in water finding but instead propose an "open sky" attraction hypothesis. In the case of hatchling sea turtles, phototaxis with a spectral bias for short-wavelength light, either reflected from a blue ocean or scattered from a blue sky, may result in seaward orientation under a majority of conditions.

Although no action spectrum exists that would allow a physiological-behavioral comparison to be made for the loggerhead, the manner in

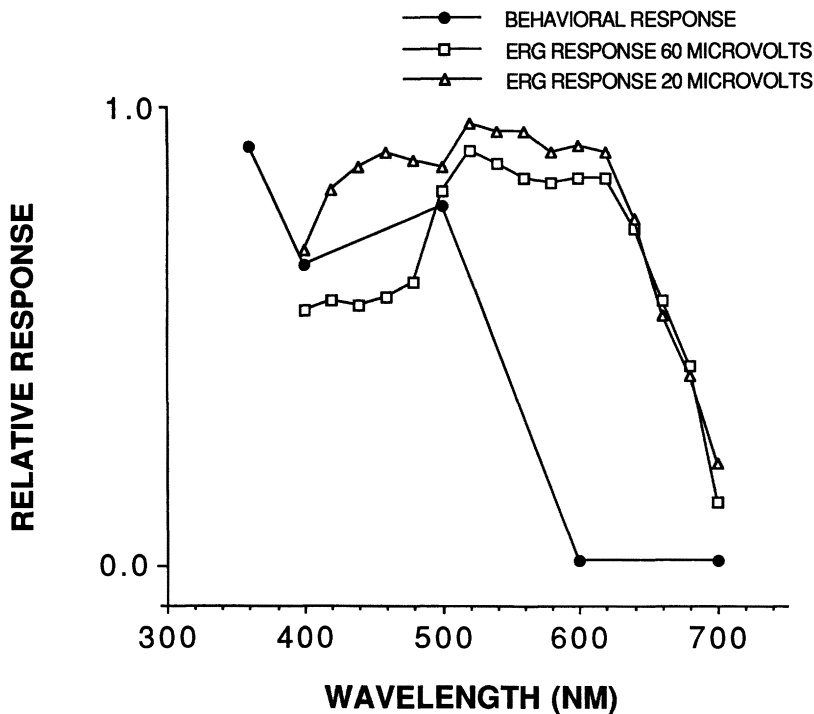


Fig. 5. Behavioral and action responses to spectral light in hatchling green turtles. Relative response for the behavioral curve is the proportion of green turtle hatchlings choosing a light source varying among the wavelengths specified at log intensity 3.5 (1.44×10^{17} photons $s^{-1} m^{-2}$), over a source of constant color and intensity. Action response curves are adapted from Granda and O'Shea (1972) and represent log sensitivity among wavelengths, as measured by electroretinography (ERG). Relative response for the ERG curves is intensity sufficient to evoke 60 and 20 microvolt criterion responses. The high and low criterion response curves represent high and low light intensity levels. Absolute intensity for the ERG light source was reported to be 2.7×10^{17} photons $s^{-1} m^{-2}$ at 580 nm.

which loggerhead hatchlings behave toward spectral light indicates that they too may use spectral cues in sea finding. Whereas loggerhead hatchlings orient positively to near-ultraviolet, violet, green, and red light (Fig. 2), they avoid yellow and yellow-orange light (Fig. 4a-b). The aversion that loggerhead hatchlings show toward yellow light, or xanthophobic response, has also been observed in loggerhead hatchlings orienting on a natural beach when presented 590 nm monochromatic yellow light from a low pressure sodium vapor (LPS) light source (Witherington and Bjorndal, 1991). Regardless of distance, no loggerhead hatchling was attracted to the LPS light source. In one of the first papers describing sea finding in sea turtles, Hooker (1911) reported that loggerhead hatchlings on a beach during the day responded negatively to panes of glass transmitting primarily orange-red light. Hooker could

not be certain, however, that this response indicated a reaction to color. Responses identical to those Hooker observed are predicted from hatchlings exhibiting simple phototaxis. The responses observed from loggerhead hatchlings in the laboratory (present study) and on the beach (Witherington and Bjorndal, 1991), however, strongly suggest a response to color. If the behavior we observed was simply a response to light of a specified brightness, the same response would have been expected to wavelengths and intensities other than the two intensities of yellow wavelengths (Fig. 4a-b).

A negative response to long-wavelength light (576 and 605 nm) during escape behavior has been reported for the leopard frog (*Rana pipiens*) (Fite et al., 1978). Because the normal escape response of this frog is toward water, this mechanism may share functional similarities with that of the loggerhead. One function

of xanthophobia in loggerhead hatchlings may be to reduce the attraction of light sources with a substantial participation of long-wavelength light. Such an adaptation could be advantageous if long-wavelength light sources with the potential to disrupt the sea-finding ability of a directional or phototropotaxis mechanism were common in nature. Rising and setting celestial bodies appear as predominantly long-wavelength sources because of the short-wavelength scattering effect of the atmosphere and have the potential to disrupt hatchling sea finding. Some controversy exists regarding whether the rising sun affects sea finding in sea turtles. Whereas Ehrenfeld and Carr (1967) and van Rhijn (1979) report that green turtles and hawksbill turtles (*Eretmochelys imbricata*) are affected insignificantly by the sun on the horizon, Mrosovsky (1970) and Mrosovsky and Kingsmill (1985) report that loggerhead, green, and hawksbill turtles are significantly affected. The loggerhead hatchlings in Mrosovsky's study orienting at sunrise or sunset without the contrast of a dune horizon still moved in the general ocean direction. It is remarkable that the sun, as an intense opposing light source, affected orientation in these experiments as little as it did.

The positive response of loggerhead hatchlings to 700 nm light at high intensity shows that a comprehensive bias against long-wavelength light does not exist. In addition to being on the periphery of color sensitivity in loggerheads, 700 nm light may also fall outside their ability for color discrimination. The variation in response of loggerhead hatchlings to 540, 560, and 580 nm light at varying intensity indicates that the xanthophobic response is not independent of light intensity.

Models of mechanisms by which sea turtles achieve a seaward orientation commonly employ the term brightness to denote the cue that guides hatchlings to the ocean (Verheijen and Wildschut, 1973; van Rhijn, 1979; Mrosovsky and Kingsmill, 1985). Unfortunately, brightness in this usage is not a currently measurable value. Brightness from the perspective of the sea turtle hatchling must certainly incorporate intensity in proportion to a species-specific action spectrum. Could perceived brightness, however, be influenced by other biased responses to color? Brightest-direction models must incorporate a definition for brightness that considers such complexities if those models are to explain the orientation behavior we observed in loggerhead and green turtle hatchlings.

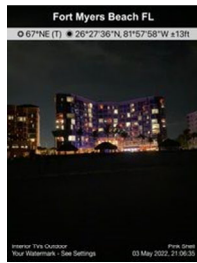
ACKNOWLEDGMENTS

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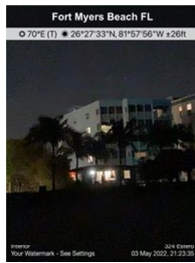
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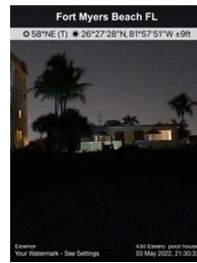
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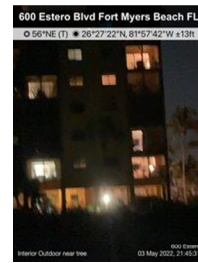
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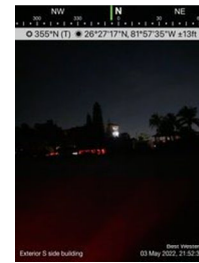
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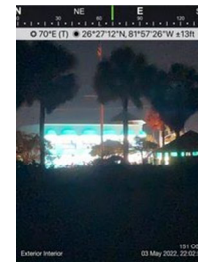
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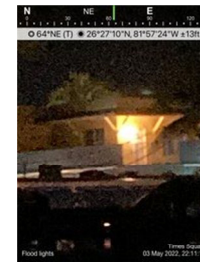
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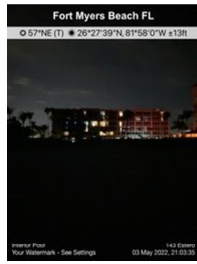
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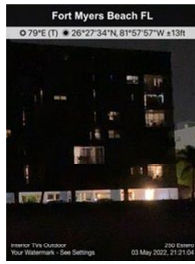
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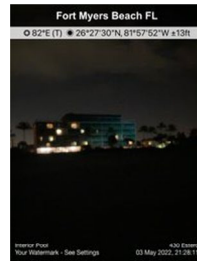
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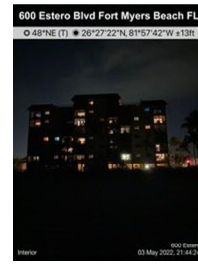
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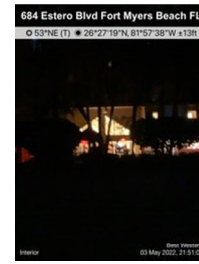
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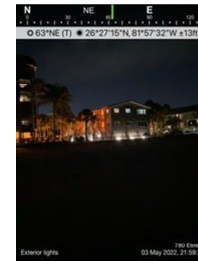
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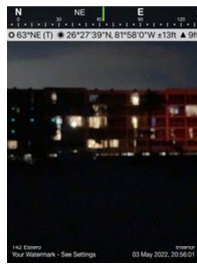
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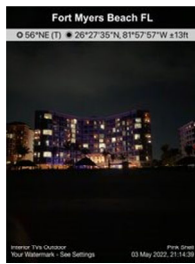
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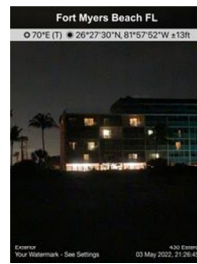
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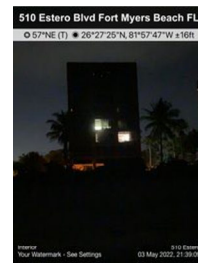
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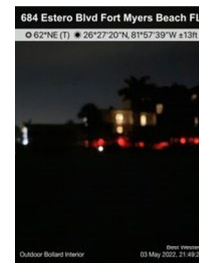
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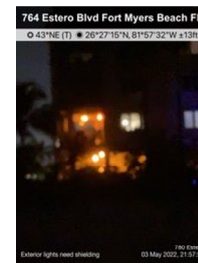
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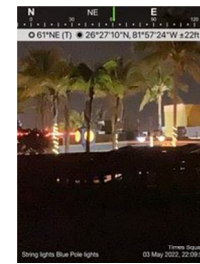
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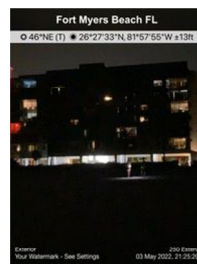
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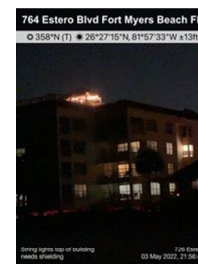
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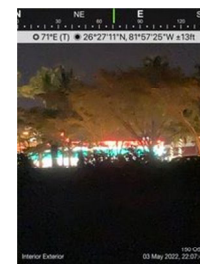
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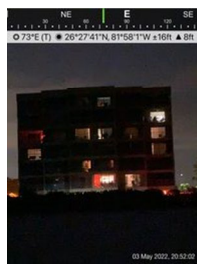
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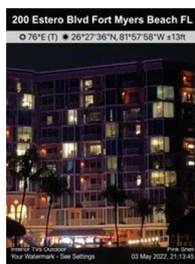
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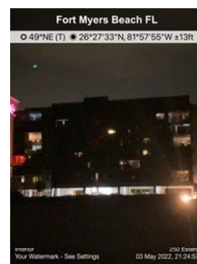
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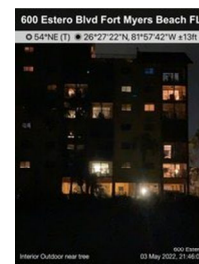
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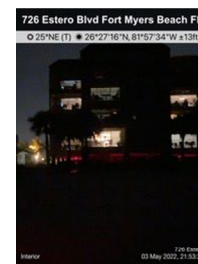
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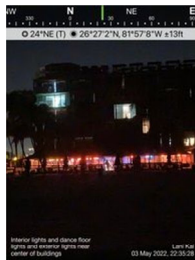
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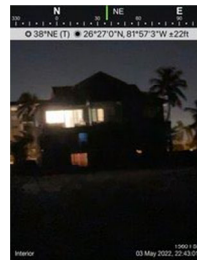
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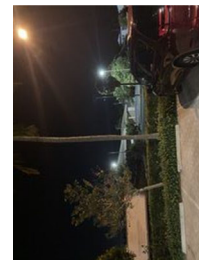
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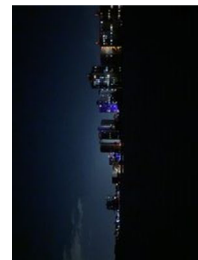
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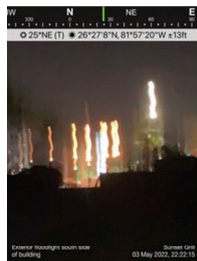
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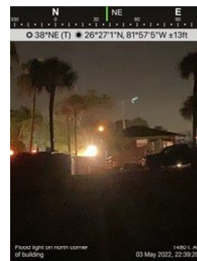
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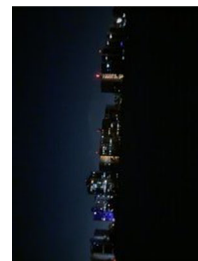
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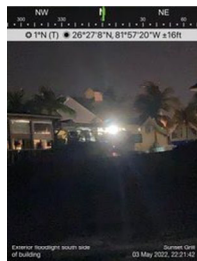
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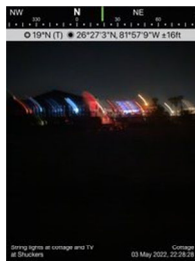
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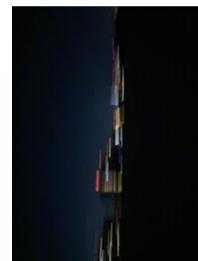
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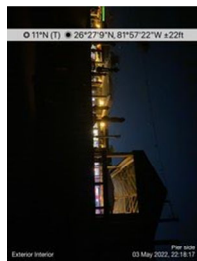
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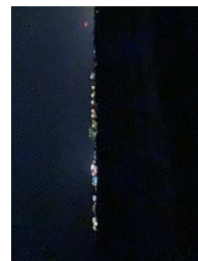
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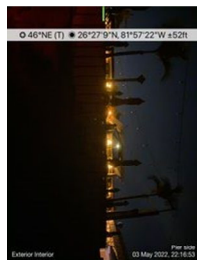
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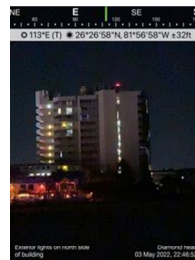
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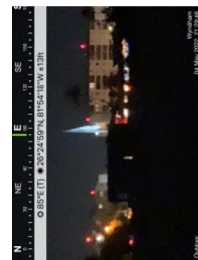
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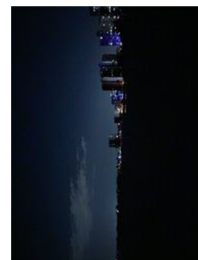
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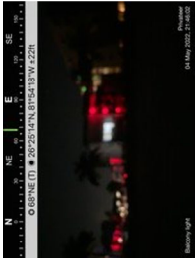
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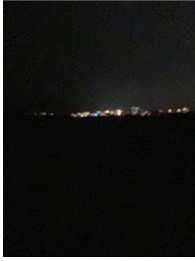
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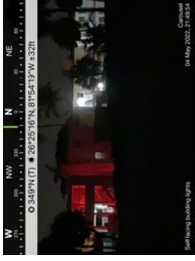
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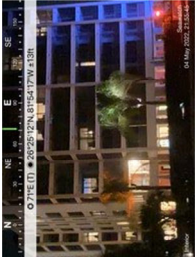
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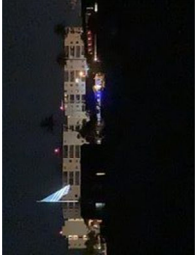
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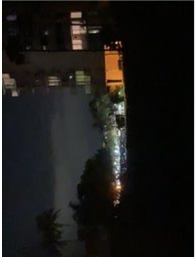
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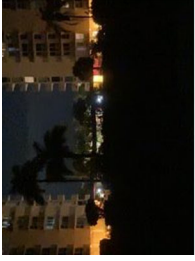
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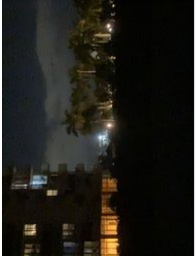
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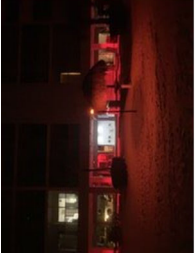
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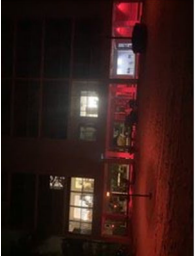
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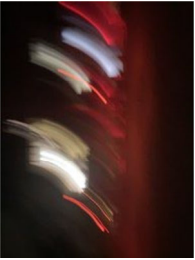
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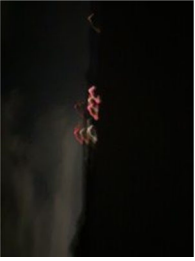
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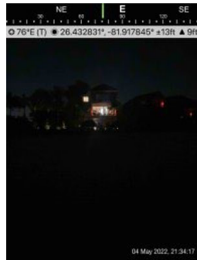
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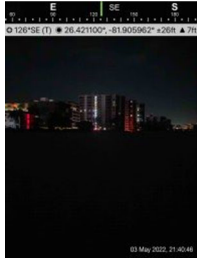
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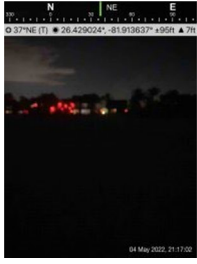
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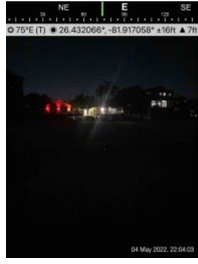
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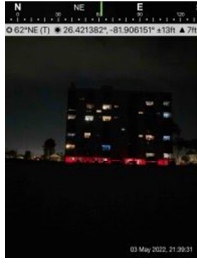
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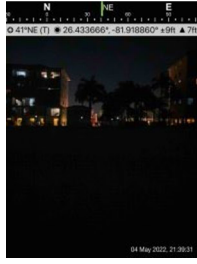
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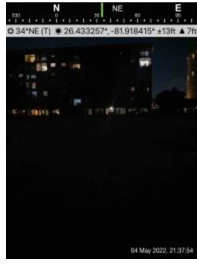
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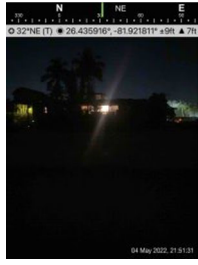
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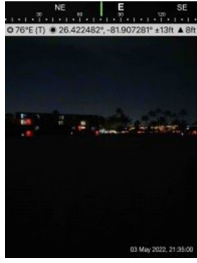
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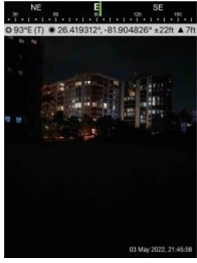
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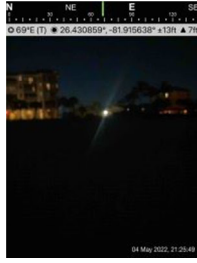
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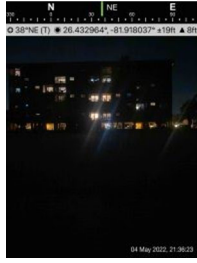
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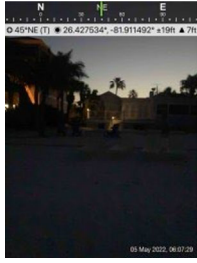
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1. Requested Motion:

Meeting Date: May 16, 2022

The Town has received the nomination of Patrick (Pat) McKeown for the annual Fort Myers Beach Citizen of Distinction Award in the area of Arts and Culture for his authoring of the history of the Mound House book "*Crown Jewel of Fort Myers Beach The Mound House*".

Why the action is necessary:

Annual Nomination based upon Town Council approved criteria to recognize citizen contributions.

What the action accomplishes:

Fills the annual nomination

2. Agenda:

ADMINISTRATIVE AGENDA

3. Requirement/Purpose:

Other

4. Submitter of Information:

5. Background:

The Citizen of Distinction Award is designed to recognize, on an annual basis, an outstanding citizen who has made an exceptional contribution to our Town.

General Criteria

- Current residents, full or part time, living in the municipal limits of Fort Myers Beach for at least 3 years are eligible for the award.
- In selecting the Outstanding Citizen Award recipient, the Town Council will consider the following:
 - how the nominee has enhanced the name of the community through positive exposure
 - what exceptional contribution the nominee has made to the community

The Town Manager forwards nominations to the Town Council for their selection. The chosen Citizen recipient will be honored during a Town Council meeting. At this time the recipient will receive a presentation from the Mayor and Council and a small engraved plaque dedicated to the recipient will be placed on the Citizens of Distinction perpetual wall. The recipients will be afforded the opportunity of serving as the Grand Marshalls in the Town's next 4th of July parade.

Attachments:

1. McKeown, Patrick
2. mound-house-book

Financial Impact:

None

6. Alternative Action

7. Management Recommendations:

8. Recommended Approval:

Amy Baker, Town Clerk
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/6/2022
Approved - 5/9/2022
Approved - 5/10/2022
Final Approval - 5/10/2022

Town of Fort Myers Beach Citizens of Distinction Award Nomination

The Town of Fort Myers Beach Achievement Awards are designed to recognize, on an annual basis, outstanding citizens, groups, organizations or businesses that have brought credit to our town.

Awards will be granted in the following categories:

- ❖ Arts and Culture Recognition Award
- ❖ Athletic Achievement Award
- ❖ Heritage Award
- ❖ Youth Award of Merit
- ❖ Mayor's Special Award (*not chose by nomination)

Town of Fort Myers Beach

MAY 6 2022

Submit nominations no later than March 31st to:

Received by: _____

Town of Fort Myers Beach
c/o Town Manager
2525 Estero Boulevard
Fort Myers Beach, FL 33931

Please review the criteria for nomination and present as complete information as possible.

Name of Individual, Team,
Group or Business:

Patrick McKown

(List all members of Team / Group on separate page)

Current Address:

2532 Estero Blvd

#605

Fort Myers Beach, FL 33931

Number of Years Individual, Team, Group or Business has
lived/operated in Fort Myers Beach

Area of Nomination
(please check)

- ☒ Arts and Culture
- ☐ Athletics
- ☐ Heritage
- ☐ Youth

Many!
lived here from
1946-1977 when
his parents owned
5 1/2 acre beach
vacation home
here since 1969
owned condo since
1999
Legal resident since
2003

Attachments:
- statement
- book

Please provide information on the nominee including:

- ✓ History of the individual, team, group or business;
- ✓ Their achievements;
- ✓ Their contribution to the community; and
- ✓ Details on how they have brought recognition to Fort Myers Beach

Please include a statement concerning why they should be recognized as a Citizen of Distinction.

The nominator may include up to a maximum of five (5) pages of material in support of the nomination. The support material must directly relate to the above information. Extraneous information will be edited from the nomination.

The chosen recipients will be recognized at a Town Council in May.

Award winner will be notified prior to the presentations.

Nominator may be contacted if there are any questions regarding this nomination

Name of Nominator:	<u>Ellen Vaughan, Friends of Mound House President</u>
Address:	<u>7500 Estero Blvd # 1107</u>
City / State / Zip	<u>Fort Myers, FL, 33931</u>
Telephone:	<u>734-846-6903</u>
Alt. Telephone:	<u></u>
Date Submitted:	<u></u>

Town of Myers Myers Beach Citizens of Distinction Award Nomination 2022

Arts and Cultural Recognition Award

Patrick (Pat) McKeown

Friends of the Mound House Docent and member of the Board of Directors

Upon learning of Mound House Director Alison Gieson's interest in having a book about the Mound House, Pat volunteered to take on the project. Pat's academic background and experience authoring college text books provided the skill match needed to create a caliber of Mound House history volume to match the "jewel of the island" that the property has become.

The book, submitted with this nominations speaks of the professionalism, commitment, and skill Pat brought to the project.

The book is for sale in the Museum Store and select retail establishments on the island.

The book is the product of long labor and demonstrates commitment that will serve the Mound House and the Town in good stead for years to come.

The Friends of the Mound House funded the publishing costs for the book:

Crown Jewel of Fort Myers Beach

The Mound House

by Patrick G. McKeown

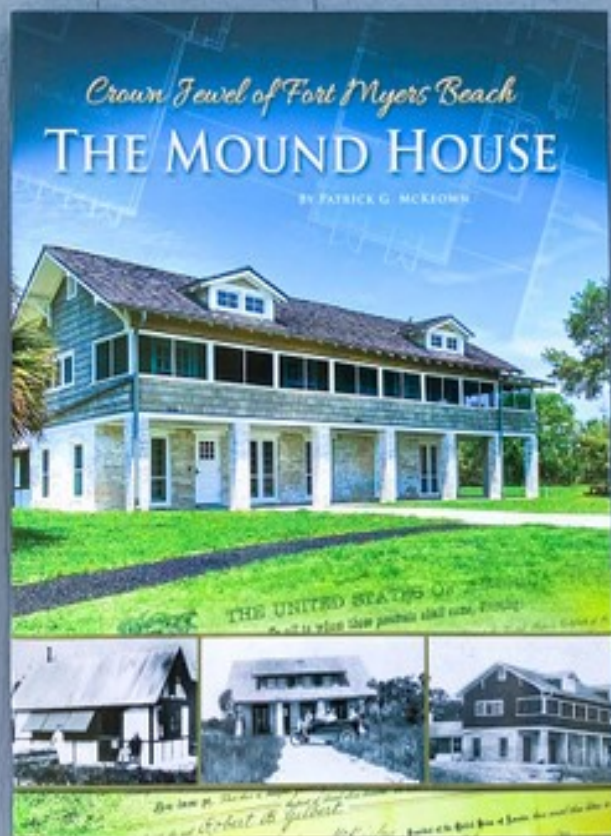
published 2020

(64 pages)

Town of Fort Myers Beach

MAY 6 2022

Received by: _____



1. **Requested Motion:**

Meeting Date: May 16, 2022

The Audit Committee currently has three vacancies on their 7 member board. Fort Myers Beach residents Michael Hauser, Jack Leson, Sherry Misgen and Barbara Puffer are each requesting to be appointed to one of the seats.

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ADMINISTRATIVE AGENDA

3. **Requirement/Purpose:**

4. **Submitter of Information:**

5. **Background:**

Ordinance 18-06, Sec. 2. Qualifications and Appointments of members
In addition to qualifications, which may be specified for membership by state statutes, charter, ordinance, or resolution, a person appointed to an Agency, Board, Committee or Commission shall give preference to a registered voter within the Town's jurisdiction or a property owner within the Town's jurisdiction. Although no specific experience requirements shall be necessary as a prerequisite to appointment, consideration shall be given to applicants who have experience or who have shown interest in the subject matter. In the event that any member is no longer a qualified elector, or is convicted of a felony, an offense involving moral turpitude while in office or has unpaid fines or liens due the Town of Fort Myers Beach, the Town Council shall terminate the appointment of such person as a member of the agency, board, committee or commission.

(b) **Audit Committee.** All members of the Audit Committee shall be Town residents who do not have any direct financial or business interests involving the Town. The Town Council may waive the residency requirements by majority vote if there are an insufficient number of applicants who reside in the Town. All members should, through education and experience, possess a basic understanding of governmental financial reporting and auditing. At least one member of the Audit Committee shall have accounting, auditing, or related financial management expertise that is specifically relevant to the government sector. The Audit Committee shall advise the Town Council on these matters and other matters pursuant to 218.391, F.S., or any other topics as assigned by the Town Council.

Attachments:

1. Hauser, Michael
2. Leson, John
3. Misgen, Sherry
4. Puffer, Barbara

Financial Impact:

6. **Alternative Action**

7. **Management Recommendations:**

8. **Recommended Approval:**

Amy Baker, Town Clerk
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/10/2022
Approved - 5/10/2022
Approved - 5/11/2022
Final Approval - 5/11/2022



Town of Fort Myers Beach **Advisory Boards and Committees Application**

Complete one form for each application/committee appointment. Your application will be a public record subject to disclosure on request.

Please type or print clearly. Do not leave blanks.

Today's Date:

Name:
Last First Middle initial

Telephone Number:

Email Address:

Home Address:

Mailing Address

(if different from home address):

Are you currently serving on any of the Town's committees? Yes ☐ No ☒

If yes, which committee(s)?

If yes, when is your term expiration?

I am applying for appointment to: (Check one)

- ☐ Anchorage Advisory Committee
- ☒ Audit Committee
- ☐ Bay Oaks Recreational Campus Advisory Board
- ☐ Community Resource Advisory Board
- ☐ Cultural and Environmental Learning Center Advisory Board
- ☐ Historic Preservation Advisory Committee
- ☐ Local Planning Agency
- ☐ Marine Resources Task Force
- ☐ Nuisance Abatement Board
- ☐ Public Safety Committee

Have you been convicted of a felony, an offense involving moral turpitude while in office? Yes ☐ No ☒

Do you have unpaid fines or liens due the Town? Yes ☐ No ☒

Are you a registered voter within the Town's jurisdiction? Yes ☒ No ☐

Are you a resident within the Town's jurisdiction?

Yes ☒ No ☐

Are you an owner of real property within the Town's jurisdiction?

Yes ☒ No ☐

Are you currently serving on a board, authority, committee or commission for another governmental agency?

Yes ☐ No ☐

If yes, what board, etc., and since when?

Why are you seeking appointment to this board or committee?

I read an article recently in the FMB Observer regarding the town's need for Audit Committee members and thought I would offer to serve.

Community Involvement:

I currently serve on the Finance Committee for the Ocean Harbor Condominium Association (FMB FL). I have also served on the Finance Committees of both the City of Des Peres Missouri (5+ years) and Saint Gerard Majella Catholic School / Church in Kirkwood Missouri (3+ years).

Interests / Activities:

Bicycling, Motorcycling, Playing Pickle Ball and Fishing

You may attach a resume in addition to the above information.

Do you qualify for Special Exemptions per § 119.071(4)(d)3., F.S.

Yes ☐ No ☒

If yes, fill out [Public Records Exemption Request](#) form and submit with the application.

I swear or affirm that all information on this form is true and accurate.

Signed

Michael Hauser

Date

05/10/22

Please return this form to the Town Clerk's Office, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931 Amy@fmbgov.com

Office Use Only:

Appointed: Yes _____ No _____

DATE: _____

[HOME](#)[ABOUT US](#)[WHAT WE DO](#)[CLIENTS](#)[NEWSROOM](#)[OUR WORK](#)[CONTACT](#)

SEARCH

Mike Hauser

Financial Management Services

Mike's career in the financial services industry has spanned more than two decades, and for the majority of that time, he has provided valued financial counsel and management services to the Hauser Group, while also maintaining a successful wealth advisory practice.

As part of the [LPL](#) Financial family of advisors, Mike is affiliated with one of the country's leading financial services companies and the largest independent broker/dealer in the nation. His commitment to client service carries over to his role with The Hauser Group, where he takes care of the day-to-day financial operations so that Julie and her team can focus on taking care of their clients' needs.

A licensed CPA, Hauser obtained a bachelor's degree in accounting and finance, and a master's degree in finance, both from Saint Louis University. He resides in Des Peres, Mo., with his wife Julie and their two children. Mike is a member of the City of Des Peres Finance Committee and also serves on the Finance Committee for St. Gerard Magella Parish.



about us

[OUR TEAM](#)[AWARDS](#)[COMMUNITY](#)[TESTIMONIALS](#)[INTERNSHIPS](#)

YOU MIGHT BE *Surprised* TO LEARN...

that when he's not crunching numbers Mike's probably happiest crunching gears on his ATV. Whether it's riding with the kids on his family's farm in Jefferson City or hooking up the snow plow to help clear the neighbors' driveways when it snows, this suburbanite is still a country boy at heart.

[« Back to Team](#)

The Hauser Group, Inc.
12813 Flushing Meadows Drive
Suite 270
St. Louis, MO 63131

phone: (314) 436-9090

email: julie@hausergrouppr.com

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Town of Fort Myers Beach

Advisory Boards and Committees Application

Complete one form for each application/committee appointment. Your application will be a public record subject to disclosure on request.

Please type or print clearly. Do not leave blanks.

Today's Date: MAY 10, 2022

Name: LESON JOHN P.
Last First Middle initial

Telephone Number: 309 363 5880

Email Address: JOHN/LES16@gmail.com

Home Address: 4141 BAY BEACH LN UNIT 4P6

Mailing Address: _____

(if different from home address):

Are you currently serving on any of the Town's committees? Yes ☐ No ☒

If yes, which committee(s)? _____

If yes, when is your term expiration? _____

I am applying for appointment to: (Check one)

- ☐ Anchorage Advisory Committee
- ☒ Audit Committee
- ☐ Bay Oaks Recreational Campus Advisory Board
- ☐ Community Resource Advisory Board
- ☐ Cultural and Environmental Learning Center Advisory Board
- ☐ Historic Preservation Advisory Committee
- ☐ Local Planning Agency
- ☐ Marine Resources Task Force
- ☐ Nuisance Abatement Board
- ☐ Public Safety Committee

Have you been convicted of a felony, an offense involving moral turpitude while in office? Yes ☐ No ☒

Do you have unpaid fines or liens due the Town? Yes ☐ No ☒

Are you a registered voter within the Town's jurisdiction? Yes ☒ No ☒

Town of Fort Myers Beach

MAY 10 2022

Received by: _____

Are you a resident within the Town's jurisdiction?

Yes ☒ No ☐

Are you an owner of real property within the Town's jurisdiction?

Yes ☒ No ☐

Are you currently serving on a board, authority, committee or commission for another governmental agency?

Yes ☐ No ☒

If yes, what board, etc., and since when?

Why are you seeking appointment to this board or committee?

PRIOR PROFESSIONAL EXPERIENCE

Community Involvement:

NEW HORIZONS AFTER SCHOOL

Interests / Activities:

TRAVELING, READING,

You may attach a resume in addition to the above information.

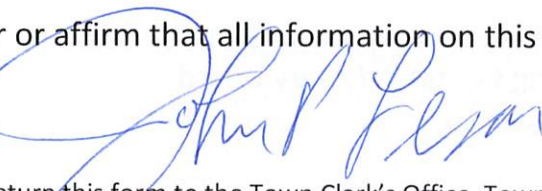
Do you qualify for Special Exemptions per § 119.071(4)(d)3., F.S.

Yes ☐ No ☐

If yes, fill out [Public Records Exemption Request](#) form and submit with the application.

I swear or affirm that all information on this form is true and accurate.

Signed



Date

5/10/2022

Please return this form to the Town Clerk's Office, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931 Amy@fmbgov.com

Office Use Only:

Appointed: Yes _____ No _____

DATE: _____



Town of Fort Myers Beach
Advisory Boards and Committees Application

Complete one form for each application/committee appointment. Your application will be a public record subject to disclosure on request.

Please type or print clearly. Do not leave blanks.

Today's Date:

Name:
Last First Middle initial

Telephone Number:

Email Address:

Home Address:

Mailing Address

(if different from home address):

Are you currently serving on any of the Town's committees? Yes ☐ No ☒

If yes, which committee(s)?

If yes, when is your term expiration?

I am applying for appointment to: (Check one)

- ☐ Anchorage Advisory Committee
- ☒ Audit Committee
- ☐ Bay Oaks Recreational Campus Advisory Board
- ☐ Community Resource Advisory Board
- ☐ Cultural and Environmental Learning Center Advisory Board
- ☐ Historic Preservation Advisory Committee
- ☐ Local Planning Agency
- ☐ Marine Resources Task Force
- ☐ Nuisance Abatement Board
- ☐ Public Safety Committee

Have you been convicted of a felony, an offense involving moral turpitude while in office? Yes ☐ No ☒

Do you have unpaid fines or liens due the Town? Yes ☐ No ☒

Are you a registered voter within the Town's jurisdiction? Yes ☒ No ☐

Town of Fort Myers Beach

APR 27 2022

Received by: _____

Are you a resident within the Town's jurisdiction?

Yes ☒ No ☐

Are you an owner of real property within the Town's jurisdiction?

Yes ☒ No ☐

Are you currently serving on a board, authority, committee or commission for another governmental agency?

Yes ☐ No ☒

If yes, what board, etc., and since when?

Why are you seeking appointment to this board or committee?

I read that the Town of FMB is looking for volunteers to serve on the Audit Committee. I am a CPA with a BS in Accounting from Mankato State University. I spent 6 years in public accounting with Ernst & Whinney (now Ernst & Young), 6 years as a supervising accountant at Montgomery Ward, and 30 years as the Executive Director of Accounting at the School of the Art Institute of Chicago, one of the top art schools in the country.

Community Involvement:

No involvement to date (I moved here in Sept. 2019 shortly after I retired from the School of the Art Institute of Chicago).

Interests / Activities:

Traveling, reading newspapers, going to the gym and watching baseball.

You may attach a resume in addition to the above information.

Do you qualify for Special Exemptions per § 119.071(4)(d)3., F.S.

Yes ☐ No ☒

If yes, fill out Public Records Exemption Request form and submit with the application.

I swear or affirm that all information on this form is true and accurate.

Signed

Sherry Misgen

Date

04/26/22

Please return this form to the Town Clerk's Office, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931 www.fmbgov.com

Office Use Only:

Appointed: Yes _____ No _____

DATE: _____

Town of Fort Myers Beach

Advisory Boards and Committees Application

Complete one form for each application/committee appointment. Your application will be a public record subject to disclosure on request.

Please type or print clearly. Do not leave blanks.

Today's Date: 05/09/22

Name: Puffer

Barbara

W

Last

First

Middle initial

Telephone Number: (203) 494-2765

Email Address: pufferpro@snet.net

Home Address: 6895 Estero Blvd. #566 Fort Myers Beach, FL 33931

Mailing Address

(if different from home address):

Are you currently serving on any of the Town's committees? Yes ☐ No ☒

If yes, which committee(s)?

If yes, when is your term expiration?

I am applying for appointment to: (Check one)

- ☐ Anchorage Advisory Committee
- ☒ Audit Committee
- ☐ Bay Oaks Recreational Campus Advisory Board
- ☐ Community Resource Advisory Board
- ☐ Cultural and Environmental Learning Center Advisory Board
- ☐ Historic Preservation Advisory Committee
- ☐ Local Planning Agency
- ☐ Marine Resources Task Force
- ☐ Nuisance Abatement Board
- ☐ Public Safety Committee

Have you been convicted of a felony, an offense involving moral turpitude while in office? Yes ☐ No ☒

Do you have unpaid fines or liens due the Town? Yes ☐ No ☒

Are you a registered voter within the Town's jurisdiction? Yes ☒ No ☐

Are you currently serving on a board, authority, committee or commission for another governmental agency? Yes ☐ No ☐

If yes, what board, etc., and since when? No Board but I am an elections worker

Why are you seeking appointment to this board or committee?

The form doesn't appear to be "saving." Please see attached detail.

Community Involvement:

The form doesn't appear to be "saving." Please see attached detail.

Interests / Activities:

The form doesn't appear to be "saving." Please see attached detail.

You may attach a resume in addition to the above information.

Do you qualify for Special Exemptions per § 119.071(4)(d)3., F.S. Yes ☐ No ☒
If yes, fill out [Public Records Exemption Request](#) form and submit with the application.

I swear or affirm that all information on this form is true and accurate.

Signed

Barbara W. Puffer

Date 05/09/02

Please return this form to the Town Clerk's Office, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931 Amy@fmbgov.com

Office Use Only:

Appointed: Yes _____ No _____

DATE: _____

2/2022

International Association of Business Communicators
PROFESSIONAL: *Fellow (2012 inducted)* *2022*

- *President, Puffer Public Relations Strategies, Promotions & Publishing* (1998 to *present*) Senior consulting and new business development role. Broad range of public relations, development, and marketing, as well as board training and facilitation for profit and non-profit organizations. One-on-one and team approaches.
- *Associate Professor, University of Maryland University College* (2002 to *2015 present*) Associate Adjunct Professor, teaching online in the undergraduate Communications Studies & Professional Writing program and for the Graduate School of Management and Technology. Undergraduate Communications Course Chair and numerous contracted assignments beyond instruction. 2011 Teaching Recognition Award.
- *Connecticut Health Investigative News* (2012 to *2018 present*) Contributing writer.
- *Corporate Manager Communications, Barnes Group Inc.* 123 Main Street, Bristol, CT 06010 (1985-1998). Reported at various times to: Chairman of the Board; Senior Vice President, Human Resources; Vice President, General Counsel & Corporate Secretary; Vice President of Human Resources; and directors of public affairs, employee relations/organization development, and compensation/benefits. Barnes Group is a 150+-year-old, sometimes Fortune 500, international distributor of parts and supplies for the maintenance and repair market, and a manufacturer of springs and precision components for aerospace, automotive and other durable goods markets. **Job scope included:** Full responsibility for planning and implementation of internal communications programs and publications for as many as 4,000 employees in 7 countries, on 4 continents -- involving surveys, ethics, employee benefits, training, curriculum development, strategic operating projects, factory closings, publications, a web site, and more traditional employee information and education programs. Additional media and community relations responsibilities. Also, simultaneously served as facilities manager, Barnes Group World Headquarters, 6/96-4/97.
- *Manager Personnel and Corporate Relations Department, Southern New England Telephone* 227 Church St., New Haven, CT (1977-1985). Full range of internal and external communications and editorial responsibilities. (Included a nine-month assignment as Manager, Advertising and Promotions, SONECOR Systems Division).
- *Manager Public Relations Dept., Phoenix* (formerly Phoenix Mutual Life Insurance Company), One American Row, Hartford, CT (1976-1977). Assistant to the Senior Vice President/Public Relations. Full range of internal and external communications and editorial responsibilities.

Barbara Puffer, MA, Accredited Business Communicator*

Puffer Public Relations Strategies – A Virtual Agency

www.pufferpr.com, barbara@pufferpr.com
203-494-2765 (cell) 203-457-0231 (CT) 239-463-4543 (FL)
6895 Estero Blvd., #566, Ft. Myers Beach, FL 33931
35 Shore Drive, Guilford, CT 06437

PROFESSIONAL:

- *President, Puffer Public Relations Strategies, Promotions & Publishing* (1998 to present) Senior consulting and new business development role. Broad range of public relations, development, and marketing, as well as board training and facilitation for profit and non-profit organizations. One-on-one and team approaches.
- *Associate Professor, University of Maryland University College* (2002 to present) Associate Adjunct Professor, teaching online in the undergraduate Communications Studies & Professional Writing program and for the Graduate School of Management and Technology. Undergraduate Communications Course Chair and numerous contracted assignments beyond instruction. 2011 Teaching Recognition Award.
- *Connecticut Health Investigative News* (2012 to present) Contributing writer.
- *Corporate Manager Communications, Barnes Group Inc.* 123 Main Street, Bristol, CT 06010 (1985-1998). Reported at various times to: Chairman of the Board; Senior Vice President, Human Resources; Vice President, General Counsel & Corporate Secretary; Vice President of Human Resources; and directors of public affairs, employee relations/organization development, and compensation/benefits. Barnes Group is a 150+-year-old, sometimes Fortune 500, international distributor of parts and supplies for the maintenance and repair market, and a manufacturer of springs and precision components for aerospace, automotive and other durable goods markets. **Job scope included:** Full responsibility for planning and implementation of internal communications programs and publications for as many as 4,000 employees in 7 countries, on 4 continents -- involving surveys, ethics, employee benefits, training, curriculum development, strategic operating projects, factory closings, publications, a web site, and more traditional employee information and education programs. Additional media and community relations responsibilities. Also, simultaneously served as facilities manager, Barnes Group World Headquarters, 6/96-4/97.
- *Manager Personnel and Corporate Relations Department, Southern New England Telephone* 227 Church St., New Haven, CT (1977-1985). Full range of internal and external communications and editorial responsibilities. (Included a nine-month assignment as Manager, Advertising and Promotions, SONECOR Systems Division).
- *Manager Public Relations Dept., Phoenix* (formerly Phoenix Mutual Life Insurance Company), One American Row, Hartford, CT (1976-1977). Assistant to the Senior Vice President/Public Relations. Full range of internal and external communications and editorial responsibilities.

- *Manager, Corporate Planning Dept., Union Trust Co.* (Now part of Wells Fargo system), Corner Church and Elm Sts. New Haven, CT 06504 (1973-1976). Assistant to the Vice President-Advertising. Full range of internal communications and editorial responsibilities.
- *Suburban Reporter/Photographer, New Haven Register*, Sargent Drive, New Haven, CT 06511 (1973). Daily and Sunday. Circulation approximately 140,000.
- *Other part-time:* University of Bridgeport (CT), Teaching Assistant. (1973) Journalism workshop Teaching Assistant; associate producer - CBS Network Television Sports (1975); writer - M/X Development Corporation (1979-1984); speech writer and publicity coordinator- CT and National High School Athletic Coaches Association (1977-1984) and various marketing for Connecticut non- profit organizations.

EDUCATION:

- **MA-Corporate and Political Communications** , Fairfield University, Fairfield., CT - 1976.
- **BA-Journalism-Broadcasting** , Dow Jones and Faculty "Outstanding Graduate" Award, accelerated study, Sigma Delta Chi New England news writing award, University of Bridgeport, Bridgeport, CT - 1972.
- **Advanced & Basic Faculty Development Training Certificates** – Univ. of Maryland University College.
- **Certified** - Online Teaching with WebTycho Training, Univ. of Maryland, Univ. College (Current)
- **Certified** - Development Dimensions International, Interaction Management Trainer. (1980s)
- **Certified** - Behavioral Technologies, Inc., Behavioral Interviewing Trainer. (1980s)
- **Continuing Education** - Boston University, American Management Association, American Institute of Banking, Wilson Learning Corporation, Productivity Inc., Bell System Training School (Illinois), Council of Communication Management, and International Association of Business Communicators.

* Accredited, 1979, International Association of Business Communicators

HONORS:

- 2013 -- The University of Maryland University College, two certificates of recognition: Notable Scholarly Activity in the Area of Professional Publications for being named a Fellow of IABC in 2012.
- 2012 -- International Association of Business Communicators Fellow distinction.
- 2011 -- Teaching Recognition Award. University of Maryland University College.
- 2010 -- U.S. Library of Congress Local Legacy *Guilford Agricultural Society Fair Since 1859*, Dedication
- 2009 -- International Association of Business Communicators, International Region Leader of the Year.
- 2007 - American School for the Deaf, Board of Directors Award of Merit, "for distinguished service since 1986."
- More than 100 awards of Excellence and Merit for multi-media communications programs, exhibits, sound, one-person efforts, community relations programs, employee publications, newspaper design, recruiting materials, and newspaper & special publications, International Association of Business Communicators (1979-2012)
- 2007 -- Susan G. Komen for the Cure Ultimate Drive BMW Survivor Hero Award for volunteerism for breast cancer.
- 2007 -- Inducted , Shriver Society, honoring long service volunteers in Special Olympics.
- 2000 -- International Association of Business Communicators Research Foundation Lifetime Foundation Friend Award, International Conference, Vancouver, B.C.
- 1999 -- St. Vincent's Foundation "Stamp Out Breast Cancer" Volunteer Award.

- 1999 -- Susan G. Komen Breast Cancer Foundation Race for the Cure and 10th Anniversary "*Celebration of Life*", Connecticut breast cancer survivor representative at the National Race and home of Honorary Race Chairmen, Vice President & Mrs. Gore.
- 1999 -- Extraordinary Women of CT Award, by Clear Channel Radio & Bob Thomas Ford.
- 1999 -- Positive Leadership Unselfish Service (PLUS) Award, from The Family Center, Inc., Bristol, CT. 39-town social service agency. Keynote address.
- 1998 -- Special Olympics Hall of Fame, inaugural class, Sheila Schmidt Award for Volunteerism. 10/98
- Chairman's Award, International Association of Business Communicators (IABC), Annual International Meeting in New Orleans.
- 1997 -- Jean Kennedy Smith Founders Award, Very Special Arts Connecticut.
- 1991 -- Lou Bachman Memorial Award as Outstanding United Way Volunteer (Bristol, Plymouth, Burlington, CT).
- 1987 -- Distinguished Alumni Award, University of Bridgeport.
- 1983 -- Communicator of the Year, Connecticut-IABC.
- 1983 & '81 -- Distinguished Service Award, Connecticut Special Olympics. Nominee 1993.
- 1979 -- Internationally certified event director, clinician & coach, International Special Olympics.
- 1979 -- SNET Women in Leadership Award nominee, New Haven, Connecticut, YMCA.
- 1975 -- Distinguished Service Award, Connecticut/IABC.
- Who's Who in Outstanding Young Women of America, as well as Who's Who Outstanding Women of the World, of America, In the East, Emerging Leaders in America, Advertising, Public Relations, International Women, and Two Thousand Notable Women.

SPEAKING & PUBLISHING:

- 2015 -- Speaker - Circle of Fellows, FIR Podcast Network, "The rising (or falling) value of organizational communicators."
- 2012 -- Speaker, IABC Heritage Region Conference & Student Conference, Pittsburgh.
- 2010 -- Speaker, University of New Haven Communications Studies program.
- 2009 -- Panelist, IABC Heritage Region Conference, Cleveland, Ohio.
- 2008 -- Speaker, CT IABC.
- 2006 -- Speaker, student workshop, Heritage Region IABC Conference, Washington D.C.
- 2006 -- Speaker, "Writing it Right for the Media," IABC Writing Conference, Chicago.
- 2005 -- Contributor -- LaBossiere, C. , *The Successful Communication Consultant*, International Association of Business Communicators, San Francisco.
- Public Relations community expert on the communications portal www.comunitelligence.com
- 2000 -- Speaker and published on "*Marketing Your Mission*" at the International Fundraising Conference sponsored by Blackbaud, in South Carolina.
- 2003/2000/1999 -- A speaker on "*Marketing Your Mission*" at Yale's Women's Campaign School workshop on lobbying and action for non-profits in 1999 and 2000. Also, panelist, 2003 on the politics of women running for office.
- 2001 -- Published on planning fundraising events in *Fund Raising Management* magazine.
- Published on planning fundraising events and communication planning in *Comment* newsletter for non-profit organizations.

VOLUNTEERISM/PROFESSIONAL AND CIVIC:

- **International Association of Business Communicators (IABC)**, Member (1974-present): *Ethics Committee*, Chairman, (2014-present); *Executive Director Search Committee*, Chairman (2013-2014); *Research Foundation Board* (1995 -1997), Chairman, 1997, Trustee (1995-1996), RFQ Committee, (2000-2005); *International Executive Board*, Director of IABC U.S. District 1, (1985-1987), Director-Professionalism, (1987-1988); Director-Educational Relations, (1988-1989); *Heritage Region Executive Committee & Board (2006-2009)*, Region Director (2009), Region Leader of the Year (2009) Region Conference Co-chair (2008); Region Conference Sponsorship Chairman (2012, 2013); *Connecticut/IABC*, two-term president, (1979 and 1980); *IABC U.S. District 1 Executive Board*, (1985-1990); *Accreditation Board* and examiner for IABC, (1984-1995), exam proctor (1997); Blue Ribbon Panel judge, division judge, and division coordinator for IABC's prestigious international *Gold Quill* competition, (1979, 1980, 1983, 2000); Chair, District 1 IABC conferences, (1979 and 1986) Chairman, *EXCEL Award*, 1992.
- **Fairfield University**, 2011 to 2015. Advisory Board of the College of Arts and Sciences.
- **11th Annual Komen CT Race for the Cure**. Vice-Chair, Public Affairs, 2004.
- **Board of Selectmen, (1 of 3) Town of Guilford, CT**. Elected 1995-1997. \$46 mil. budget.
- **Board of Finance, Guilford, CT**. Elected 1991-1995. Vice Chair., 1993 to 1995. \$40+ million budget.
- **American School for the Deaf**, West Hartford, CT. President 1996-1999 (First woman to hold position in the 180-year history of the school) \$12 million budget, 200+ students; Board of Directors (1991-present); first vice president of the Board and chairman- Executive Committee (1994-1996); past development chairman; Board of Corporators (1986-1991), and 175th Anniversary/Communications 2000 capital campaign steering committee (special gifts). Co-chair, executive director search committee, 2006
- **MILE (Micro Investment Lending Enterprise)** member of the Board of Directors of national board formed by Subway founder Fred DeLuca.(2000-2003.)
- **Mercy High School**, principal's development committee. Middletown, CT. (2002 to 2003)
- **Bristol Hospital**, Corporator (1996 to 2002). Development Foundation Board Member (1994 to 1998); Capital Campaign Cabinet (1994 -1996).
- **Special Olympics, CT**, Honorary Advisory Board (1997-2002); Executive Committee, vice chairman of the Board (1989-1996); Public Ed. Chair (1979-1981, and 1988-1996); State Wheelchair Events Co-Director, (1978-1989); creator and volunteer director of public relations/advertising program for Conn. Special Olympics. Raised more than \$400K in services over 1979 and 1980, for 2 years of prize-winning communications programs on state & regional level. Honorary lifetime trustee for Greater Hartford .
- **Special Olympics, International**, 1995 World Games Board of Directors, CT, (1993- 1995); Public Speaking Trainer for adults with mental retardation in a program called Global Messengers, formerly Athletes for Outreach (1989-1997); Director/Media Center, International Winter Games, VT (1981); and liaison and coordinator between the international office and the National High School Athletic Coaches Association(1980-1985).
- **Bristol, Plymouth, Burlington (CT) United Way**, Executive Board (1986-1989), Public Relations and Marketing committees, vice chairman Allocations Committee; Chairman and Founder of New Cambridge Society Leadership Giving Club (1990-1993); United Way Emergency Campaign Chair, (1992).
- **Guilford Agricultural Society Board of Directors** (1993 to 2005), Public Relations and Advertising Director (1996 to 2008); Treasurer (1998 - 2000.)
- **Tunxis Community College Foundation** Director (1989-1992 and 1994-1997); Economic Conference Chairman (1990), Conference and Scholarship Committees (1990-1992). Economic Conference, Membership and Capitol Campaign Committees (1994-1997).
- **"Big Sister"**, (1993-1994) and School Business Partnership mentor (1989 to 1995).
- **Bristol (CT) School/Business Partnership**. Barnes Group liaison (1989 to 1996)

- **"What About Women" Volunteer Television Production Board, WVIT-TV-30**, Connecticut's NBC Station (1993-1995).
- **Bristol (CT) Girls Club Family Center**, Executive Board, (1987-1989); Lifetime Trustee, 1990. Founder, chairperson, and Steering Committee of Bristol PLUS "Women in Leadership" Awards (1990-1999).
- **Susan G. Komen Breast Cancer Foundation Connecticut Race For the Cure**, Startup steering committee, survivor coordinator, long-range planning chair, funds distribution. (1993 to 2000).
- **Very Special Arts Connecticut**. Founder, chair and steering committee for the Shoreline Festival for physically and mentally challenged artists and performers (1992 to 1997).
- **"SARAH 40"** vice chair Celebration Cabinet in charge of public education and events (1997). (Formerly Shoreline Association for Retarded and Handicapped).

OTHER:

- **University of Bridgeport**, Alumni Board of Directors, Vice President-Alumni Affairs (1985-1989), Presidential Search Committee (1986 and 1987); Alumni House Chairman (1989-1991).
- **Exceptional Cancer Patients**, Executive Board (1988).
- **New England Association for Business, Industry, & Rehabilitation, Public Relations**, (1980). Greater New Haven, Connecticut
- **Private Industry Council**, Startup member, and Marketing Committee (1980).
- **Esterio Cove Condominium Association** (FT. Myers Beach, FL.,) President, Secretary, and Treasurer (2002 to 2006). As president, led a \$4 million recovery in 2004 after the devastation of Hurricane Charley. Finance committee, 2006 - present)
- **National Panel of Consumer Arbitrators and the New Haven Better Business Bureau**, Member and arbitrator (1984- 1985).

Updated Aug., 2015

ADDENDUM TO FORT MYERS BEACH COMMITTEE APPLICATION

Why are you seeking appointment to the Audit Committee?

I think I would be a helpful addition to the volunteer team.

I had a 49-year corporate, consulting and college professor career in communications and public affairs at high levels. I know. That expertise doesn't seem to fit. However, I have lots of financial experience....beginning with my presidency/chairmanship of some large non-profit organizations.

- I have owned on the island since 1991 and became a resident in 2009. I was the Hurricane Charley president for Estero Cove, where we had about \$4 million in association and owner damage ...cleared in 9 months. Prior to that, I was EC's treasurer and for more than a decade have been EC's Finance chairman. Our operating budget and our Reserves budget are just below \$1 million each.
- I was an elected member of the Guilford CT Board of Finance from 1991-1995 and then moved up to be one of three elected Selectmen (like your Council) for 1996-1998.
- I was treasurer for the 160+-year-old Guilford Agricultural Society/Guilford Fair, bringing them out of a financial hole around 1992 and last year spearheading fundraising for \$50K and many thousands into a community foundation to bridge COVID deficits.
- I was exec VP overseeing finance, grounds, and human resources committees before rising to be the first woman president of American School for the Deaf in the '90s. Those are a few of my more relevant experiences.
- I am one of fewer than 90 Fellows in my profession worldwide and have received more than 100 awards for my work. I have served in every position from chapter president to the international board and just authored a chapter on business communication ethics published in a global primer on business communications.

Community Involvement:

- I am a two-time breast cancer survivor -- in fact, just doubled my life from the first ordeal. Since then, I have been a fervent fundraiser for Komen Race for the Cure in both CT (where I was on the founding committee) and SWFL Florida. I have been the honored survivor in both places and stood up teams in CT, SWFL, D.C., Dallas, and NYC.
- I have been involved from volunteer, to Board, to speech coach to running the NYC. I have been involved from volunteer, to Board, to speech coach to running the media center for international winter games with Special Olympics CT and internationally for 43 years and was the first volunteer inducted into the CTSO Hall of Fame.
- I founded and ran a Very Special Arts Festival in CT for 7 years in the '90s and received a Kennedy Foundation award for my work.
- I was the youngest distinguished alum ever (1987) at my undergrad alma mater University of Bridgeport.

- I earned a masters from Fairfield University, where I served for four years on the College of Arts and Sciences Advisory Board and assisted in launching a new major of study. Those are the first that come to mind but there are many more listed on my resume.

Interests/Activities:

- My husband Tom and I have no children but are very involved with extended young family. We even have Puffer "camp" for the youngest, for 3 days in the summer.
- My elderly mother still lives in CT and we maintain a vacation home there. However, Avelo Airlines at New Haven is so close to us and non-stop to Fort Myers that we can easily make quick trips as necessary of desirable. I am also often participating in ZOOM and conference calls -- the most interesting are those for American School for the Deaf where the attendees are hearing and not.
- We love boating on the Gulf and on Long Island Sound.
- I am very active in the Ascension Women's Club and am currently writing their 60th anniversary history (Sept. 2022).

I can provide references on request.

1. Requested Motion:

Meeting Date: May 16, 2022

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA PROPOSING THE ESTABLISHMENT AND FUNDING OF THE LAGUNA SHORES DREDGING ASSESSMENT AREA WITHIN THE AREA OF THE TOWN DESCRIBED HEREIN FOR THE PURPOSE OF PAYING THE COST OF THE LAGUNA SHORES CANAL DREDGING PROJECT; PAYING OTHER PROJECT, FINANCING AND COLLECTION COSTS; MAKING CERTAIN FINDINGS AND DETERMINATIONS OF SPECIAL BENEFIT AND THE LOGICAL RELATIONSHIP BETWEEN THE DREDGING PROJECT AND THE BENEFIT RECEIVED; SPECIFYING THE TOTAL ESTIMATED CAPITAL COST OF THE DREDGING PROJECT; SPECIFYING THE UNIT OF MEASUREMENT FOR, AND THE ESTIMATED MAXIMUM AMOUNT OF SAID ASSESSMENT TO BE LEVIED AGAINST EACH PARCEL WITHIN THE DESCRIBED AREA; SPECIFYING THE NUMBER OF YEARS SAID ASSESSMENT IS TO BE LEVIED; ALLOWING FOR THE PREPAYMENT OF THE SPECIAL ASSESSMENT; PROVIDING FOR ANNUAL ADJUSTMENTS TO THE AMOUNT OF THE ASSESSMENT IF NECESSARY; PROVIDING FOR CERTAIN OTHER AUTHORIZATIONS AND DELEGATIONS OF AUTHORITY IN RELATION THERETO; AND PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE.

Why the action is necessary:

What the action accomplishes:

2. Agenda:

ADMINISTRATIVE AGENDA

3. Requirement/Purpose:

Resolution

4. Submitter of Information:

5. Background:

The Town has been approached by the property owners of the Laguna Shores neighborhood to develop a special assessment for the dredging of a portion of Estero Bay to improve water access to Buccaneer Lagoon and Big Carlos Pass.

The Laguna Shore neighborhood property owners conducted a mail survey of property owners in the proposed Assessment Area to determine if most property owners in the Assessment Area are in favor of a special assessment to pay for that portion of the project consisting of the Dredging Activity.

The Town believes it is in the best interest of the Laguna Shores neighborhood property owners that live or own property within the Assessment Area, and the business owners, residents, and visitors of the Town to adopt this Initial Resolution establishing the Assessment and Assessment Area through their FMB Utility bill.

Attachments:

Financial Impact:

6. Alternative Action

7. Management Recommendations:

8. **Recommended Approval:**

Chadd Chustz, Environmental Services

John R Herin Jr, Town Attorney

John R Herin Jr, Town Attorney

Amy Baker, Town Clerk

Roger Hernstadt, Town Manager

Created/Initiated - 4/26/2022

Approved - 5/12/2022

Approved - 5/12/2022

Approved - 5/12/2022

Final Approval - 5/12/2022

1. **Requested Motion:**

Meeting Date: May 16, 2022

Authorize the Town Manager to enter into an Agreement with Arbor Tree & Land, Inc., the low, responsive, and responsible bidder to ITB-22-10-EN to perform the Laguna Shores Channel Dredge Project ("Project") in an amount not to exceed \$585,905.00, and expend budgeted funds for the Project.

Why the action is necessary:

To enter into contract with ATL to dredge the Laguna Shores Channel.

What the action accomplishes:

Approves and authorizes the Town Manager to execute contract documents once funds are received from the benefiting properties of Laguna Shores.

2. **Agenda:**

ADMINISTRATIVE AGENDA

3. **Requirement/Purpose:**

4. **Submitter of Information:**

5. **Background:**

ITB-22-10-EN was issued and properly advertised on January 4, 2022 for the Laguna Shores Channel Dredge Project. Bids were due February 4, 2022. The invitation resulted in four submittals ranging in costs from \$585,905.00 to \$760,407.15. The Town's consulting engineer, HWA, Inc, recommended award of the contract to Arbor Tree & Land, Inc. as the lowest responsive and responsible bidder.

Attachments:

1. Fmb10 Bid Compare 3-10-22 Combined
2. Fmb10ContractorRec3-3-22

Financial Impact:

\$500,000 was budgeted by the Town for the Laguna Shores Channel Dredge Project for FY22. The benefiting properties of the Laguna Shores Homeowners Association committed to paying 50% of the construction costs of the project.

6. **Alternative Action**

Do not approve.

7. **Management Recommendations:**

Approve and authorize the Town Manager to execute the contract documents pending funding by the benefiting properties of the Laguna Shores Homeowners Association.

8. **Recommended Approval:**

Chadd Chustz, Environmental Services
Daphnie Bercher, Community Services Administrator
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 4/26/2022
Approved - 4/27/2022
Approved - 5/11/2022
Approved - 5/11/2022
Final Approval - 5/11/2022

**TOWN OF FT MYERS BEACH
LAGUNA SHORES DREDGE
BID COMPARISON
LOWEST TWO BIDDERS**

ITEM #	ITEM DESCRIPTION	QTY IN PLACE	UNIT	ATL Inc. - CORRECTED		LPS Contracting - CORRECTED		Difference ATL-LPS - CORRECTED	
				UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE
1	Mobilization (<5%)	5%	Lump Sum	\$ 30,000.00	\$ 30,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00
2	Performance, Payment, and Maintenance Bond Premiums and Insurance	1%	Lump Sum	\$ 6,000.00	\$ 6,000.00	\$ 3,500.00	\$ 3,500.00	\$ 2,500.00	\$ 2,500.00
3	Material Handling, Placement and Disposal	----	----	----	----	----	----	----	----
3.a	CONTRACTOR alternative material handling, placement and disposal; attach narrative	6600	Cubic Yard	\$ 9.00	\$ 59,400.00	\$ 37.80	\$ 249,480.00	\$ (28.80)	\$ (190,080.00)
3.b	Material handling, placement and disposal within 300 yards of 280 Estrellita Drive.	~4,500 may vary	Cubic Yard	\$ 4.50	\$ 20,250.00	\$ 34.19	\$ 153,855.00	\$ (29.69)	\$ (133,605.00)
3.c	Material handling, placement and disposal at City of Fort Myers property.	up to 6,600	Cubic Yard	\$ 14.50	\$ 95,700.00	\$ 37.84	\$ 249,744.00	\$ (23.34)	\$ (154,044.00)
4	Mechanical Dredging	6600	Cubic Yard	\$ 52.00	\$ 343,200.00	\$ 50.40	\$ 332,640.00	\$ 1.60	\$ 10,560.00
5	Turbidity Monitoring	1	Lump Sum	\$ 45,000.00	\$ 45,000.00	\$ 22,950.00	\$ 22,950.00	\$ 22,050.00	\$ 22,050.00
6	Local Permits and Authorizations	1	Lump Sum	\$ 5,500.00	\$ 5,500.00	\$ -	\$ -	\$ 5,500.00	\$ 5,500.00
SUBTOTAL BID 3.a				\$	489,100.00	\$	623,570.00	\$	(134,470.00)
SUBTOTAL BID 3.b plus 2,100 CY 3.c				\$	480,400.00	\$	607,409.00	\$	(127,009.00)
SUBTOTAL BID 3.c				\$	525,400.00	\$	623,834.00	\$	(98,434.00)
A (4)	Demobilization (Project Closeout)	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 15,000.00	\$ 15,000.00	\$	15,252.50
B (5)	Contingency	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 20,039.50	\$ 20,039.50	\$	10,213.00
TOTAL BID 3.a				\$	549,605.00	\$	658,609.50	\$	(109,004.50)
TOTAL BID 3.b plus 2,100 CY 3.c				\$	540,905.00	\$	642,448.50	\$	(101,543.50)
TOTAL BID 3.c				\$	585,905.00	\$	658,873.50	\$	(72,968.50)

Estimated Mobilization	30 days after Notice to Proceed	April 7, 2022	----
Substantial Completion (calendar)	90	90	----
Final Completion (calendar)	120	120	----
Bid Bond	Yes	Yes	----
HWA items of Interest	No narrative for 3.a	No narrative for 3.a	----
	West Palm Beach, FL Offices	McHenry County, IL Offices	----
	In business under present Name - 40 yrs	In business under present Name - 4 + yrs	----

**TOWN OF FT MYERS BEACH
LAGUNA SHORES DREDGE
BID COMPARISON
ALL BIDDERS**

3-3-2022

ITEM #	ITEM DESCRIPTION	QTY IN PLACE	UNIT	ATL Inc. - CORRECTED		LPS Contracting - CORRECTED		Gator Dredging - CORRECTED		Sea & Shoreline - CORRECTED	
				UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE
1	Mobilization (<5%)	5%	Lump Sum	\$ 30,000.00	\$ 30,000.00	\$ 15,000.00	\$ 15,000.00	\$ 35,000.00	\$ 35,000.00	\$ 30,650.00	\$ 30,650.00
2	Performance, Payment, and Maintenance Bond Premiums and Insurance	1%	Lump Sum	\$ 6,000.00	\$ 6,000.00	\$ 3,500.00	\$ 3,500.00	\$ 7,727.65	\$ 7,727.65	\$ 6,130.00	\$ 6,130.00
3	Material Handling, Placement and Disposal	----	----	----	----	----	----	----	----	----	----
3.a	CONTRACTOR alternative material handling, placement and disposal; attach narrative	6600	Cubic Yard	\$ 9.00	\$ 59,400.00	\$ 37.80	\$ 249,480.00	----	----	----	----
3.b	Material handling, placement and disposal within 300 yards of 280 Estrellita Drive.	~4,500 may vary	Cubic Yard	\$ 4.50	\$ 20,250.00	\$ 34.19	\$ 153,855.00	\$ 12.25	\$ 55,125.00	\$ 20.00	\$ 90,000.00
3.c	Material handling, placement and disposal at City of Fort Myers property.	up to 6,600	Cubic Yard	\$ 14.50	\$ 95,700.00	\$ 37.84	\$ 249,744.00	\$ 26.40	\$ 174,240.00	-	-
4	Mechanical Dredging	6600	Cubic Yard	\$ 52.00	\$ 343,200.00	\$ 50.40	\$ 332,640.00	\$ 74.00	\$ 488,400.00	\$ 63.00	\$ 415,800.00
5	Turbidity Monitoring	1	Lump Sum	\$ 45,000.00	\$ 45,000.00	\$ 22,950.00	\$ 22,950.00	\$ 10,000.00	\$ 10,000.00	\$ 67,420.00	\$ 67,420.00
6	Local Permits and Authorizations	1	Lump Sum	\$ 5,500.00	\$ 5,500.00	----	----	\$ 10,000.00	\$ 10,000.00	\$ 3,000.00	\$ 3,000.00
SUBTOTAL BID 3.a				\$ 489,100.00		\$ 623,570.00		NO BID		NO BID	
SUBTOTAL BID 3.b plus 2,100 CY 3.c				\$ 480,400.00		\$ 607,409.00		\$ 661,692.65		Unable to calculate with no 3.c bid	
SUBTOTAL BID 3.c				\$ 525,400.00		\$ 623,834.00		\$ 725,367.65		NO BID	
A (4)	Demobilization (Project Closeout)	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 30,252.50	\$ 30,252.50
B (5)	Contingency	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 20,039.50	\$ 20,039.50	\$ 20,039.50	\$ 20,039.50	\$ 30,252.50	\$ 30,252.50
TOTAL BID 3.a				\$ 549,605.00		\$ 658,609.50		NO BID		NO BID	
TOTAL BID 3.b plus 2,100 CY 3.c				\$ 540,905.00		\$ 642,448.50		\$ 696,732.15		Unable to calculate with no 3.c bid	
TOTAL BID 3.c				\$ 585,905.00		\$ 658,873.50		\$ 760,407.15		NO BID	

Estimated Mobilization	30 days after Notice to Proceed	April 7, 2022	April 1, 2022	15 days after Notice to Proceed
Substantial Completion (calendar)	90	90	120	120
Final Completion (calendar)	120	120	135	150
Bid Bond	Yes	Yes	Yes	Yes
HWA items of Interest	No narrative for 3.a	No narrative for 3.a	Full Narrative Provided	No narrative for 3.a
	West Palm Beach, FL Offices	McHenry County, IL Offices	Clearwater, FL Offices	Winter Garden, FL Offices
	In business under present Name - 40 yrs	In business under present Name - 4 + yrs	In business under present Name - 16 yrs	In business under present Name - 7 yrs

**TOWN OF FT MYERS BEACH
LAGUNA SHORES DREDGE
BID COMPARISON
ALL BIDDERS
AS SUBMITTED BY CONTRACTORS**

ITEM #	ITEM DESCRIPTION	QTY IN PLACE	UNIT	ATL Inc.		LPS Contracting		Gator Dredging		Sea and Shoreline	
				UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE	UNIT PRICE	TOTAL COST IN PLACE
1	Mobilization (<5%)	5%	Lump Sum	\$ 30,000.00	\$ 30,000.00	\$ 15,000.00	\$ 15,000.00	\$ 35,000.00	\$ 35,000.00	\$ 30,650.00	\$ 30,650.00
2	Performance, Payment, and Maintenance Bond Premiums and Insurance	1%	Lump Sum	\$ 6,000.00	\$ 6,000.00	\$ 3,500.00	\$ 3,500.00	\$ 7,727.65	\$ 7,727.65	\$ 6,130.00	\$ 6,130.00
3	Material Handling, Placement and Disposal										
3.a	CONTRACTOR alternative material handling, placement and disposal; attach narrative	6600	Cubic Yard	\$ 9.00	\$ 59,400.00	\$ 37.80	\$ 249,480.00	NO BID	NO BID	NO BID	NO BID
3.b	Material handling, placement and disposal within 300 yards of 280 Estrellita Drive.	~4,500 may vary	Cubic Yard	\$ 4.50	\$ 20,250.00	\$ 34.19	\$ 153,855.00	\$ 12.25	\$ 55,125.00	\$ 20.00	\$ 90,000.00
3.c	Material handling, placement and disposal at City of Fort Myers property.	up to 6,600	Cubic Yard	\$ 14.50	\$ 95,700.00	\$ 37.84	\$ 249,744.00	\$ 26.40	\$ 174,240.00	NO BID	NO BID
4	Mechanical Dredging	6600	Cubic Yard	\$ 52.00	\$ 343,200.00	\$ 50.40	\$ 332,640.00	\$ 74.00	\$ 488,400.00	\$ 63.00	\$ 415,800.00
5	Turbidity Monitoring	1	Lump Sum	\$ 45,000.00	\$ 45,000.00	\$ 22,950.00	\$ 22,950.00	\$ 10,000.00	\$ 10,000.00	\$ 67,420.00	\$ 67,420.00
6	Local Permits and Authorizations	1	Lump Sum	\$ 5,500.00	\$ 5,500.00	\$ -	\$ -	\$ 10,000.00	\$ 10,000.00	\$ 3,000.00	\$ 3,000.00
SUBTOTAL BID 3.a				\$ 489,100.00		\$ 623,570.00		NO BID		NO BID	
SUBTOTAL BID 3.b				\$ 449,950.00		\$ 527,945.00		\$ 606,252.65		\$ 613,000.00	
SUBTOTAL BID 3.c				\$ 525,400.00		\$ 623,834.00		\$ 725,367.65		NO BID	
A (4)	Demobilization (Project Closeout)	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 15,000.00	\$ 15,000.00	\$ 39,024.63	\$ 39,024.63	\$ 30,650.00	\$ 30,650.00
B (5)	Contingency	5%	Lump Sum	\$ 30,252.50	\$ 30,252.50	\$ 20,039.50	\$ 20,039.50	\$ 39,025.63	\$ 39,025.63	\$ 30,650.00	\$ 30,650.00
TOTAL BID				\$ 549,905.00		\$ 562,984.50		\$ 760,690.26		\$ 674,300.00	
Contractor Bid Form Entry Subtotal				\$ 605,050.00		\$ 527,945.00		\$ 780,492.65		\$ 613,000.00	
Difference between Contractor entered low total bid				\$ 77,105.00		Zero		\$ 252,547.65		\$ 85,055.00	

Estimated Mobilization	30 days after Notice to Proceed	April 7, 2022	April 1, 2022	15 days after Notice to Proceed
Substantial Completion (calendar)	90	90	120	120
Final Completion (calendar)	120	120	135	150
Bid Bond	Yes	Yes	Yes	Yes
HWA items of Interest	No narrative for 3.a	No narrative for 3.a	Full Narrative Provided	No narrative for 3.a
	West Palm Beach, FL Offices	McHenry County, IL Offices	Clearwater, FL Offices	Winter Garden, FL Offices
	In business under present Name - 40 yrs	In business under present Name - 4 + yrs	In business under present Name - 16 yrs	In business under present Name - 7 yrs



Marine Engineers and Environmental Consultants

March 3, 2022

Town of Fort Myers Beach
C/O Mr. Chad Chustz
Environmental Project Manager
2525 Estero Blvd.
Fort Myers Beach, FL 33931

Chad:

I have reviewed the submitted bid packages, supplied by the Town of Fort Myers Beach, and compared each contractors Official Bid Form entries. Based on pricing submitted, that included the full project bid quantity of 6,600 CY for Material Placement, Disposal and Dredging, I would recommend that the Town of Fort Myers Beach award a contract to Arbor Tree & Land, Inc. (ATL) for ITB-22-10-EN, Laguna Shores Dredge.

Respectfully,

A handwritten signature in black ink, appearing to read 'Paul Domke', is written over a light blue horizontal line.

Paul Domke, E.I.
Project Engineer
239-334-6870

1. Requested Motion:

Meeting Date: May 16, 2022

Approve Supplemental Task Authorization #14 with Coastal Engineering Consultant's Inc., in the amount of \$47,013 for Professional Engineering Services to conduct annual monitoring of beach profiles along the shoreline of Estero Island, and authorizing the Town Manager to execute the Supplemental Task Authorization and expend budgeted funds.

Why the action is necessary:

This shoreline monitoring project will enable the Town to study and review the Town's beach profile along Estero Island. This profile review and analysis allows for the Town to collect data of sand movement and deposits around the island to keep as historical data for future use. This historical data is essential to the Town for the replacement of sand after a major storm event that most closely match what was on the island previously. This profile analysis will also calculate recent erosion rates of the island and data collected will allow staff to make better decisions for future beach nourishment projects.

What the action accomplishes:

Authorizes the Town Manager to execute the contract documents.

2. Agenda:

ADMINISTRATIVE AGENDA

3. Requirement/Purpose:

Other

4. Submitter of Information:

5. Background:

Coastal Engineering Consultants (CEC) was hired to assist the Town of Fort Myers Beach in conducting beach profile surveys for North, Central and South Estero Island, FDEP Reference Monuments R-174 to R-210, for the 2021 Estero Island Beach Monitoring. In previous years, CEC has worked under separate contracts with Lee County and WCIND to conduct beach profile surveys for the north and south ends of the island. Profiles on the northern end of the island (C-174 to R-186) were performed in accordance with the Estero Island Beach Restoration Project, DEP Permit 0173059-001-JC, for the County. Profiles on the southern end of the island were performed in accordance with the Big Carlos Pass Channel Dredging Project, DEP Permit 0332643-003-JN, for WCIND. The work performed on May 26-27, 2021, provide a comprehensive beach profile survey along the entire length of Estero Island.

Scope of Work

CEC's contracted scope of work with the Town included the following:

- Conduct beach profile monitoring surveys starting at the monument location or approximately 150 feet landward of the vegetation line, whichever is more seaward, and extending seaward to the -13.2' NAVD88 contour or 3,000 feet from the shoreline, whichever is least.
- Calculate erosion and accretion rates that occurring since the last available survey; and evaluation of patterns, trends, or changes over time.
- Prepare report describing the survey and presenting the results.

Attachments:

1. STA 14-Estero Island
2. 2021 Report -Estero Island Tech Memo 20210930 with Appendix
3. TDC ILA - 3278Beach Erosion Monitoring

Financial Impact:

The COUNTY will reimburse the TOWN for an amount not to exceed Thirty two thousand thirteen dollars and no cents (\$32,013.00) during the COUNTY'S fiscal year 2021/2022.
The TOWN budgeted \$15,000 in matching funds in FY21/22 Contingency for the Beach Monitoring Project.

6. **Alternative Action**

Do not approve.

7. **Management Recommendations:**

Approve the Supplemental Task Authorization.

8. **Recommended Approval:**

Chadd Chustz, Environmental Services
John R Herin Jr, Town Attorney
Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Created/Initiated - 5/10/2022
Approved - 5/10/2022
Approved - 5/11/2022
Final Approval - 5/11/2022

**TOWN OF FORT MYERS BEACH SERVICE AGREEMENT
SUPPLEMENTAL TASK AUTHORIZATION**

X Supplemental Task Authorization

NO.: 14

CONTRACT/PROJECT NAME: 2022 Estero Island Monitoring Survey

CONSULTANT: Coastal Engineering Consultants, Inc.

PROJECT NO.: _____

SOLICIT NO.: Environmental Assessments & Marine Engineering

CONTRACT NO.: RFQ-20-06-AD

REQUESTED BY: Chadd Chustz, Environmental Project Manager

DATE OF REQUEST: 4/20/2022

Upon the completion and execution of this Supplemental Task Authorization by both parties, the Consultant/Provider is authorized to and shall proceed with the following:

EXHIBIT "A" SCOPE OF PROFESSIONAL SERVICE: DATED: April 20, 2022

EXHIBIT "B" COMPENSATION & METHOD OF PAYMENT: DATED: April 20, 2022

EXHIBIT "C" TIME AND SCHEDULE OF PERFORMANCE: DATED: April 20, 2022

EXHIBIT "D" CONSULTANT'S/PROVIDER'S ASSOCIATED
SUB-CONSULTANT(S)/SUB-CONTRACTORS: DATED: April 20, 2022

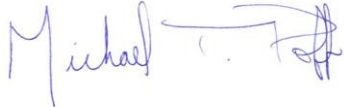
It is understood and agreed that the acceptance of this modification by the CONSULTANT/PROVIDER constitutes an accord and satisfaction.

RECOMMENDED:

By: _____
Department Director Date

By: _____
Contracts Manager Date

ACCEPTED:


By: _____ April 25, 2022
Consultant/Provider Date

TOWN APPROVAL:

By: _____
Town Manager Date

EXHIBIT A

Date: April 20, 2022

SCOPE OF PROFESSIONAL SERVICES 2022 ESTERO ISLAND MONITORING SURVEY

Task 1. 2022 Beach Profile Monitoring Survey

Conduct beach profile monitoring survey of the active beach zone along the shoreline at each R-Monument from C-174A to R-210 including one half monument profile at C-180.5. Two (2) additional profile lines will be surveyed at the groin. Survey control information to be used in the survey is presented in Table 1.

Profiles survey shall extend landward to the Florida Department of Environmental Protection (FDEP) monument location or approximately 150 feet landward of the vegetation line, whichever is more seaward. If the point 150 feet landward of the vegetation line cannot be reached because of an obstruction, such as a building, bay water, mangroves or other impassible vegetation or obstacle, then the survey line may be stopped at the obstacle and shall be noted as such in the survey field book. Coastal armoring is generally not an impassible obstacle and is normally to be surveyed. Upland profiles shall extend seaward to a waiting depth deep enough to provide an approximate 50-foot overlap with the offshore portion of the profile survey where environmental conditions allow. Offshore profile survey will extend seaward to the -13.2' NAVD88 contour or 3,000 feet from the shoreline, whichever is least.

The monitoring activities as described herein shall be conducted and provided in accordance with the current version of FDEP's "Monitoring Standards for Beach Erosion Control Projects."

Table 1. Estero Island Survey Control Information.

Reference Monument	Easting (ft)	Northing (ft)	Azimuth (deg)
C-174A	666547.875	774787.688	245 & 10
R-175	667127.375	774428.125	248 & 10
Groin 1	666545.625	774582.125	248
Groin 3	666581.375	774489.813	248
R-176	667335.625	773671.125	245
R-177	667878.688	772960.313	220
R-178	668634.375	772145.125	227
R-179	669180.000	771546.125	230
R-180	669931.125	770720.500	210
C-180.5	670330.500	770449.375	205
R-181	670772.875	770198.625	205
R-182	671773.875	769985.625	204
R-183	672566.875	769642.625	205
R-184	673555.375	769229.625	205
R-185	674405.875	768650.125	200
R-186	675299.875	768269.125	205
R-187	676626.590	767772.860	205
R-188	678055.100	766965.700	210
R-189	678958.100	766467.200	210
R-190	679784.100	765887.200	210
R-191	680532.100	765395.700	210
R-192	681339.900	764699.500	210

Reference Monument	Easting (ft)	Northing (ft)	Azimuth (deg)
R-193	681959.100	764084.100	220
R-194	682996.600	763295.600	220
R-195	683662.100	762625.100	220
R-196	684376.000	762037.100	225
R-197	685066.500	761215.400	225
R-198	685859.100	760662.600	225
R-199	686470.100	759735.100	225
R-200	687111.400	759122.000	230
R-201	688006.100	758428.000	235
R-202	688024.400	757304.000	265
R-203	688193.100	755976.100	255
R-204	688540.100	754979.600	265
R-205	689409.900	754511.000	235
R-206	690175.200	753582.500	230
R-207	690818.400	752698.000	190
R-208	691853.900	752572.500	190
R-209	692873.400	752524.000	185
R-210	693980.900	752758.500	195

Prepare and submit to the Town a Survey Report within 90 days following completion of the fieldwork. The report shall include:

- signed and sealed surveyor's report
- beach profile plots depicting the 2019, 2020, 2021 and 2022 surveys
- 2021 mean high water (MHW) shoreline position and 2021-2022 MHW change tables
- 2021-2022 beach profile volume changes to seaward point of active transport (consistent with prior year reporting)

EXHIBIT B

Date: April 20, 2022

COMPENSATION AND METHOD OF PAYMENT
2022 ESTERO ISLAND MONITORING SURVEY

Section 1. BASIC SERVICES/TASK(S)

The TOWN shall compensate the CONSULTANT for providing and performing the Task(s) set forth and enumerated in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "A". In accordance with Agreement Article 5.02(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
Task 1	2022 Monitoring Survey	\$47,013	LS	W.I.P.P.
TOTAL		\$47,013		

(Unless list is continued on next page)

Section 2. ADDITIONAL SERVICES

The TOWN shall compensate the CONSULTANT for such ADDITIONAL SERVICES as are requested and authorized in writing for such amounts or on such a basis as may be mutually agreed to in writing by both parties to this Agreement. The basis and/or amount of compensation to be paid the CONSULTANT for ADDITIONAL SERVICES requested and authorized in writing by the TOWN shall be as set forth in Article 4 of this Agreement.

Should it be mutually agreed to base compensation for ADDITIONAL SERVICES on an hourly rate charge basis for each involved professional and technical employee's wage rate classification, the applicable hourly rates to be charged are as set forth and contained in ATTACHMENT NO. 1 hereto dated 4/20/2022, entitled "CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE".

Section 3. REIMBURSABLE EXPENSES AND COSTS

When the CONSULTANT'S compensation and method of payment is based on an hourly rate for professional and/or technical personnel, the CONSULTANT shall, in addition to such hourly rates as are set forth in Attachment No. 1 hereto, be entitled to reimbursement of out-of-pocket, non-personnel expenses and costs as set forth in ATTACHMENT NO. 2 hereto dated 4/20/2022, entitled "NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: April 20, 2022

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

2022 ESTERO ISLAND MONITORING SURVEY

Consultant or Sub-Consultant Name: Coastal Engineering Consultants, Inc.
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Standard Rate Schedule Included in Master Contract			

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative & overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 2 TO EXHIBIT B

Date: April 20, 2022

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

2022 ESTERO ISLAND MONITORING SURVEY

CONSULTANT OR SUB-CONSULTANT NAME: Coastal Engineering Consultants, Inc.

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (N.T.E. 50 miles one-way) (or)	\$0.405/mile
Vehicle Rental/Gas	Actual Cost
Lodging (Per Person)	Actual Cost or NTE \$100.00
Meals:	
	Breakfast
	Lunch
	Dinner
In accordance with the Runzheimer rate service for Travel utilizing the "average", dated 5/4/06	\$12.01 \$11.82 \$24.72
Reproduction (Photocopy) 8 1/2" x 11"	\$0.15/Page
8 1/2" x 14"	\$0.20/Page
11" x 14"	\$0.35/Page
Reproduction (Blue/White Prints)	\$0.20/Sq. Ft.
Printing/Binding	Actual Cost
Mylar Sheets	Actual Cost
Photographic Supplies & Services	Actual Cost
Tolls	Actual Cost
*List other specific project related reimbursables (i.e. film/developing):	
Permit Fees	Actual Cost
NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the Town, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

*NOTE: N.T.E. indicates Not-To-Exceed

EXHIBIT C

Date: April 20, 2022

TIME AND SCHEDULE OF PERFORMANCE
2022 ESTERO ISLAND MONITORING SURVEY

This EXHIBIT "C" establishes times of completion for the various phases and tasks required to provide and perform the services and work set forth in EXHIBIT "A" of this Agreement. The times and schedule of performance set forth hereinafter is established pursuant to this Agreement.

Phase and/or Task Reference As Enumerated in EXHIBIT "A"	NAME OR TITLE Of Phase and/Task	Number Of Calendar Days For Completion Of Each Phase And/or Task	Cumulative Number of Calendar Days for Completion from Date of Notice to Proceed
Task 1	2022 Monitoring Survey	180	180

EXHIBIT D

Date: April 20, 2022

CONSULTANT'S ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S)

2022 ESTERO ISLAND MONITORING SURVEY

CONSULTANT has identified the following Sub-Consultant(s) and/or Subcontractor(s) which may be engaged to assist the CONSULTANT in providing and performing services and work on this Project:

(If none, enter the word "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm				Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
					Yes	No
NONE						



[CECI Group Services](#)
Coastal and Marine Engineering
Environmental and Geological Services
Land and Marine Survey and Mapping
Website: www.coastalengineering.com

A CECI GROUP COMPANY

MEMORANDUM

TO: Chadd Chustz
COPY: Chelsea O'Riley
FROM: Michael Poff
DATE: September 30, 2021
SUBJECT: 2021 Estero Island Beach Monitoring
CEC FILE NO. 21.102

1 Introduction

Coastal Engineering Consultants (CEC) was hired to assist the Town of Fort Myers Beach in conducting beach profile surveys for North, Central and South Estero Island, FDEP Reference Monuments R-174 to R-210 (Figure 1), for the 2021 Estero Island Beach Monitoring. In previous years, CEC has worked under separate contracts with Lee County and WCIND to conduct beach profile surveys for the north and south ends of the island. Profiles on the northern end of the island (C-174 to R-186) were performed in accordance with the Estero Island Beach Restoration Project, DEP Permit 0173059-001-JC, for the County. Profiles on the southern end of the island were performed in accordance with the Big Carlos Pass Channel Dredging Project, DEP Permit 0332643-003-JN, for WCIND. The work performed on May 26-27, 2021, provide a comprehensive beach profile survey along the entire length of Estero Island.

2 Scope of Work

CEC's contracted scope of work with the Town included the following:

- Conduct beach profile monitoring surveys starting at the monument location or approximately 150 feet landward of the vegetation line, whichever is more seaward, and extending seaward to the -13.2' NAVD88 contour or 3,000 feet from the shoreline, whichever is least.
- Calculate erosion and accretion rates that occurring since the last available survey; and evaluation of patterns, trends, or changes over time.
- Prepare report describing the survey and presenting the results.

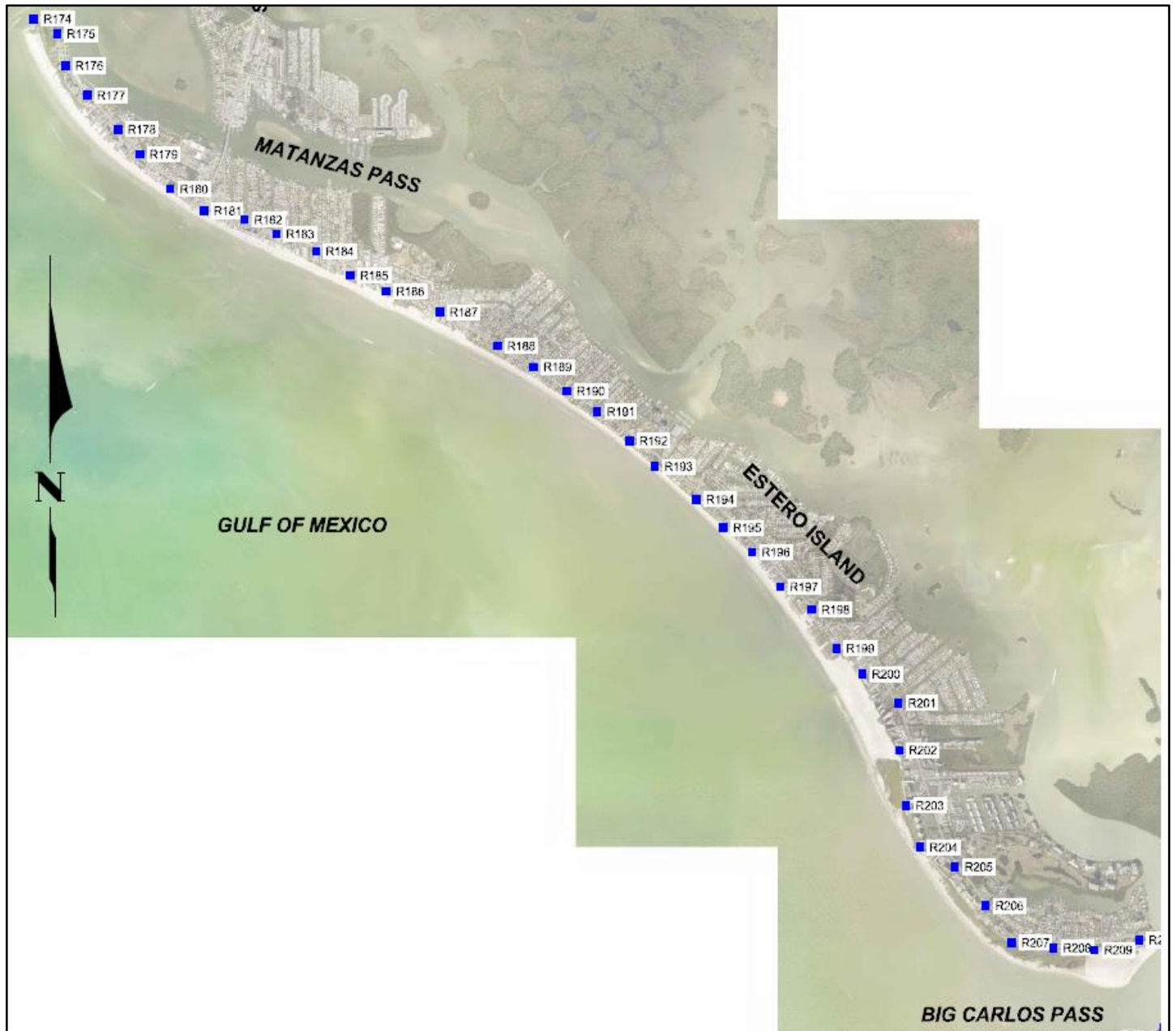


Figure 1. Estero Island Beach Profile Monitoring Location Map.

3 Beach Profiles

CEC conducted the North, Central and South Estero Island beach profile surveys between C-174 and R-210 on May 26-27, 2021.

Appendix 1 presents the beach profiles measured at each R-monument. Monitoring activities as described herein were conducted and provided in accordance with the current version of FDEP's "Monitoring Standards for Beach Erosion Control Projects."

4 Depth of Closure

The offshore depth beyond which the net sediment transport does not result in significant changes in mean water depth is known as the depth of closure (DOC). The DOC varies between the North, Central and South sections of Estero Island, and the values can be found in Tables 3, 6 and 9.

5 Shoreline and Volume Changes

CEC compared the June 2020 and June 2021 surveys for Estero Island. A summary of the shoreline and volumetric changes based on the comparisons for this period is presented below. These comparisons serve as a baseline for determining shoreline and volume change trends.

5.1 North Estero Island (C-174A to R-186)

Table 1 and Figure 2 present the shoreline positions at MHW of North Estero Island and the changes that occurred for the 2020-2021 time period. Applying weighted average methodology to account for variability in distances between the survey monuments, North Estero Island's shoreline receded by 3.1 feet between the 2020 and 2021 surveys. The changes ranged from 105.4 feet of recession at Groin 1 to 79.1 feet of advancement at R-186.

Table 2 and Figure 3 present the volumetric changes to MHW from comparing the 2020 and 2021 monitoring surveys. Table 3 and Figure 4 present those calculated above DOC for the same period. Overall, the monitoring area of North Estero Island was accretional between 2020 and 2021. Approximately 4,920 cubic yards (CY) accreted above MHW and approximately 124,730 CY accreted above DOC.

The majority of accretional changes are attributed to two fill placement projects constructed in 2020: 1) Lee County imported over 4,000 CY via truck haul to address erosion due to Tropical Storm Eta along the Lynn Hall Beach Park shoreline in the vicinity of R-180 and 2) USACE dredged Matanzas Pass and placed as beneficial use the sediment (estimated quantity was 124,000 CY based on USACE Project Plans) in the nearshore area between R-182 and R-187.

Table 1: 2020-2021 North Estero Island Shoreline Migration at MHW.

MONUMENT	MHW POSITION JUNE 2020 (FT)	MHW POSITION MAY 2021 (FT)	SHORELINE CHANGE 2020 – 2021 (FT)	AVERAGE SHORELINE CHANGE (FT)	
C-174A	402.9	Profile Below MHW	-	-105.4	North Adjacent Shoreline
GROIN 1	349.9	244.5	-105.4		
GROIN 3	345.0	252.3	-92.7		
R-175	803.2	763.3	-39.8	-18.3	Project Area
R-176	530.8	537.6	6.9		
R-177	603.2	554.7	-48.5		
R-178	547.8	527.9	-19.8		
R-179	436.8	429.5	-7.3		
R-180	158.6	152.5	-6.1		
C-180.5	152.6	148.6	-4.0		
R-181	152.6	181.7	29.1		
R-182	483.1	482.7	-0.4		
R-183	546.8	554.2	7.4		
R-184	601.8	550.9	-50.9	10.2	South Adjacent Shoreline
R-185	393.4	398.6	5.2		
R-186	383.1	462.2	79.1		
Weighted Average* (FT)				-3.1	

* Weighted average was applied to account for variability in distances between the survey monuments. For each monument an effective distance was calculated, which represents half distance between the next monument in both directions up and down the shoreline (e.g., effective distance for R-177 is the distance between R-176.5 and R-177.5).

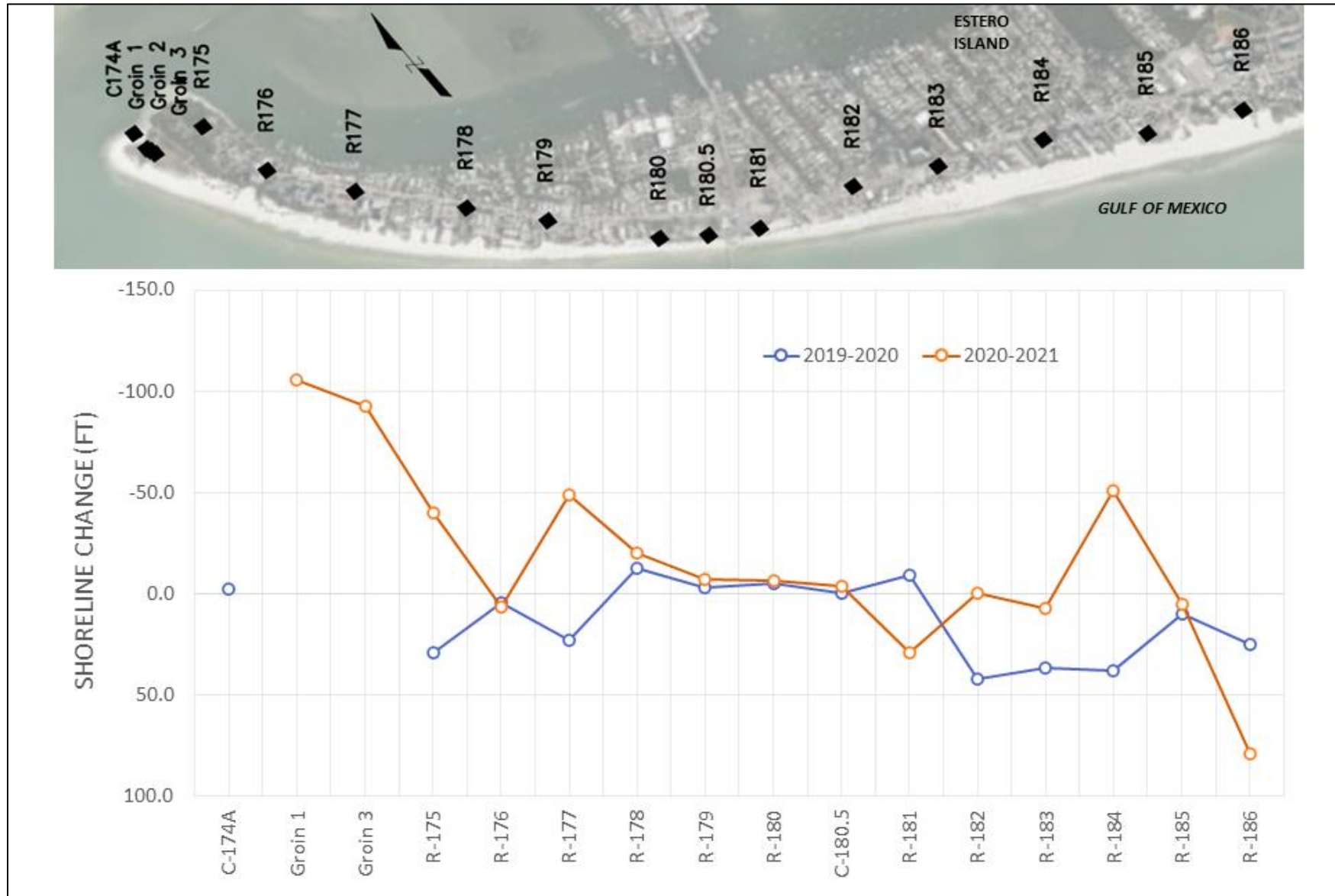


Figure 2: 2020-2021 North Estero Island Shoreline Migration at MHW.

Table 2: 2020-2021 North Estero Island Volumetric Changes Above MHW.

MONUMENT	AREA (YD³/FT)	AVE AREA (YD³/FT)	LENGTH (FT)	VOLUME (YD³)	TOTAL VOLUME (CY)	
C-174A					-3,750	Project Area
		-2.2	173	-379		
GROIN 1	-4.4					
		-2.8	99	-274		
GROIN 3	-1.2					
		-1.4	262	-359		
R-175	-1.6					
		-0.3	819	-286		
R-176	0.9					
		-0.2	1,131	-273		
R-177	-1.4					
		-1.6	1,044	-1,623		
R-178	-1.7					
		-2.3	793	-1,797		
R-179	-2.8					
		-1.3	1,213	-1,522		
R-180	0.3					
		2.0	490	975		
C-180.5	3.7					
		2.9	522	1,488		
R-181	2.0					
		0.3	1,008	304		
R-182	-1.4				8,670	South Adjacent Shoreline
		0.3	857	240		
R-183	2.0					
		-0.3	1,071	-284		
R-184	-2.5					
		0.4	1,051	373		
R-185	3.2					
		3.7	937	3,474		
R-186	4.2					
		3.4	1,418	4,866		
TOTAL				4,920		



Figure 3: 2020-2021 North Estero Island Volumetric Changes Above MHW.

Table 3: 2020-2021 North Estero Island Volumetric Changes Above DOC.

MONUMENT	CELL AREA (YD ³ /FT)	AVE CELL AREA (YD ³ /FT)	LENGTH (FT)	VOLUME (YD ³)	DOC (FT)	TOTAL VOLUME (CY)	
C-174A	-347.4				-14.5	-48,020	Project Area
		-198.3	173	-34,239			
GROIN 1	-49.2				-14.5		
		-39.4	99	-3,899			
GROIN 3	-29.5				-14.5		
		-19.2	262	-5,026			
R-175	-8.9				-14.5		
		-3.3	819	-2,709			
R-176	2.2				-14.5		
		-0.6	1,131	-731			
R-177	-3.5				-14.5		
		-4.0	1,044	-4,139			
R-178	-4.4				-14.5		
		-5.2	793	-4,155			
R-179	-6.1				-14.5		
		-0.9	1,213	-1,134			
R-180	4.2				-12.0		
		5.0	490	2,442			
C-180.5	5.7				-12.0		
		6.0	522	3,149			
R-181	6.3				-12.0	172,750	South Adjacent Shoreline
		2.4	1,008	2,423			
R-182	-1.5				-11.0		
		10.8	857	9,291			
R-183	23.2				-10.5		
		23.7	1,071	25,380			
R-184	24.1				-10.0		
		45.8	1,051	48,114			
R-185	67.5				-11.0		
		56.0	937	52,437			
R-186	44.5				-11.0		
		26.5	1,418	37,530			
TOTAL				124,730			

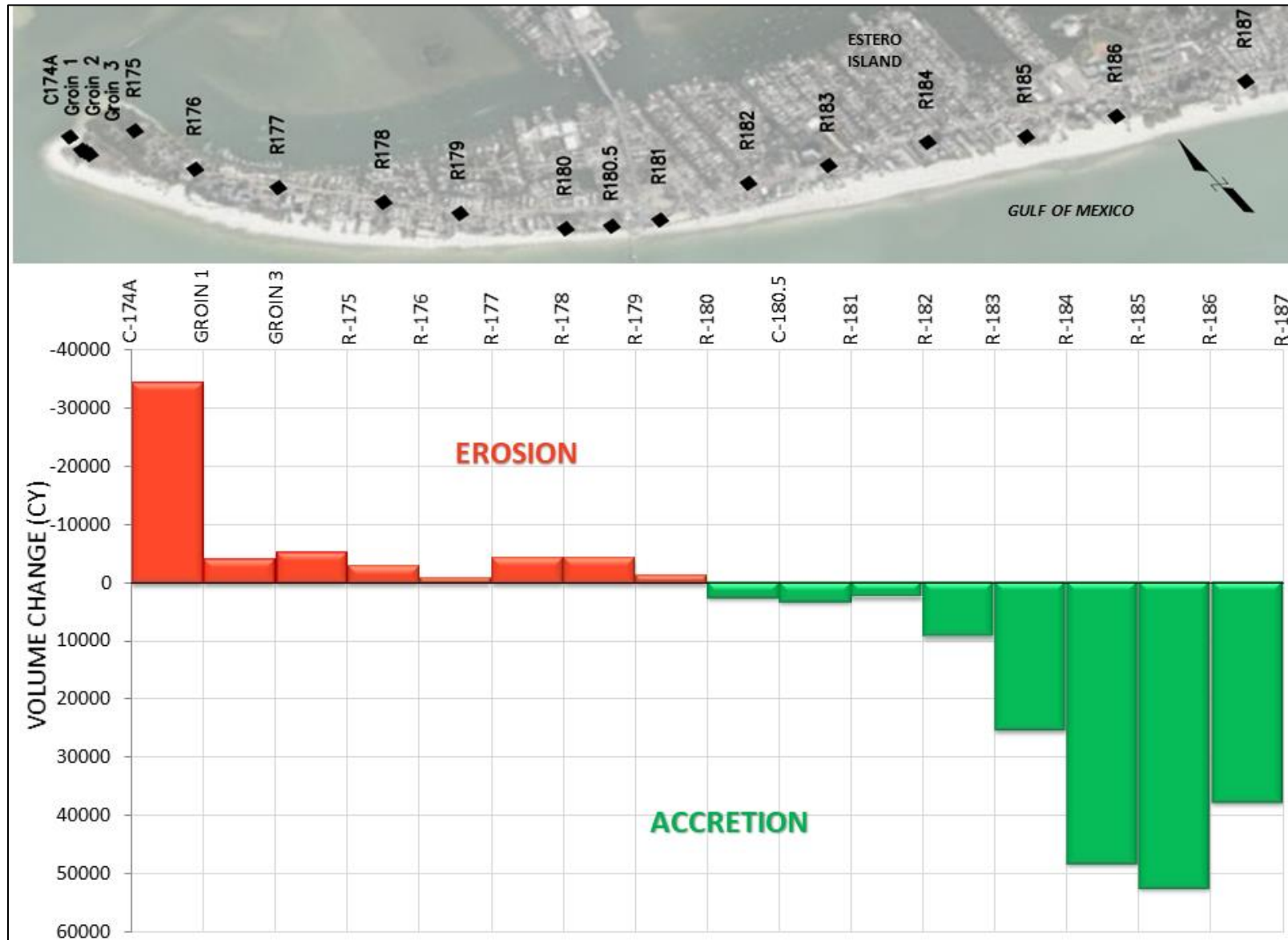


Figure 4: 2020-2021 North Estero Island Volumetric Changes Above DOC.

5.2 Central Estero Island (R-187 to R-199)

Table 4 and Figure 5 present the shoreline positions at MHW of Central Estero Island and the changes that occurred for the 2020-2021 time period. Applying weighted average methodology to account for variability in distances between the survey monuments, Central Estero Island's shoreline advanced by 13.2 feet between the 2020 and 2021 surveys. The changes ranged from 14.9 feet of recession at R-197 to 65.9 feet of advancement at R-199.

Table 5 and Figure 6 present the volumetric changes to MHW from comparing the 2020 and 2021 monitoring surveys. Table 6 and Figure 7 present those calculated above DOC for the same period. Overall, the monitoring area of North Estero Island was accretional between 2020 and 2021. Approximately 10,250 CY accreted above MHW and approximately 750 CY accreted above DOC.

Table 4: 2020-2021 Central Estero Island Shoreline Migration at MHW.

MONUMENT	MHW POSITION JUNE 2020 (FT)	MHW POSITION MAY 2021 (FT)	SHORELINE CHANGE 2020 – 2021 (FT)	AVERAGE SHORELINE CHANGE (FT)
R-187	423.3	443.3	20.0	13.6
R-188	360.9	366.0	5.1	
R-189	365.1	364.0	-1.1	
R-190	280.0	294.4	14.3	
R-191	302.2	299.5	-2.6	
R-192	209.6	228.3	18.7	
R-193	101.2	110.4	9.3	
R-194	177.2	173.7	-3.6	
R-195	126.4	170.5	44.1	
R-196	283.7	285.4	1.8	
R-197	246.6	231.7	-14.9	
R-198	522.7	542.3	19.6	
R-199	511.0	576.9	65.9	
			Weighted Average* (FT)	13.2

* Weighted average was applied to account for variability in distances between the survey monuments. For each monument an effective distance was calculated, which represents half distance between the next monument in both directions up and down the shoreline (e.g., effective distance for R-191 is the distance between R-190.5 and R-191.5).

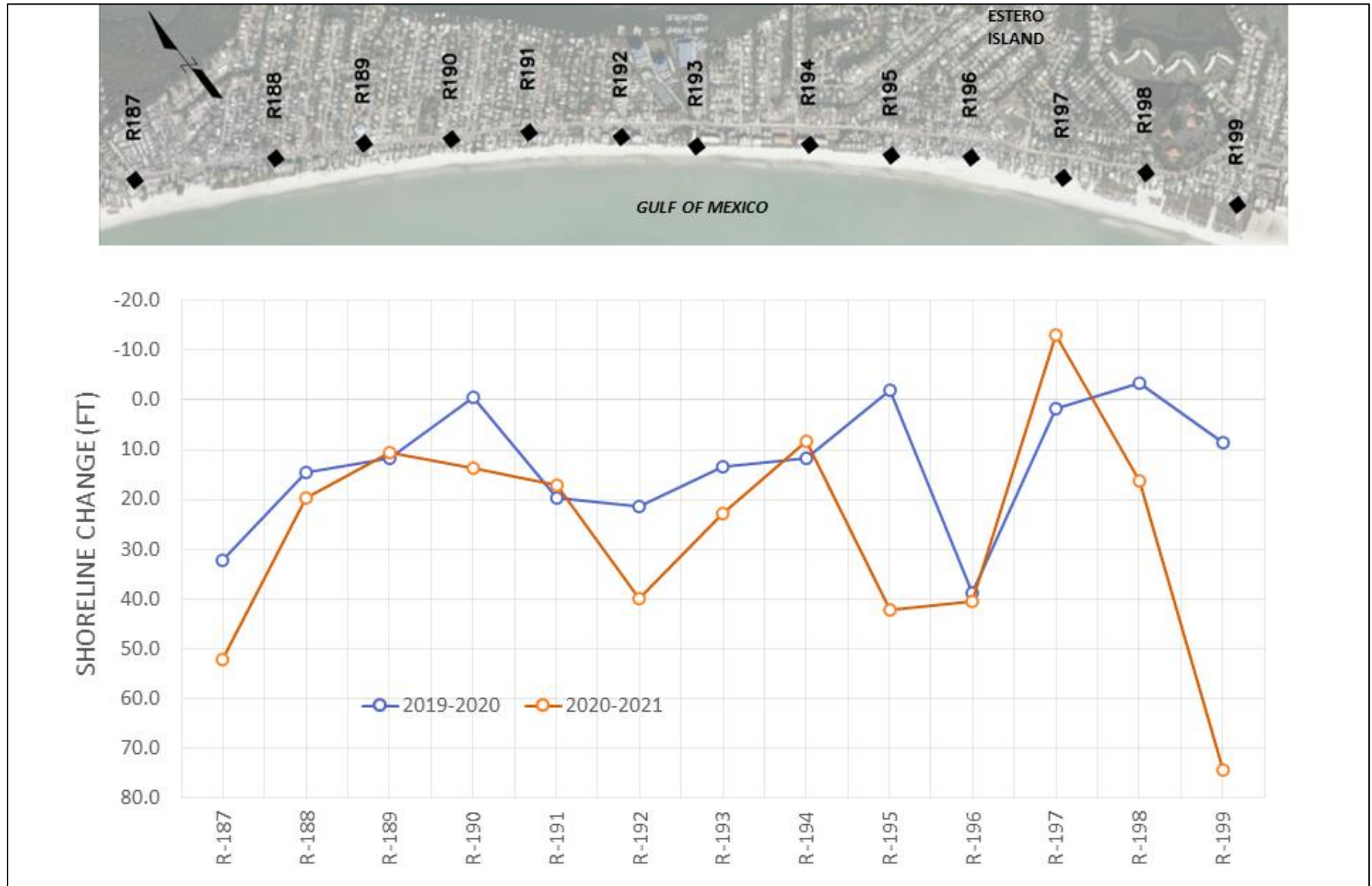


Figure 5: 2020-2021 Central Estero Island Shoreline Migration at MHW.

Table 5: 2020-2021 Central Estero Island Volumetric Changes Above MHW.

MONUMENT	AREA (YD ³ /FT)	AVE AREA (YD ³ /FT)	LENGTH (FT)	VOLUME (YD ³)
R-187	2.7			
		1.9	1,605	3,038
R-188	1.1			
		0.7	1,032	715
R-189	0.3			
		0.6	1,005	633
R-190	1.0			
		1.4	894	1,210
R-191	1.7			
		1.9	1,055	1,955
R-192	2.0			
		0.5	844	451
R-193	-0.9			
		-1.3	1,306	-1,675
R-194	-1.6			
		0.8	941	712
R-195	3.2			
		2.4	913	2,183
R-196	1.6			
		0.4	1,071	390
R-197	-0.9			
		-0.9	981	-929
R-198	-1.0			
		-0.2	1,108	-228
R-199	0.6			
		2.2	836	1,799
TOTAL				10,250



Figure 6: 2020-2021 Central Estero Island Volumetric Changes Above MHW.

Table 6: 2020-2021 Central Estero Island Volumetric Changes Above DOC.

MONUMENT	AREA (YD ³ /FT)	AVE AREA (YD ³ /FT)	LENGTH (FT)	VOLUME (YD ³)	DOC
R-187	8.5				500 ft seaward of MHW
		4.8	1,605	7,704	
R-188	1.1				
		0.4	1,032	413	
R-189	-0.3				
		0.2	1,005	169	
R-190	0.7				
		1.3	894	1,125	
R-191	1.8				
		2.2	1,055	2,312	
R-192	2.5				
		1.9	844	1,568	
R-193	1.2				
		-0.9	1,306	-1,117	
R-194	-2.9				
		-0.1	941	-61	
R-195	2.8				
		1.0	913	936	
R-196	-0.7				
		-1.6	1,071	-1,664	
R-197	-2.4				
		-3.8	981	-3,719	
R-198	-5.2				
		-5.4	1,108	-6,019	
R-199	-5.7				
		-1.1	836	-895	
TOTAL				750	



Figure 7: 2020-2021 Central Estero Island Volumetric Changes Above DOC.

5.3 South Estero Island (R-200 to R-210)

Table 7 and Figure 8 present South Estero Island's shoreline positions at MHW along with shoreline changes that occurred. Applying weighted average methodology to account for variability in distances between the survey monuments, South Estero Island's shoreline receded by 4.6 feet between the 2020 and 2021 surveys. The shoreline changes ranged from 53.8 feet of recession at R-205 to 59.2 feet of advancement at R-200.

Table 8 and Figure 9 present the volumetric changes to MHW from comparing the 2020 and 2021 monitoring surveys. Table 9 and Figure 10 present those calculated above DOC for the same period. Overall, the monitoring area of South Estero Island was recessional between 2020 and 2021. Approximately 5,420 CY accreted above MHW and approximately 37,020 CY recessed above DOC.

Table 7: 2020-2021 South Estero Island Shoreline Migration at MHW.

MONUMENT	MHW POSITION JUNE 2020 (FT)	MHW POSITION MAY 2021 (FT)	SHORELINE CHANGE 2020 – 2021 (FT)	AVERAGE SHORELINE CHANGE (FT)
R-200	777.4	836.6	59.2	-1.3
R-201	1,260.4	1,303.0	42.6	
R-202	859.9	876.0	16.1	
R-203	415.9	398.7	-17.2	
R-204	181.4	159.0	-22.3	
R-205	601.3	547.4	-53.8	
R-206	551.8	528.9	-23.0	
R-207	366.8	320.2	-46.6	
R-208	592.1	616.0	23.8	
R-209	889.2	910.4	21.2	
R-210	1,116.2	1,101.7	-14.5	
			Weighted Average* (FT)	-4.6

* Weighted average was applied to account for variability in distances between the survey monuments. For each monument an effective distance was calculated, which represents half distance between the next monument in both directions up and down the shoreline (e.g., effective distance for R-204 is the distance between R-203.5 and R-204.5).

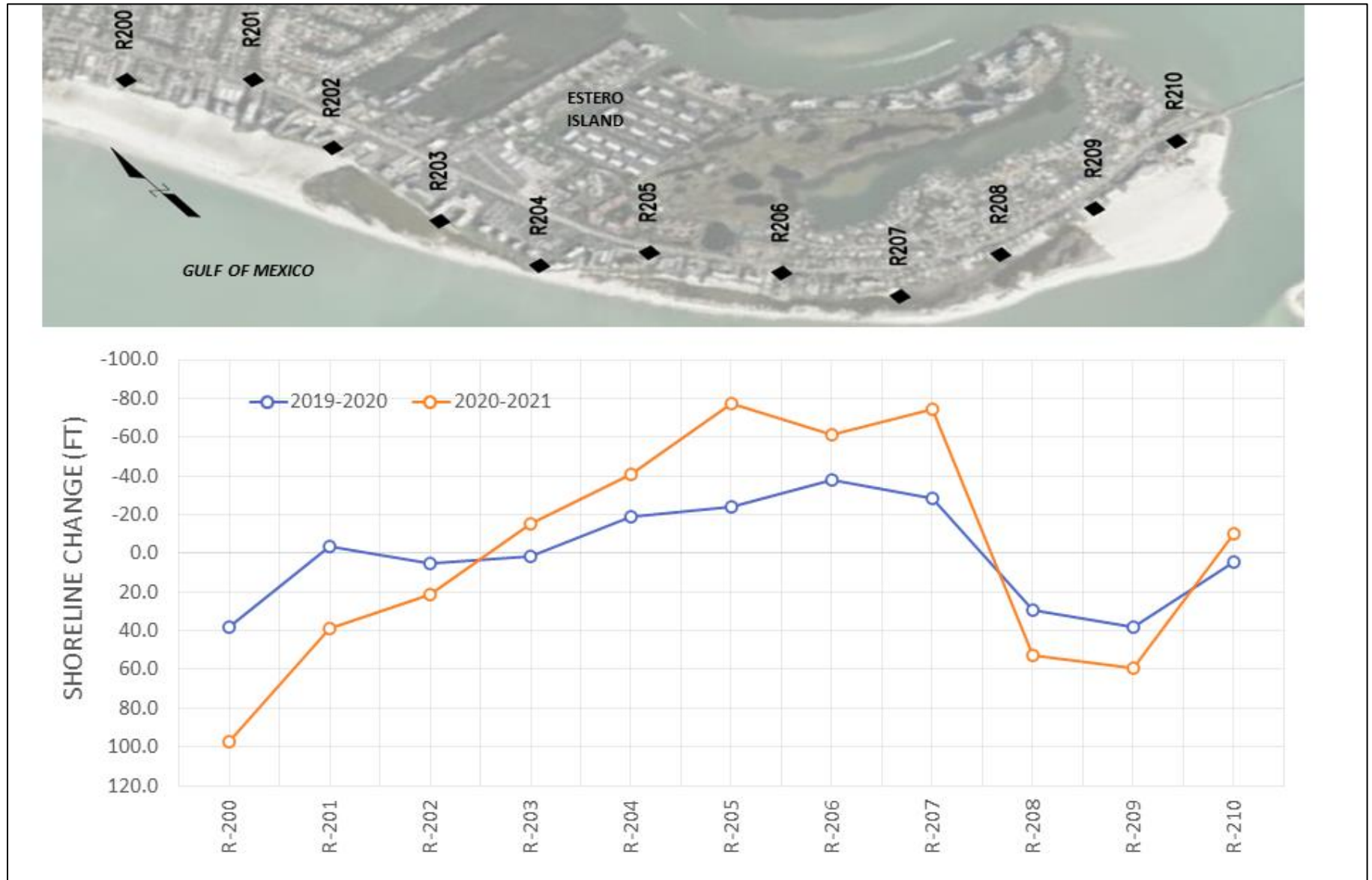


Figure 8: 2020-2021 South Estero Island Shoreline Migration at MHW.

Table 8: 2020-2021 South Estero Island Volumetric Changes Above MHW.

MONUMENT	AREA (YD ³ /FT)	AVE AREA (YD ³ /FT)	LENGTH (FT)	VOLUME (YD ³)
R-200	3.7			
		3.8	1,035	3,899
R-201	3.8			
		1.2	604	716
R-202	-1.4			
		-1.6	1,472	-2,303
R-203	-1.7			
		-2.0	1,106	-2,182
R-204	-2.3			
		-1.4	864	-1,215
R-205	-0.6			
		1.2	1,234	1,482
R-206	3.0			
		1.6	1,179	1,837
R-207	0.2			
		1.2	1,069	1,325
R-208	2.3			
		2.3	1,087	2,519
R-209	2.3			
		-0.7	939	-662
R-210	-3.7			
TOTAL				5,420

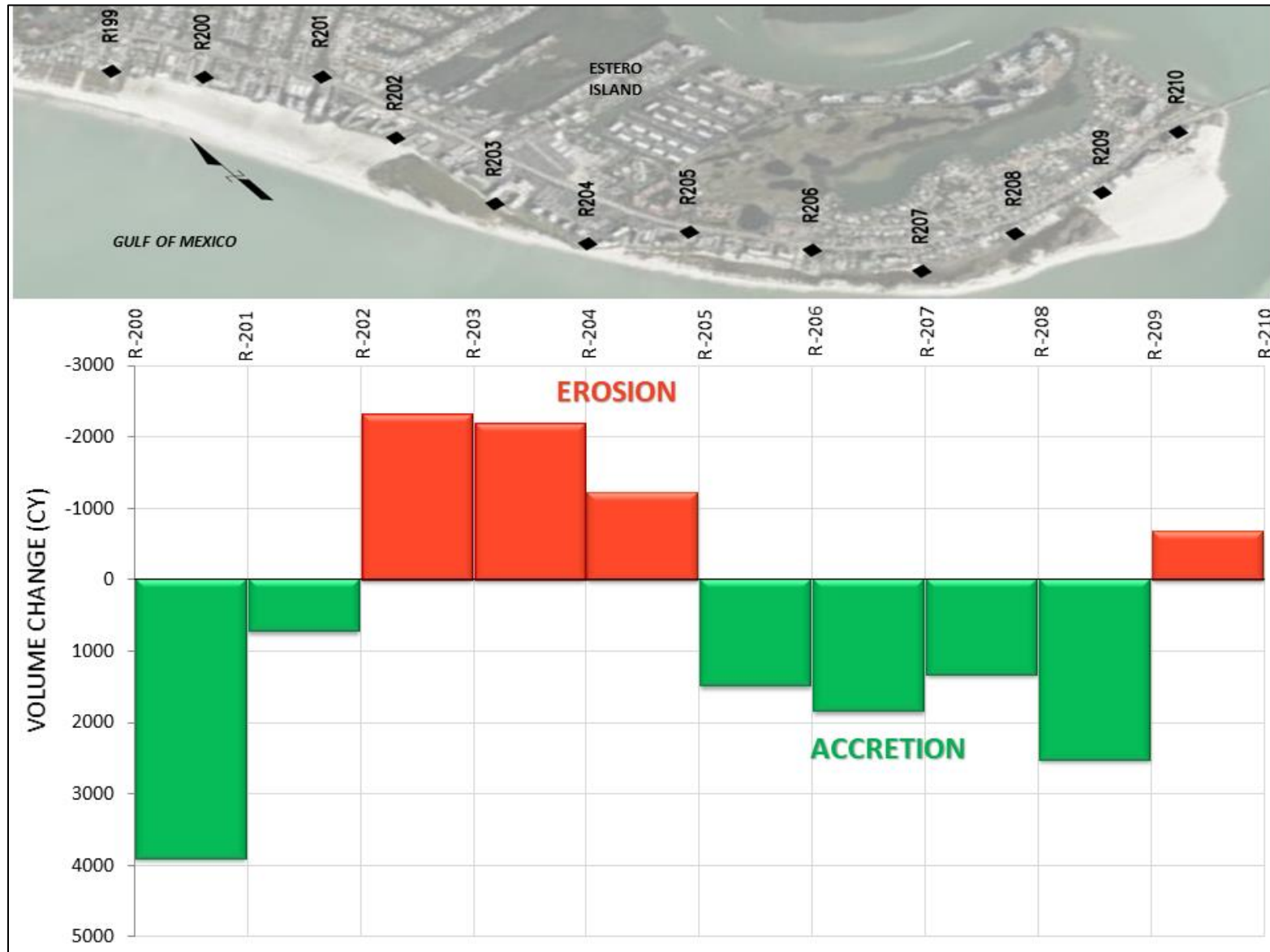


Figure 9: 2020-2021 South Estero Island Volumetric Changes Above MHW.

Table 9: 2020-2021 South Estero Island Volumetric Changes Above DOC.

MONUMENT	AREA (YD ³ /FT)	AVE AREA (YD ³ /FT)	LENGTH (FT)	VOLUME (YD ³)	DOC (FT)
R-200	3.6				500 seaward of MHW
		3.5	1,035	3,621	
R-201	3.4				
		0.5	604	279	
R-202	-2.5				
		-5.4	1,472	-8,003	
R-203	-8.4				
		-9.7	1,106	-10,747	
R-204	-11.1				
		-11.5	864	-9,944	
R-205	-11.9				
		-6.2	1,234	-7,708	
R-206	-0.6				
		-6.9	1179	-8,147	
R-207	-13.2				
		-2.8	1,069	-3,019	
R-208	7.6				1400 ft seaward of Monument
		7.6	1,087	8,244	
R-209	7.6				
		-1.7	939	-1,596	
R-210	-11.0				
TOTAL				-37,020	

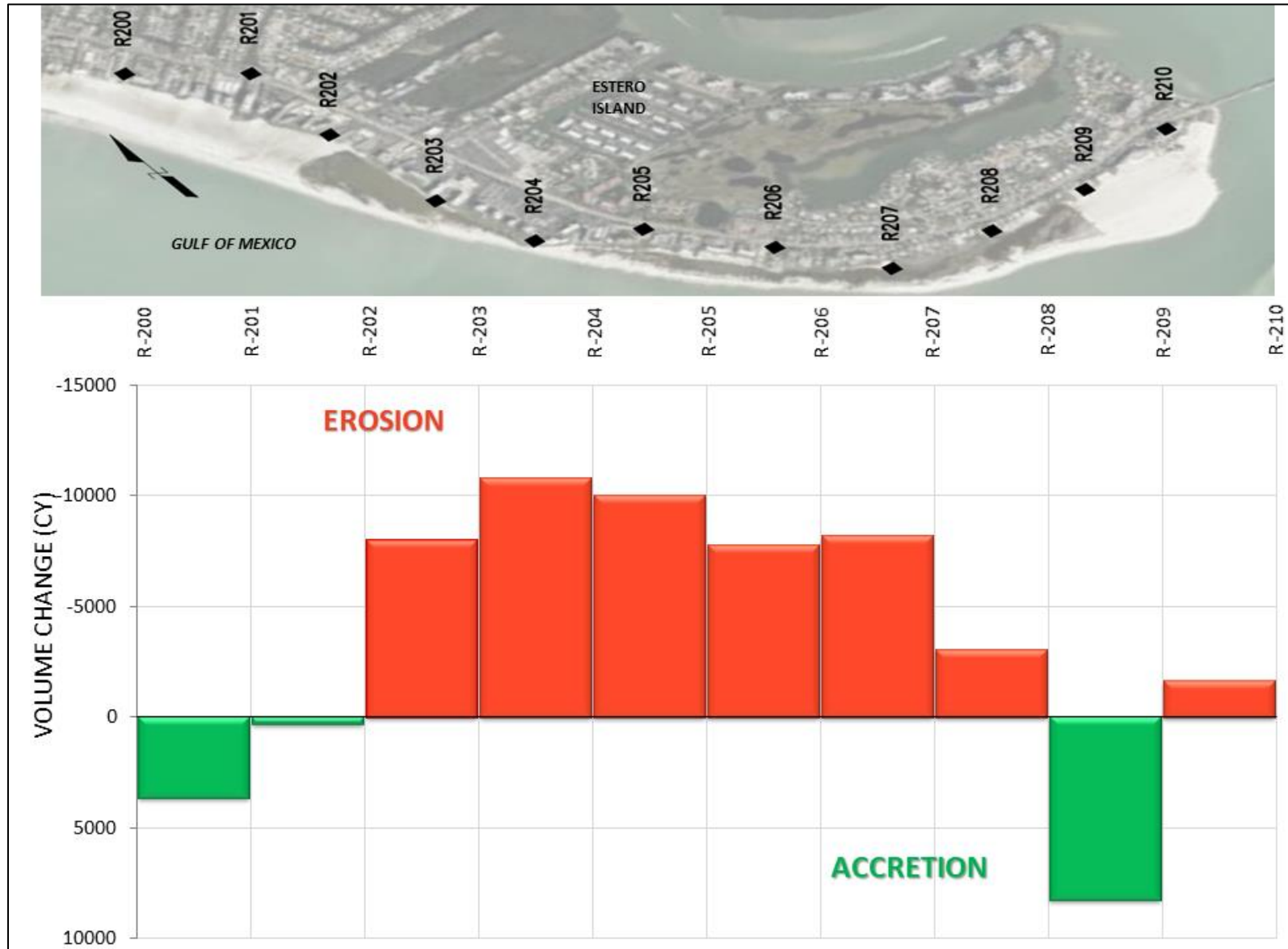


Figure 10: 2020-2021 Central Estero Island Volumetric Changes Above DOC.

5.4 Estero Island Summary (R-174 to R-210)

Table 10 presents a summary of shoreline and volumetric changes that occurred between 2020 and 2021 for Estero Island by shoreline segment and overall.

Table 10: 2020-2021 Estero Island Shoreline and Volume Change Totals

SHORELINE SEGMENT	WEIGHTED SHORELINE POSITION CHANGE (FT)	VOLUME ABOVE MHW (CY)	VOLUME ABOVE DOC (CY)
North Estero Island	-3.1	4,920	124,730
Central Estero Island	13.2	10,250	750
South Estero Island	-4.6	5,420	-37,020
OVERALL	2.4	20,590	88,460

6 Summary

On behalf of the Town of Fort Myers Beach, CEC conducted a comprehensive beach profile survey along Estero Island and performed a shoreline change and volumetric change analysis.

Between 2020 and 2021, Estero Island experienced shoreline changes ranging from 105.4 feet of recession to 79.1 feet of advancement with the average weighted shoreline change of 2.4 feet of advancement; and volumetric changes above MHW and DOC equal to approximately 20,590 CY and 88,460 CY of accretion, respectively. It should be noted that the significant accretion resulted from two fill placement projects constructed in 2020:

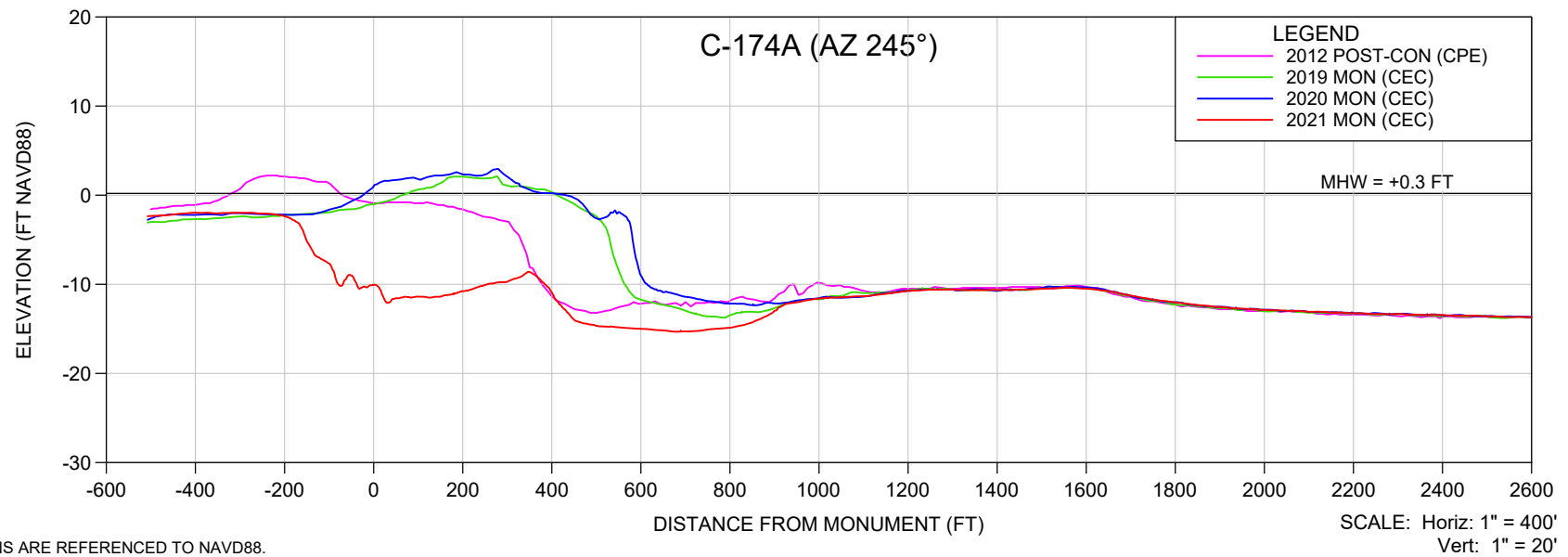
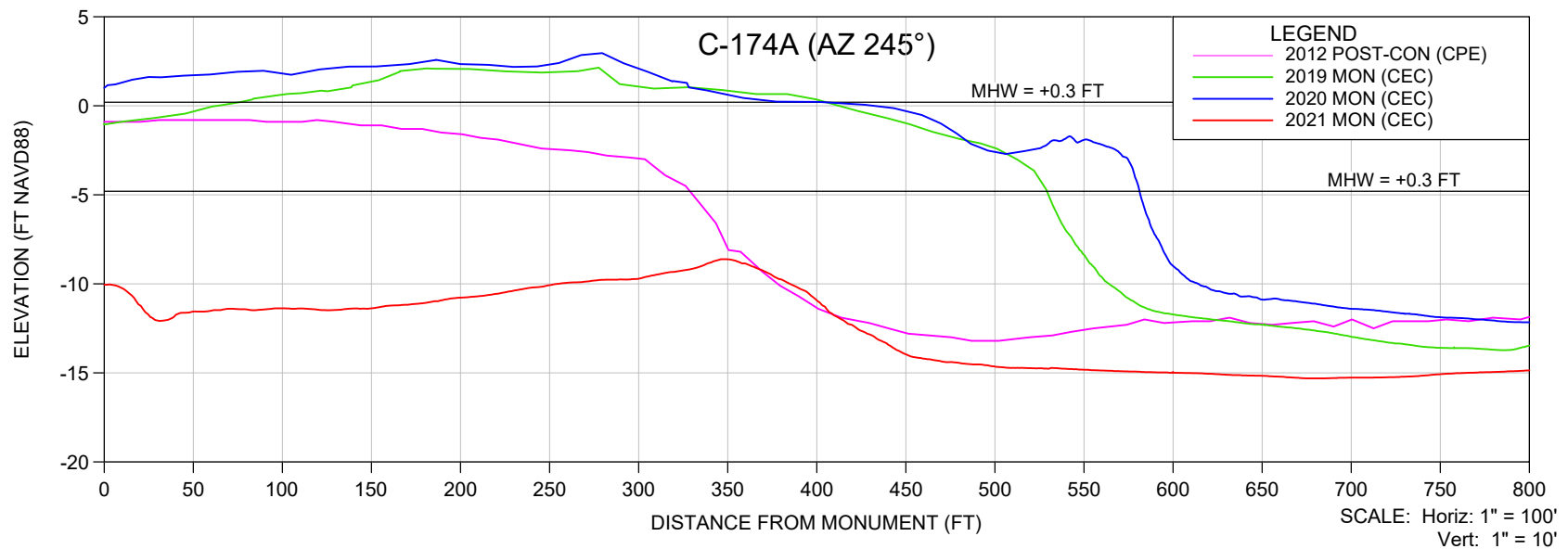
- 1) Lee County imported over 4,000 CY via truck haul to address erosion due to Tropical Storm Eta along the Lynn Hall Beach Park shoreline in the vicinity of R-180 and
- 2) USACE dredged Matanzas Pass and placed dredge material (estimated quantity was 124,000 CY based on USACE Project Plans) in the nearshore area between R-182 and R-187.

7 References

Coastal Engineering Consultants, Inc. (2015) "Estero Island Restoration 2015 Annual Monitoring Report."

APPENDIX 1

BEACH PROFILES



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

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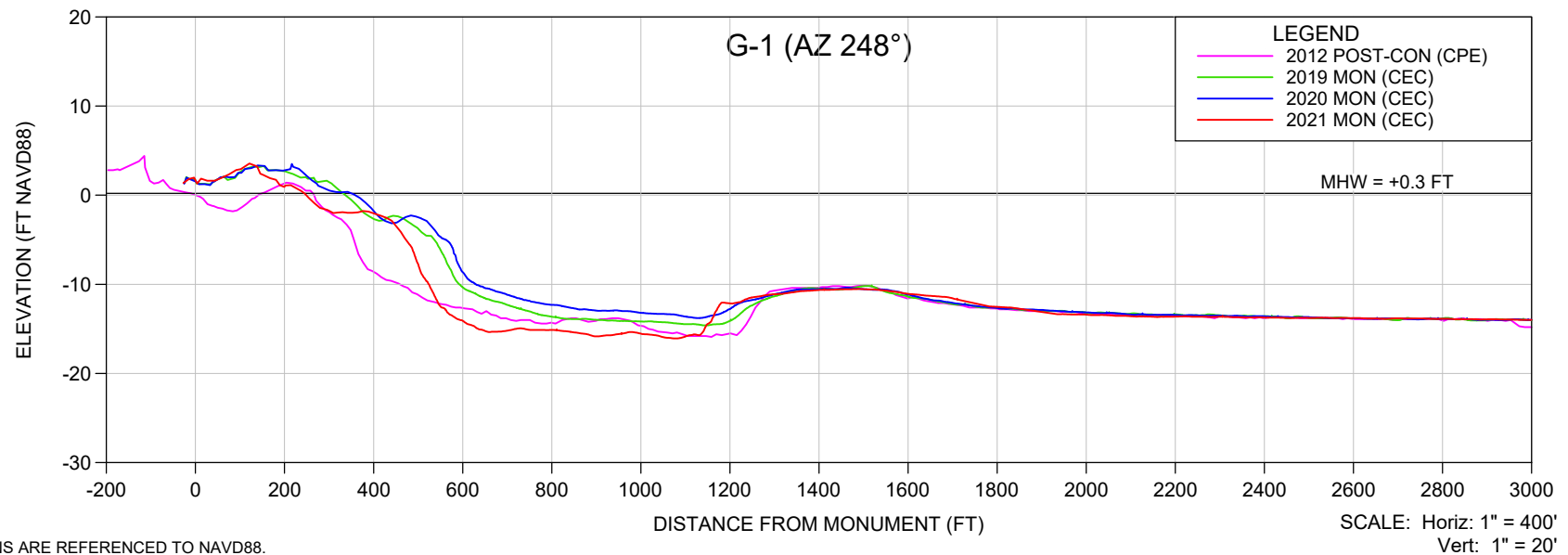
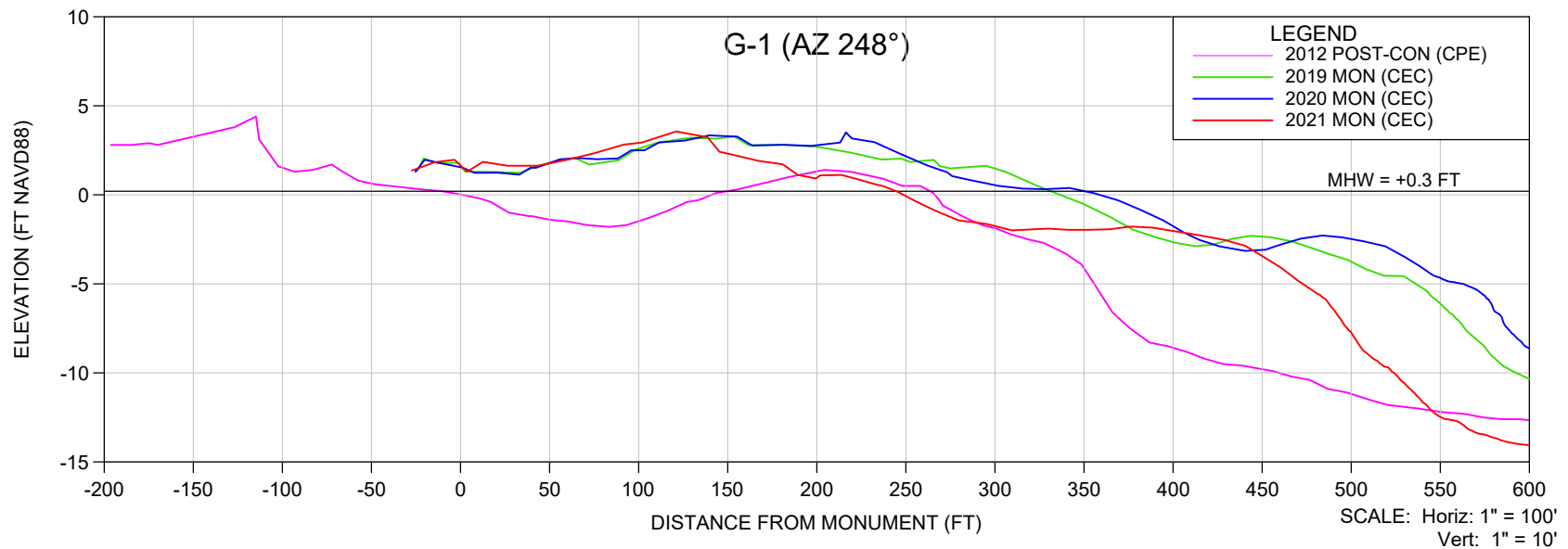
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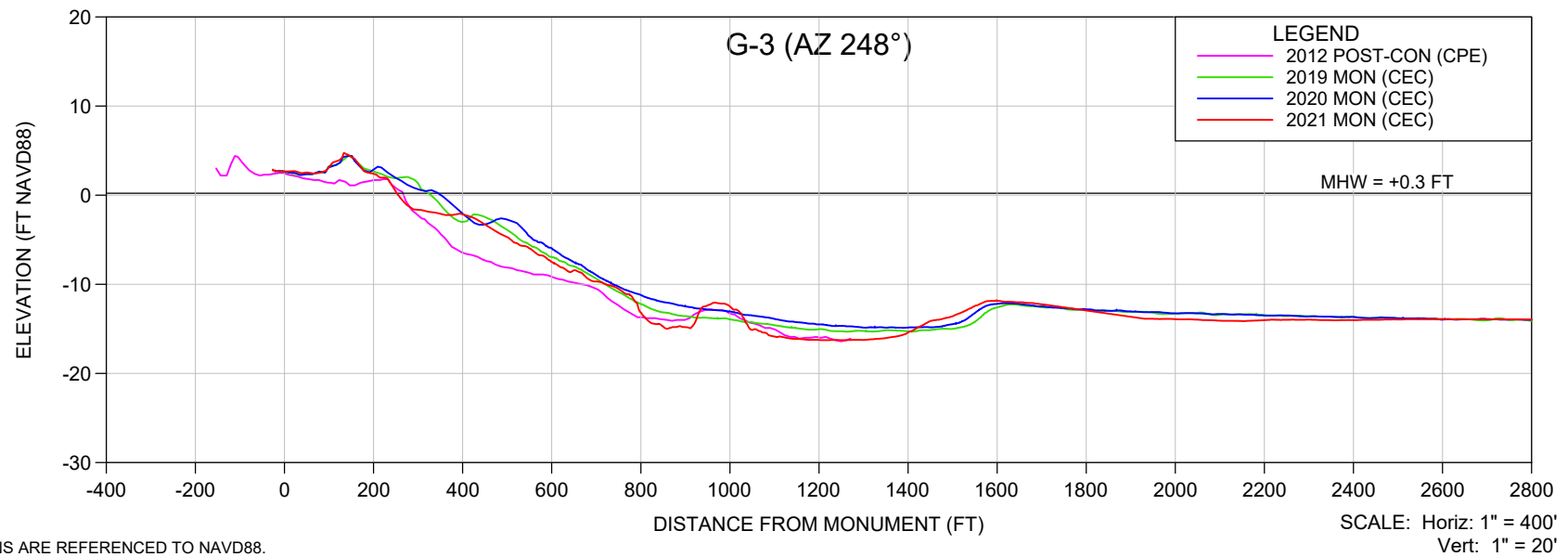
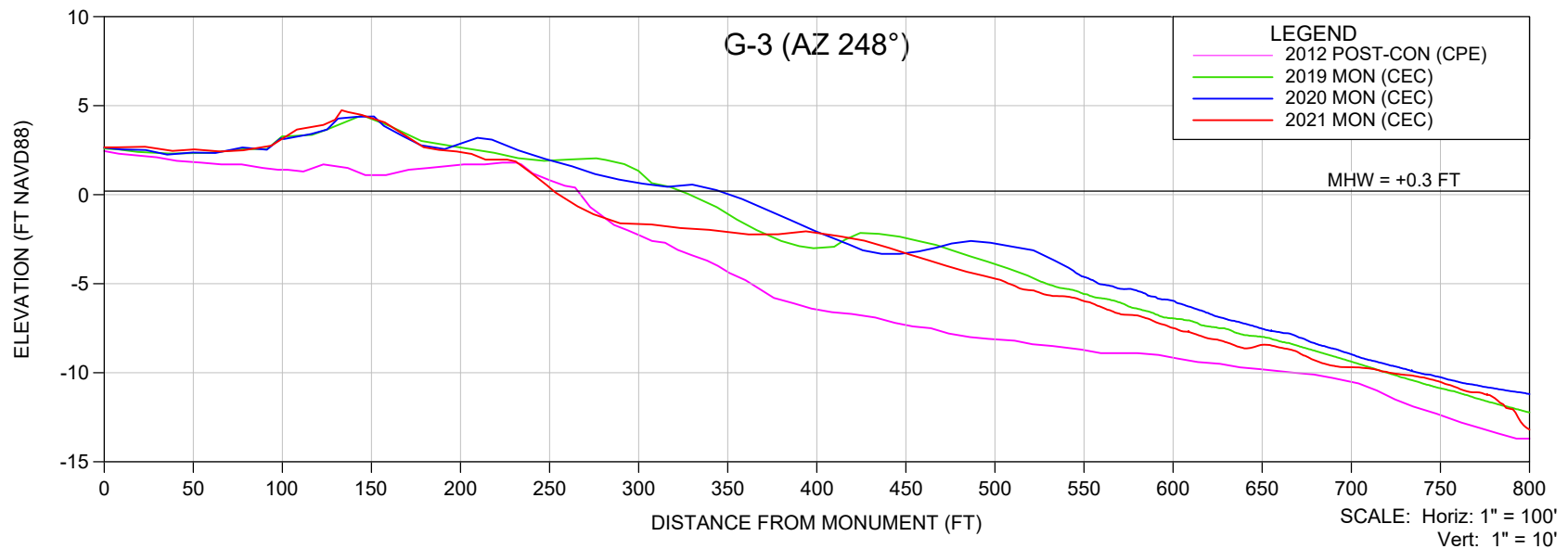
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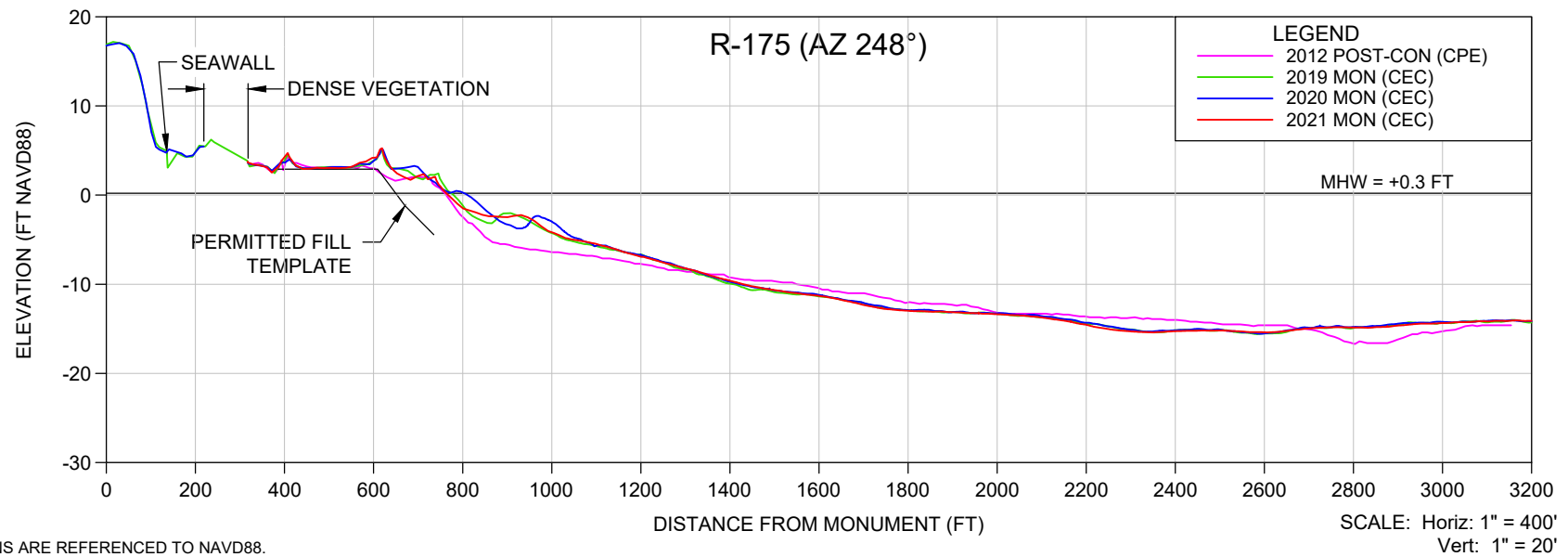
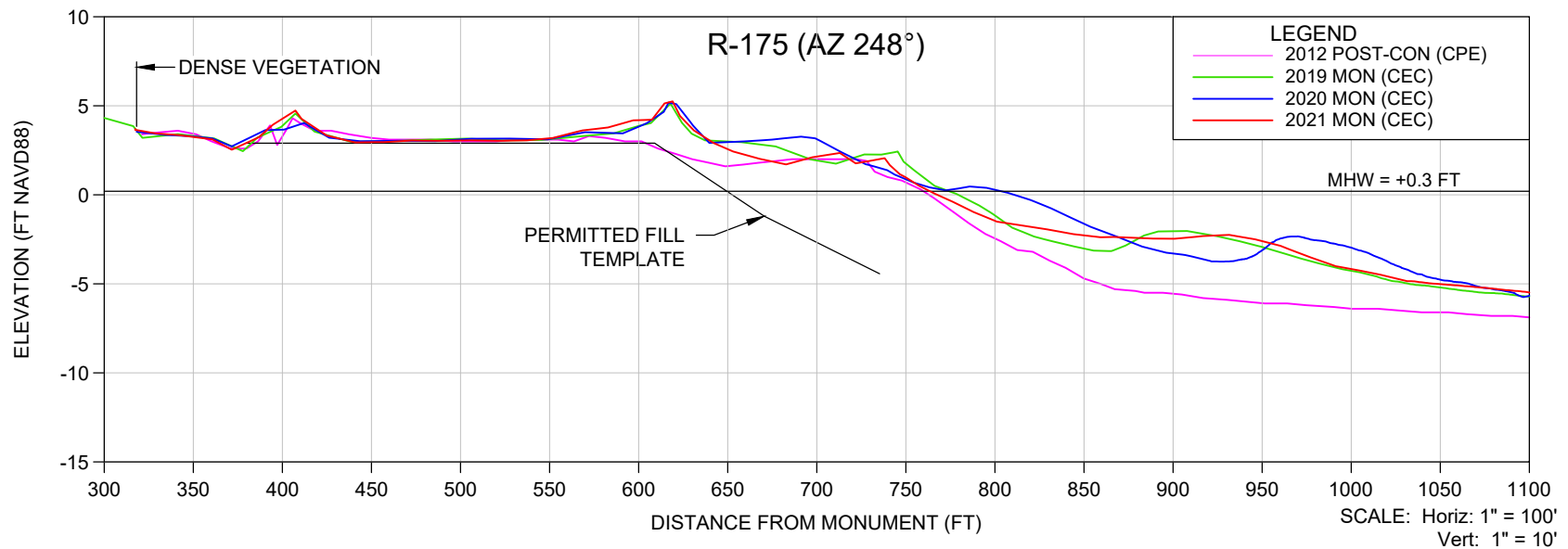
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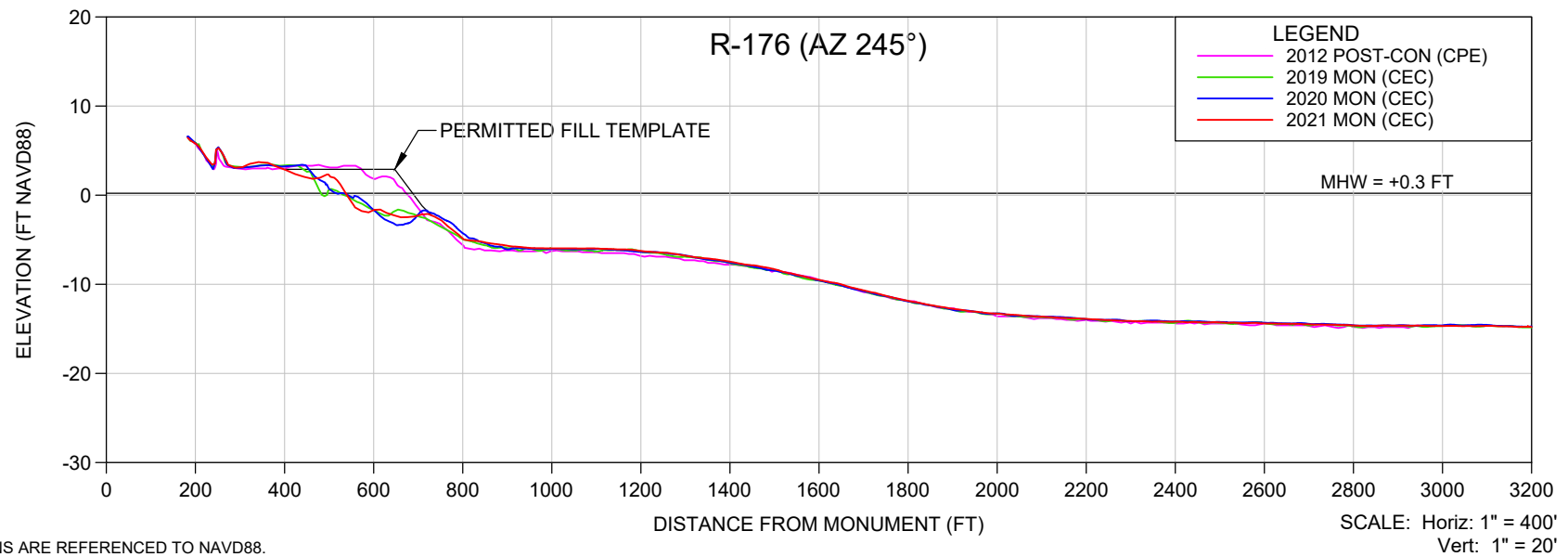
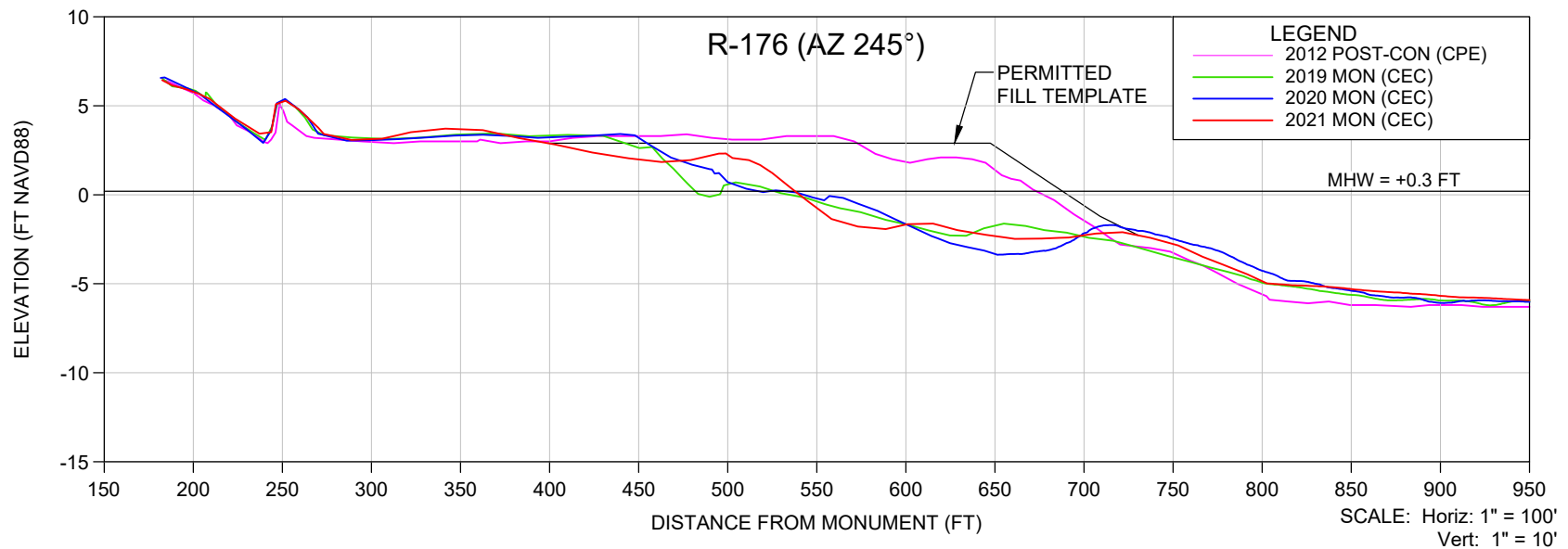
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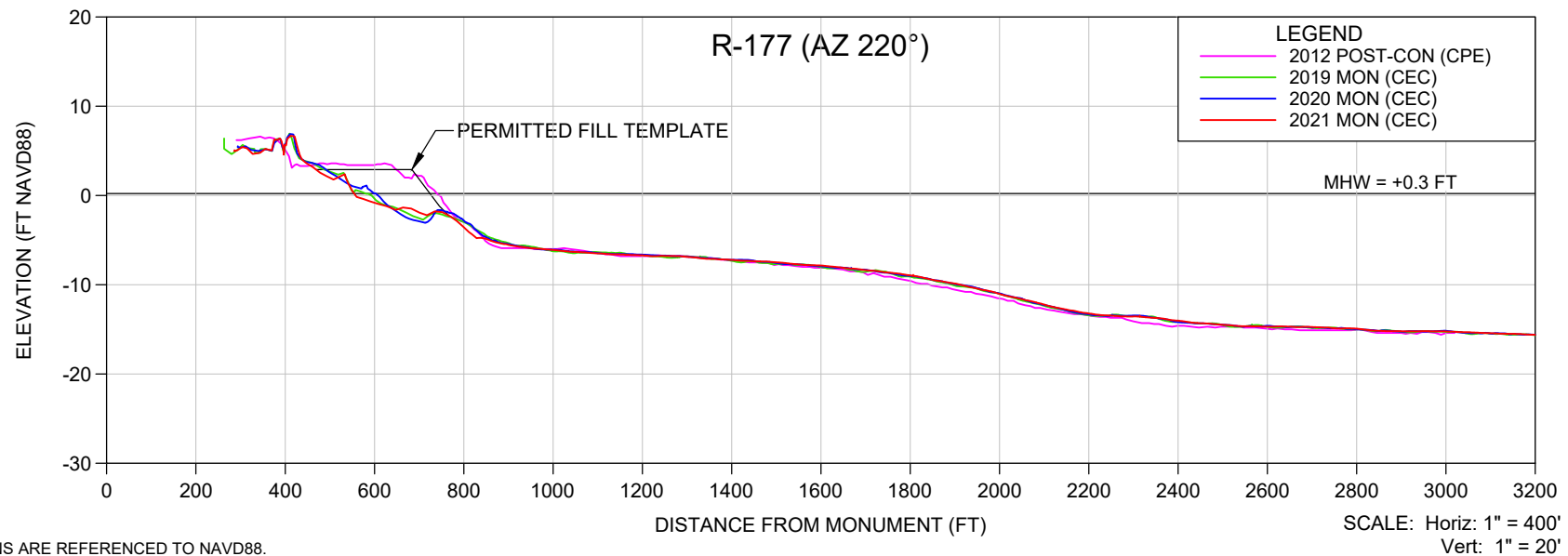
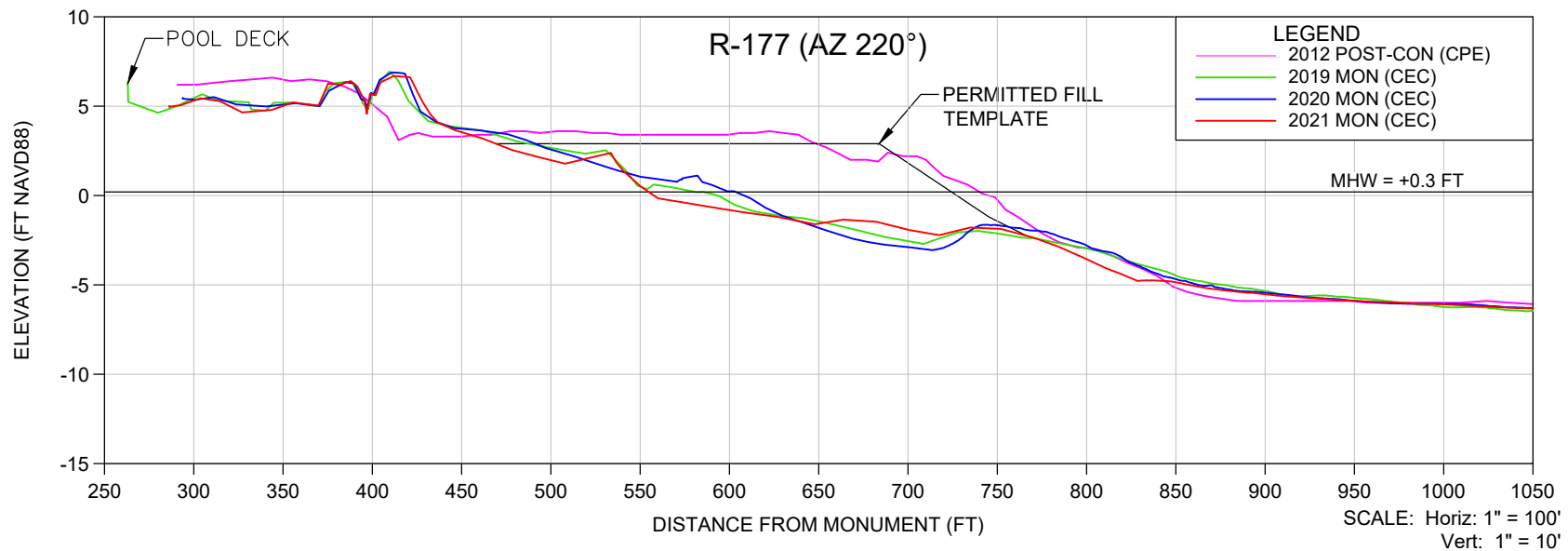
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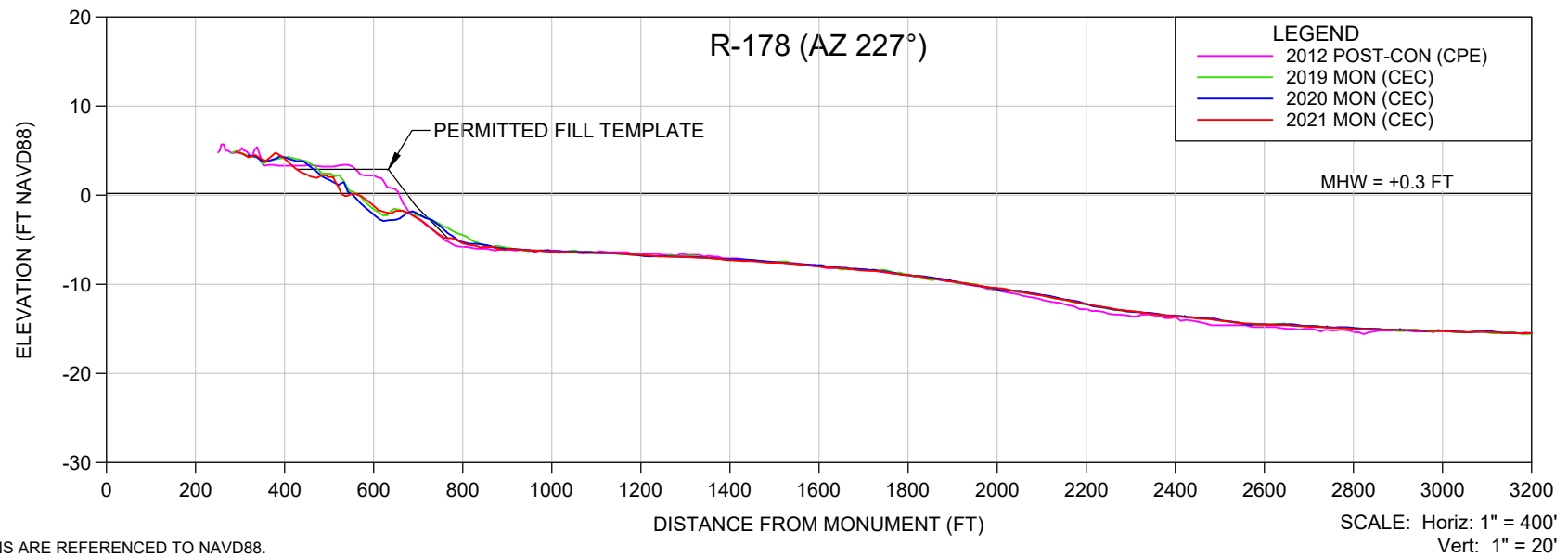
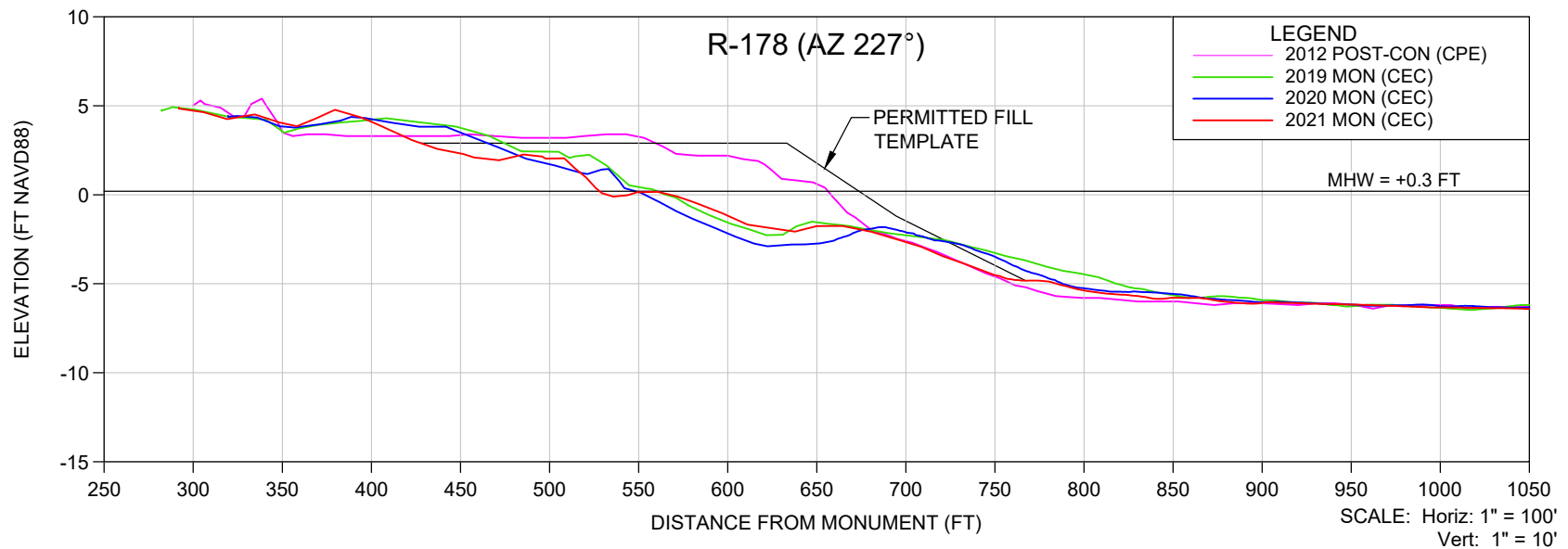
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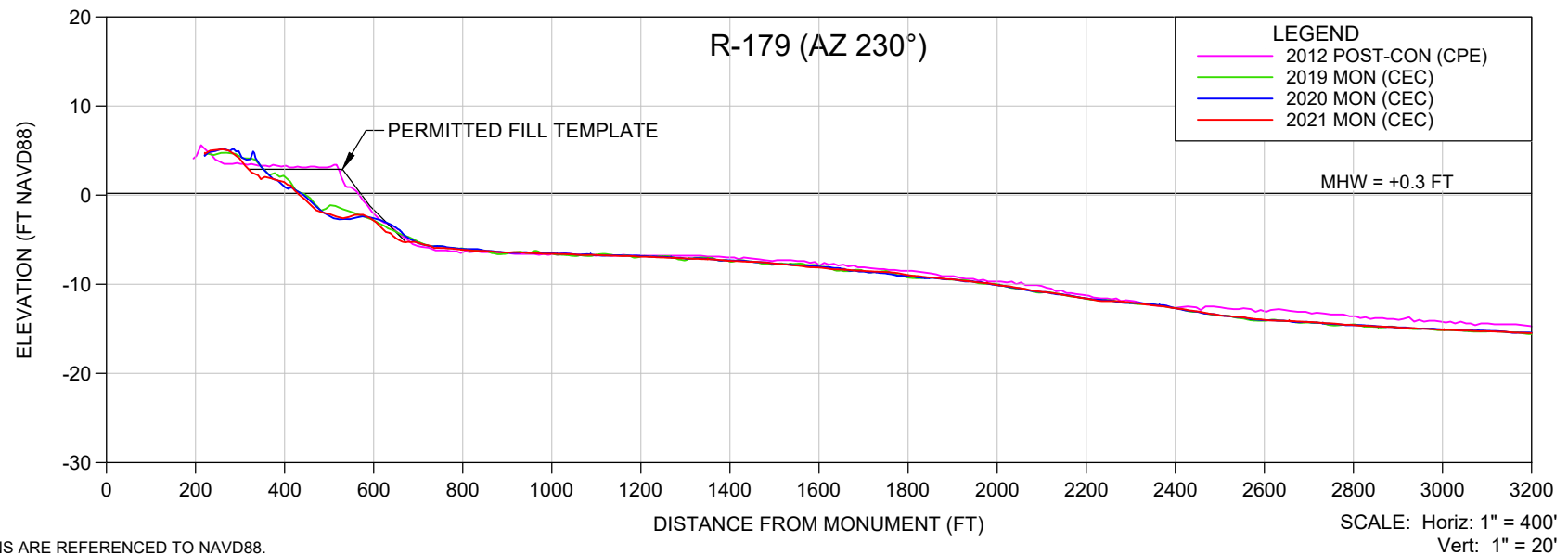
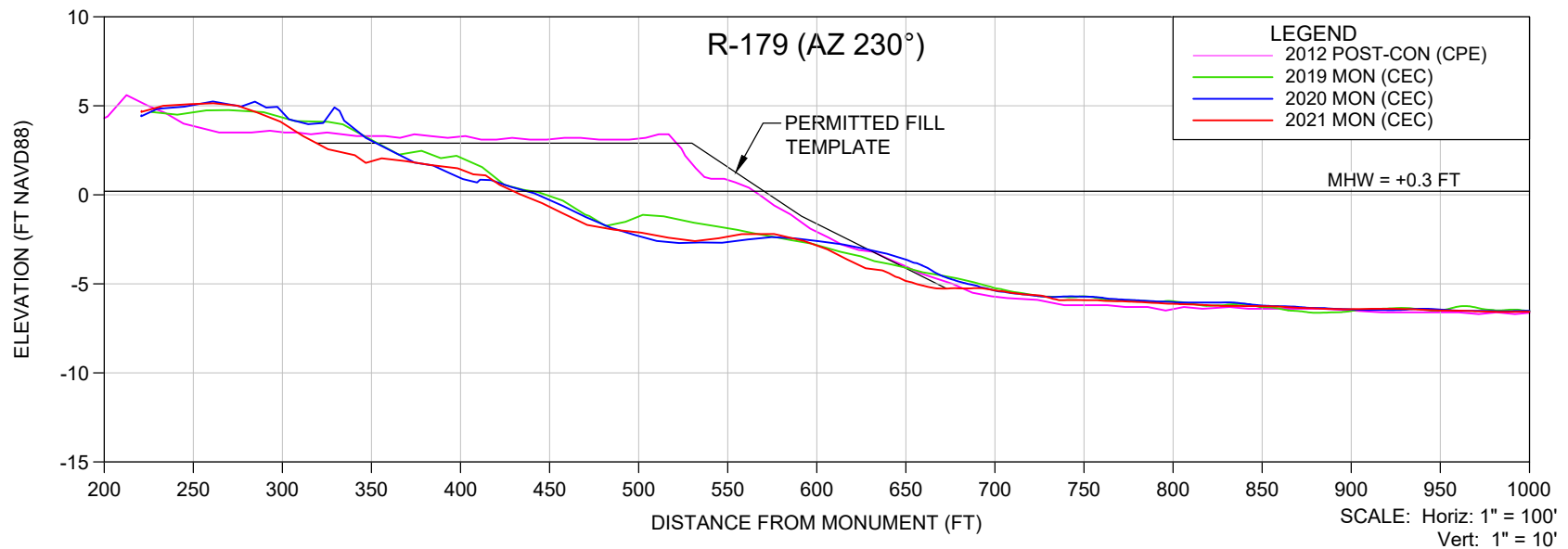
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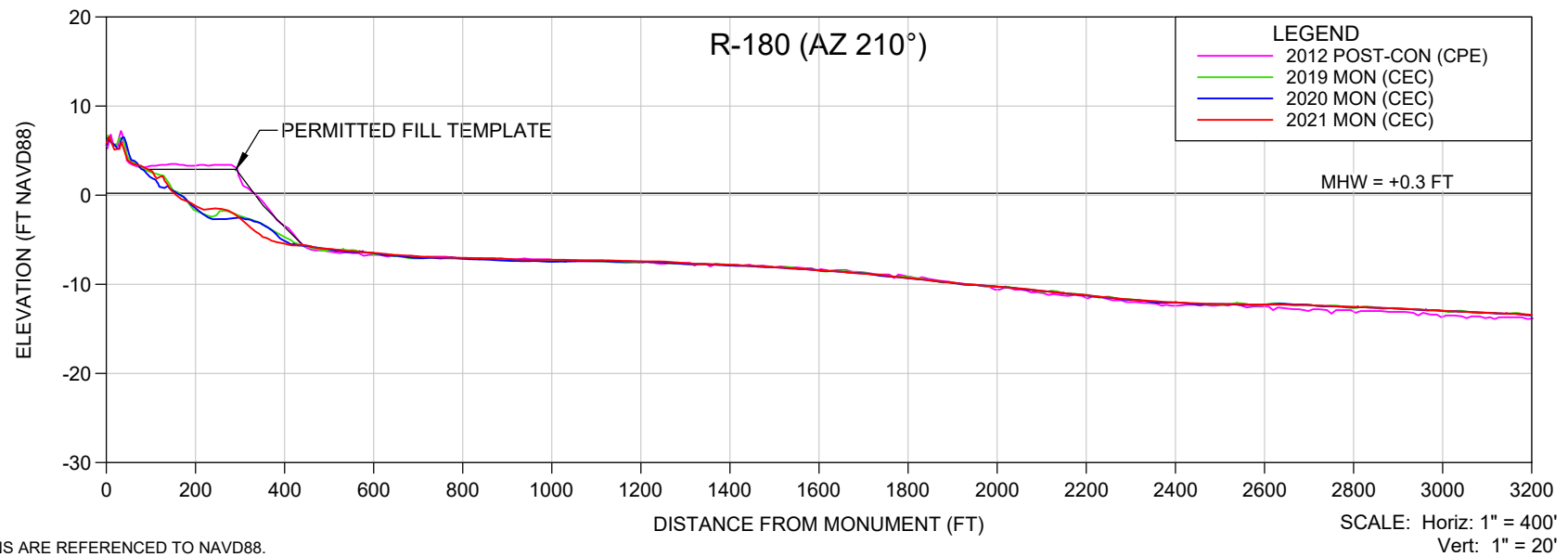
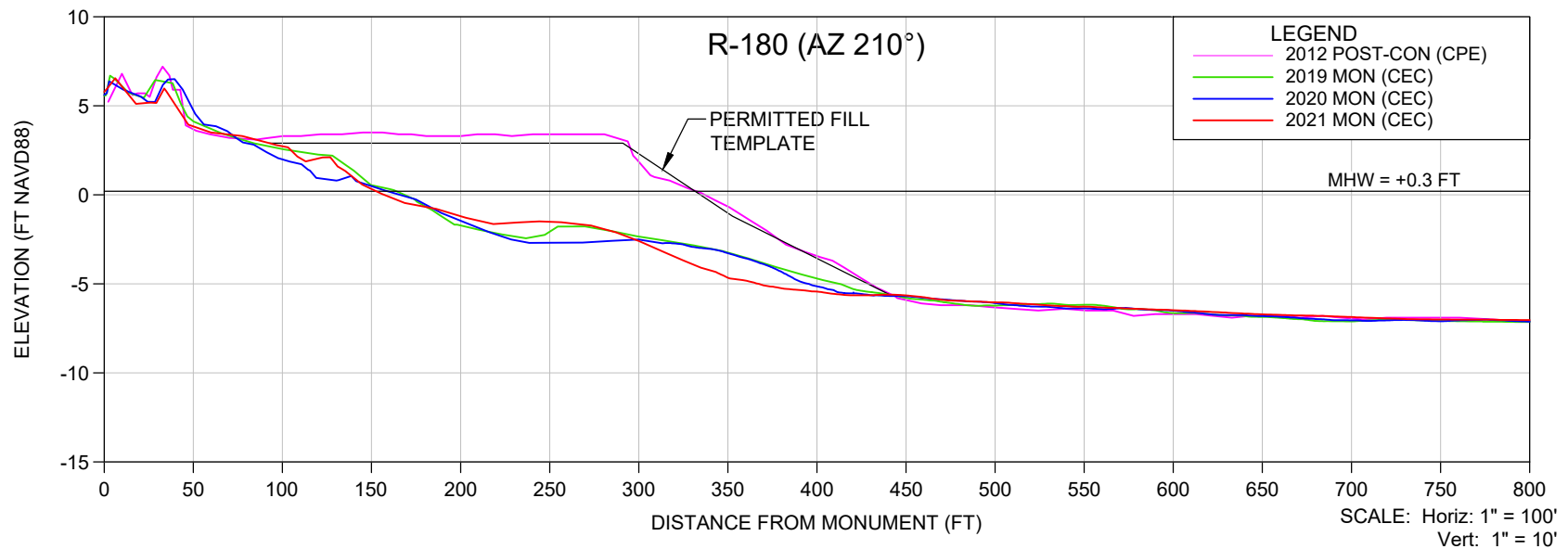
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CLIENT: **LEE COUNTY**
TITLE: **R-179 (AZ 230°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 9
FILE NO.: 21102-R-180-AZ210

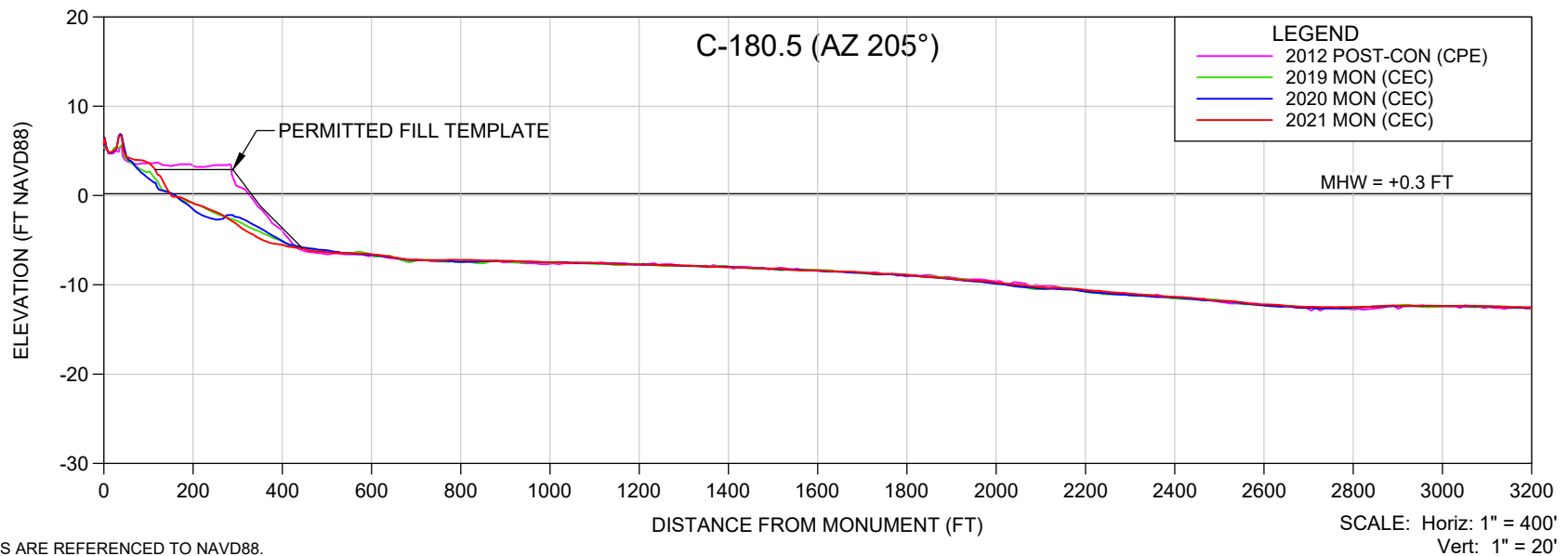
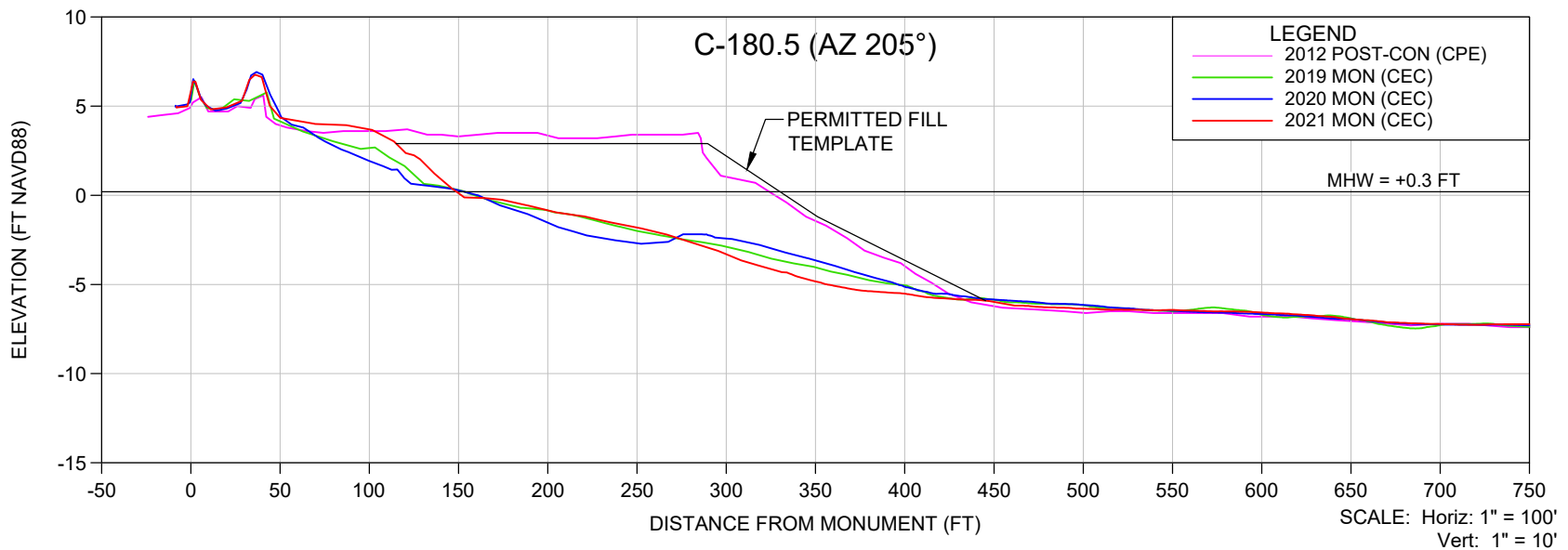
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CLIENT: **LEE COUNTY**
TITLE: **R-180 (AZ 210°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 10
FILE NO.: 21102-C180.5 AZ205

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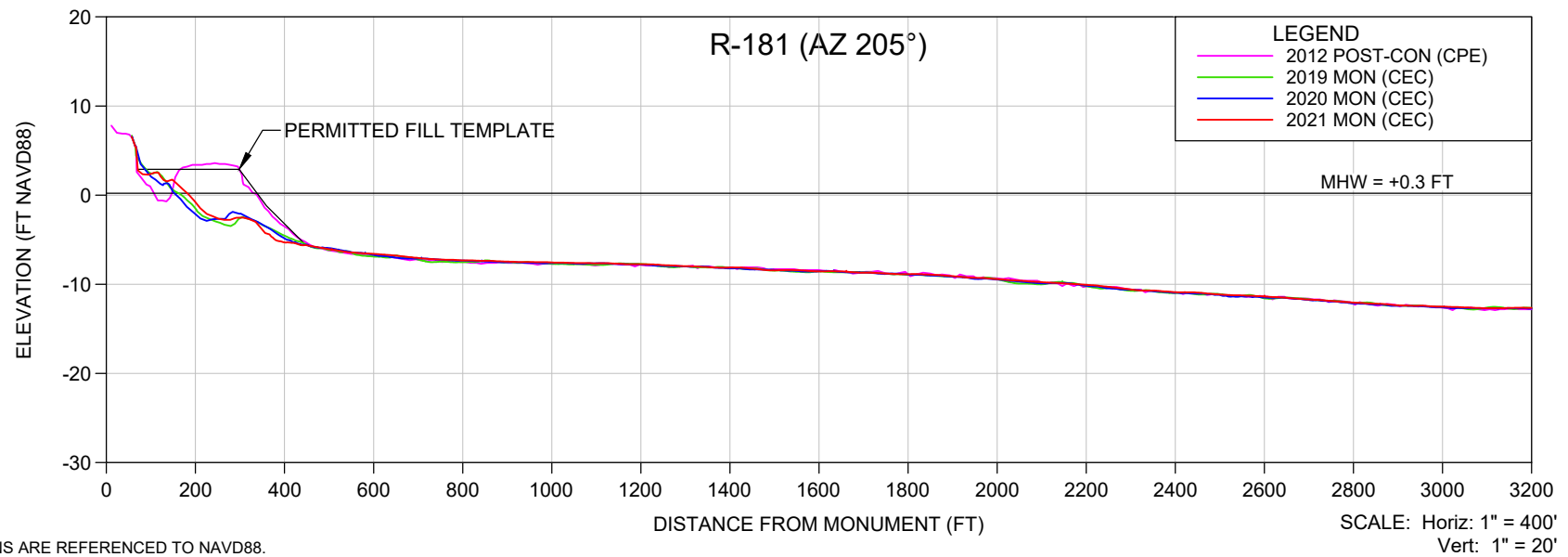
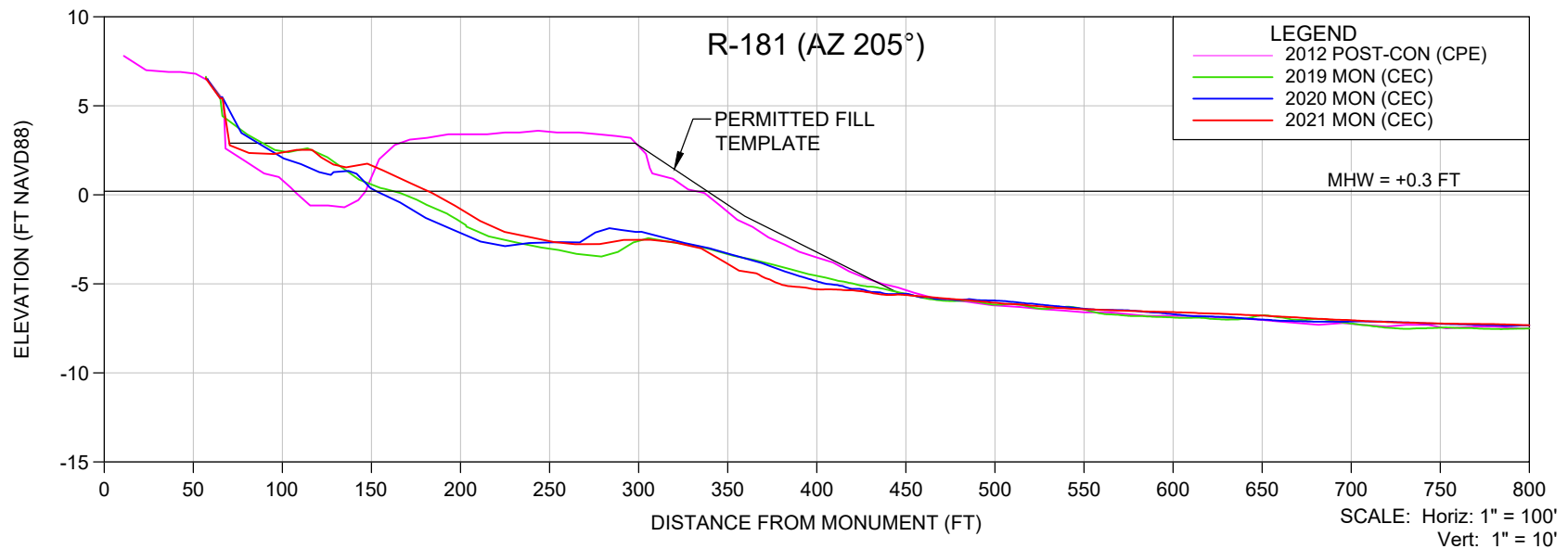
CLIENT:

LEE COUNTY

TITLE:

C-180.5 (AZ 205°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

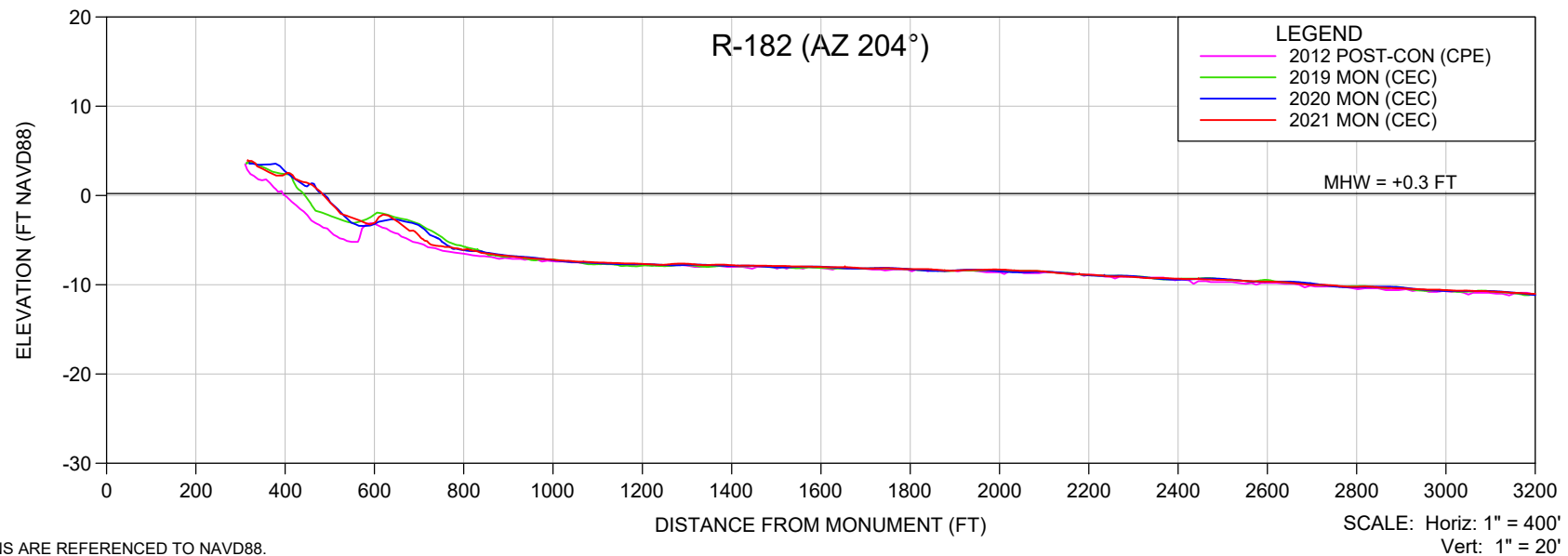
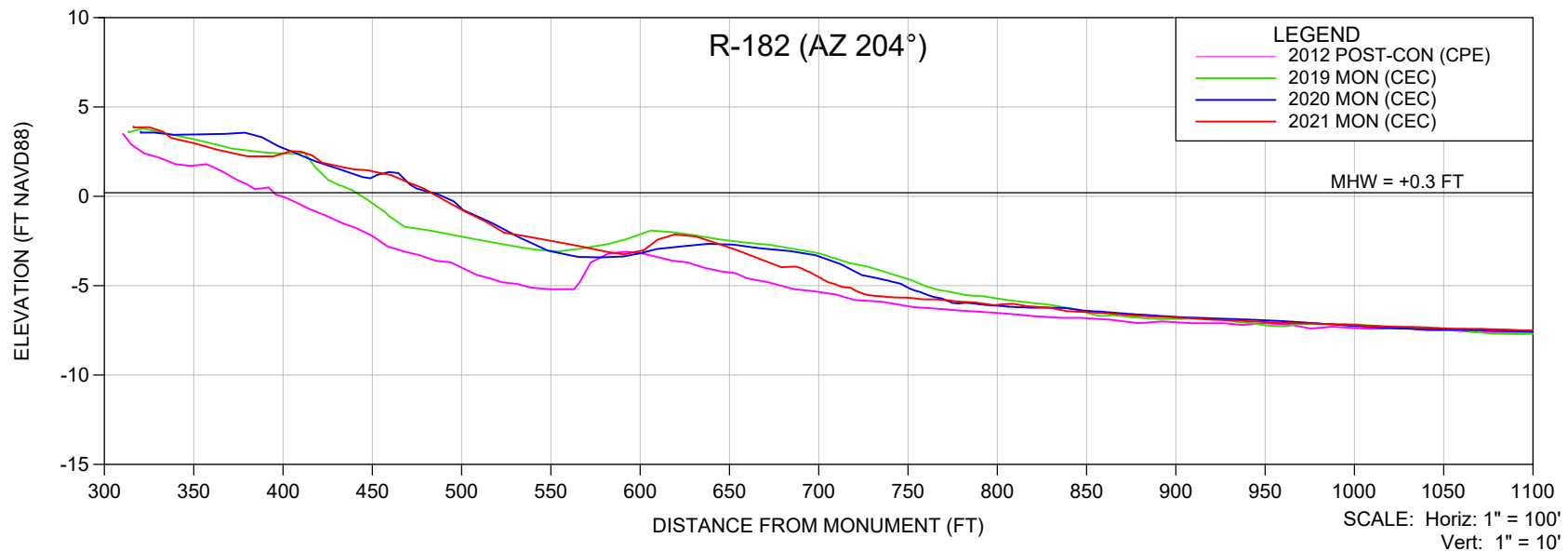
SHEET 11
FILE NO.: 21102-R-181-AZ205

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CLIENT: **LEE COUNTY**
TITLE: **R-181 (AZ 205°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 12
FILE NO.: 21102-R-182-AZ04

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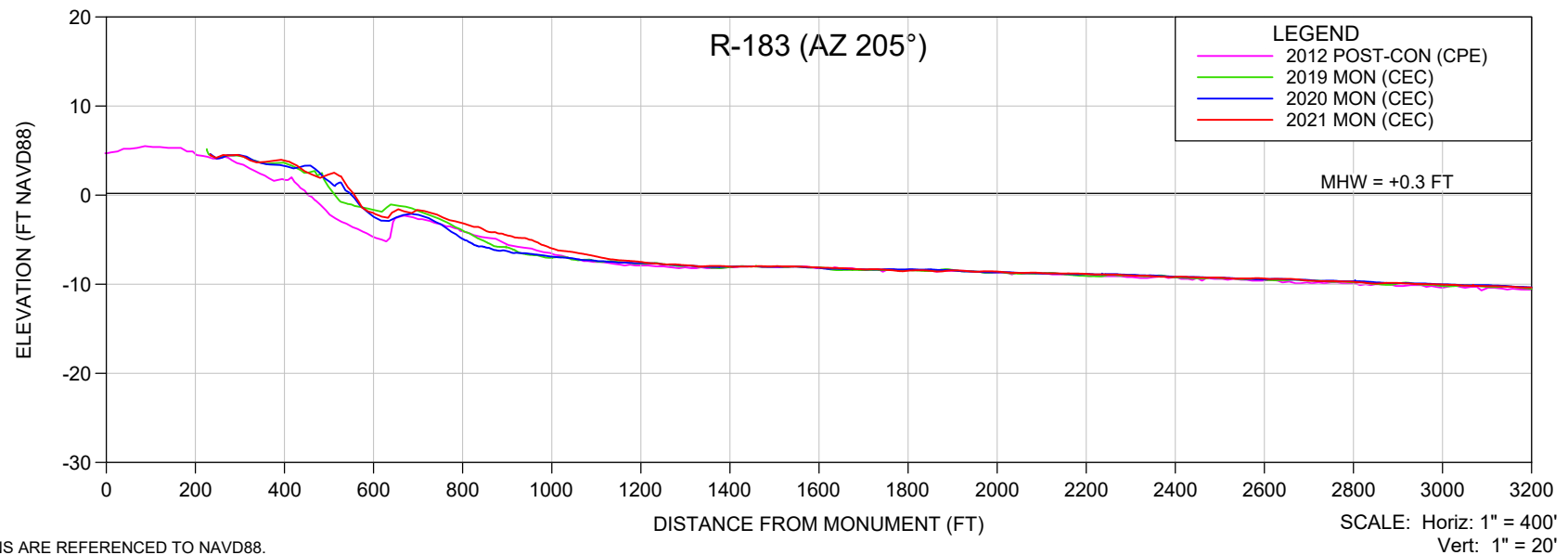
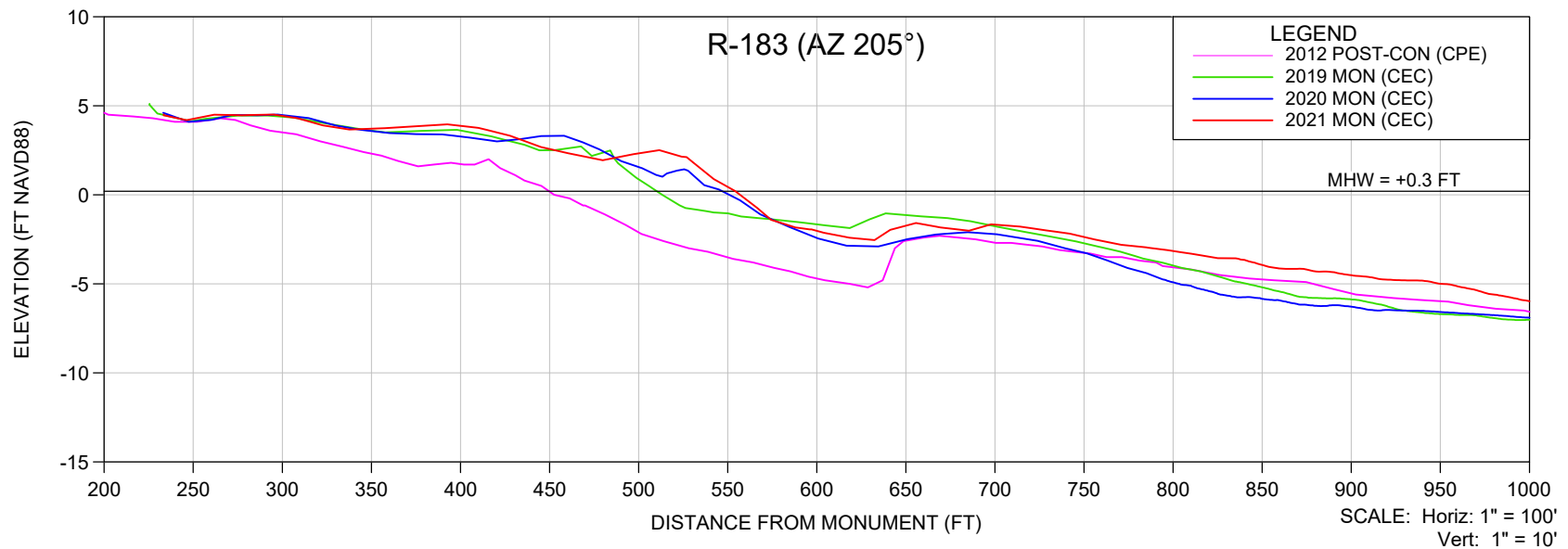
CLIENT:

LEE COUNTY

TITLE:

R-182 (AZ 204°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

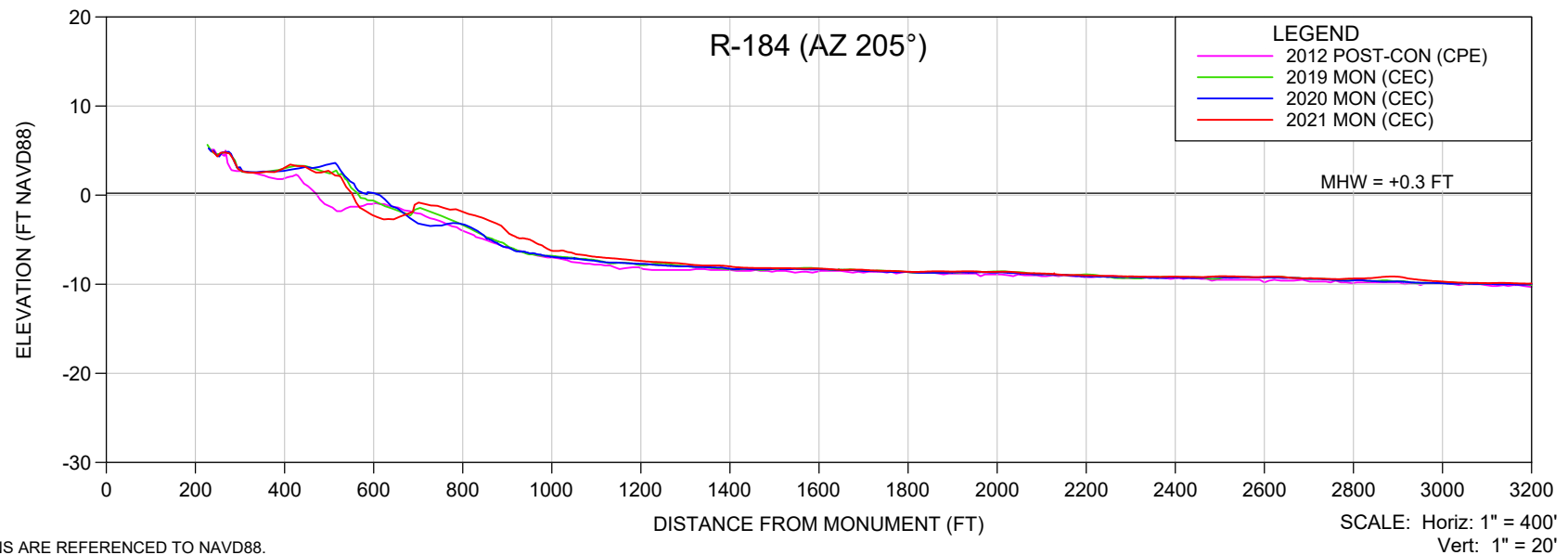
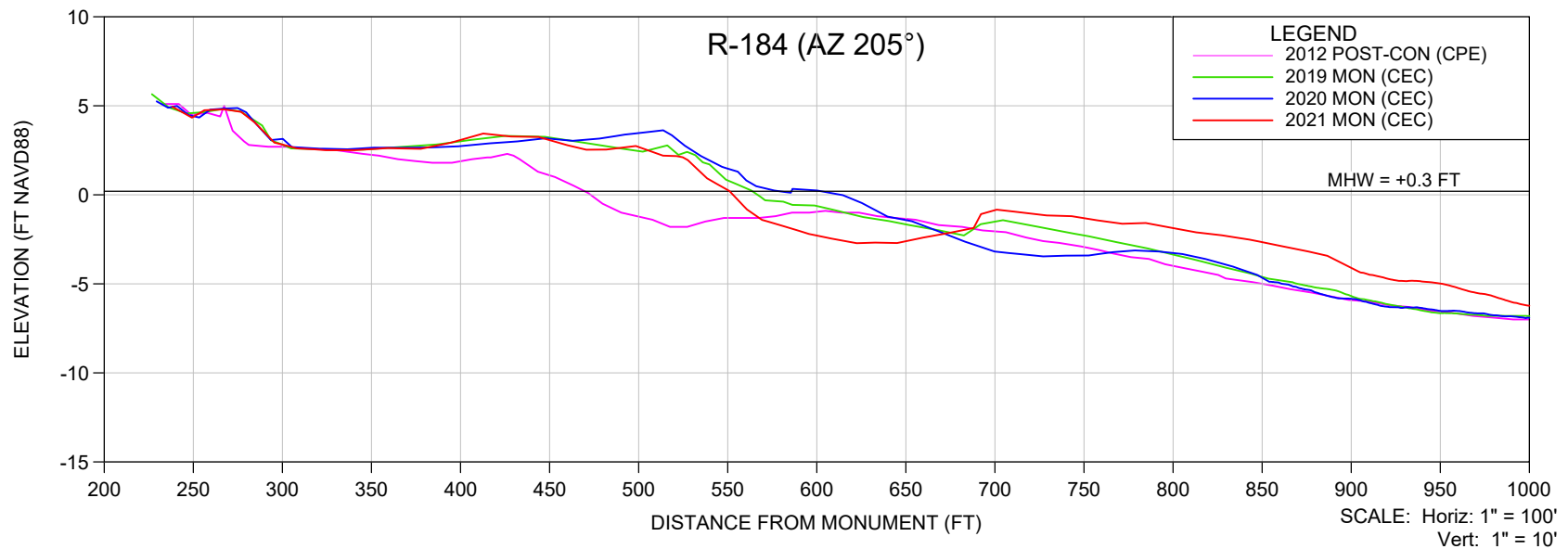
SHEET 13
FILE NO.: 21102-R-183-AZ205

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CLIENT: **LEE COUNTY**
 TITLE: **R-183 (AZ 205°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

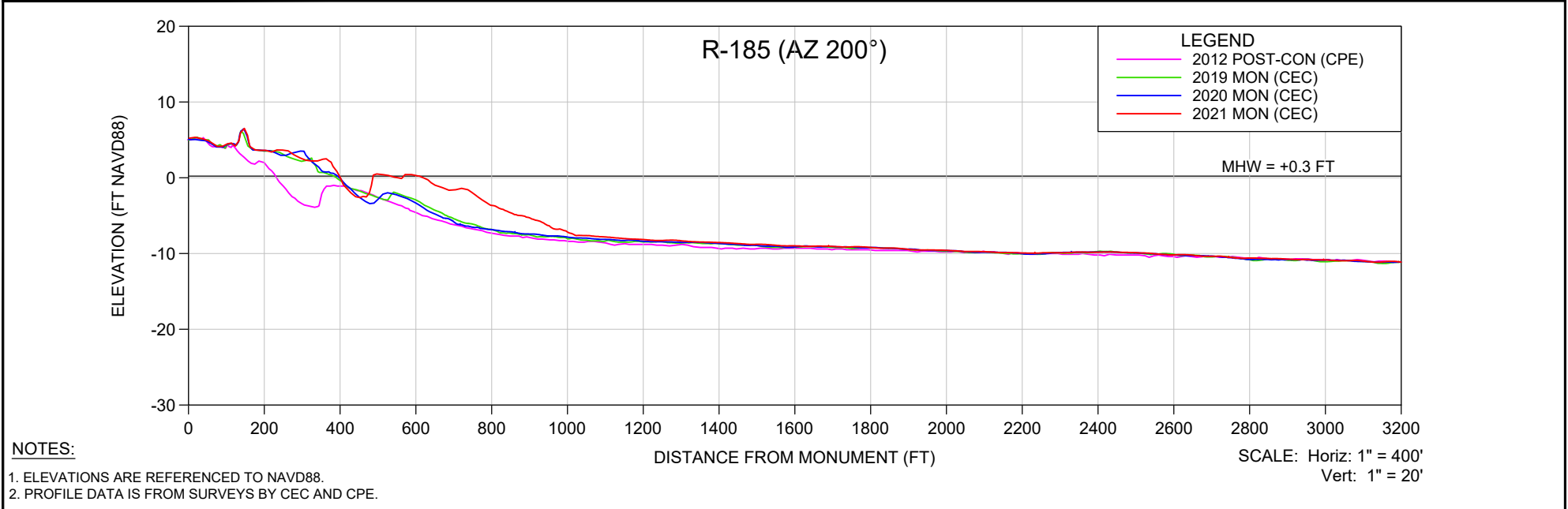
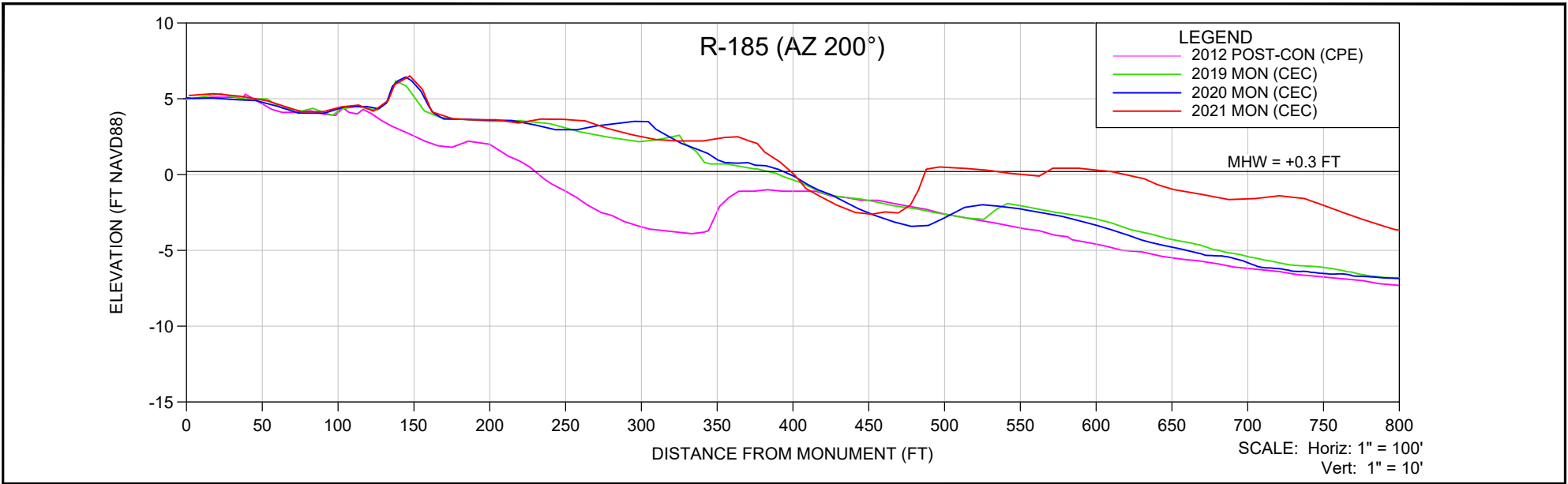
SHEET 14
FILE NO.: 21102-R-184 AZ205

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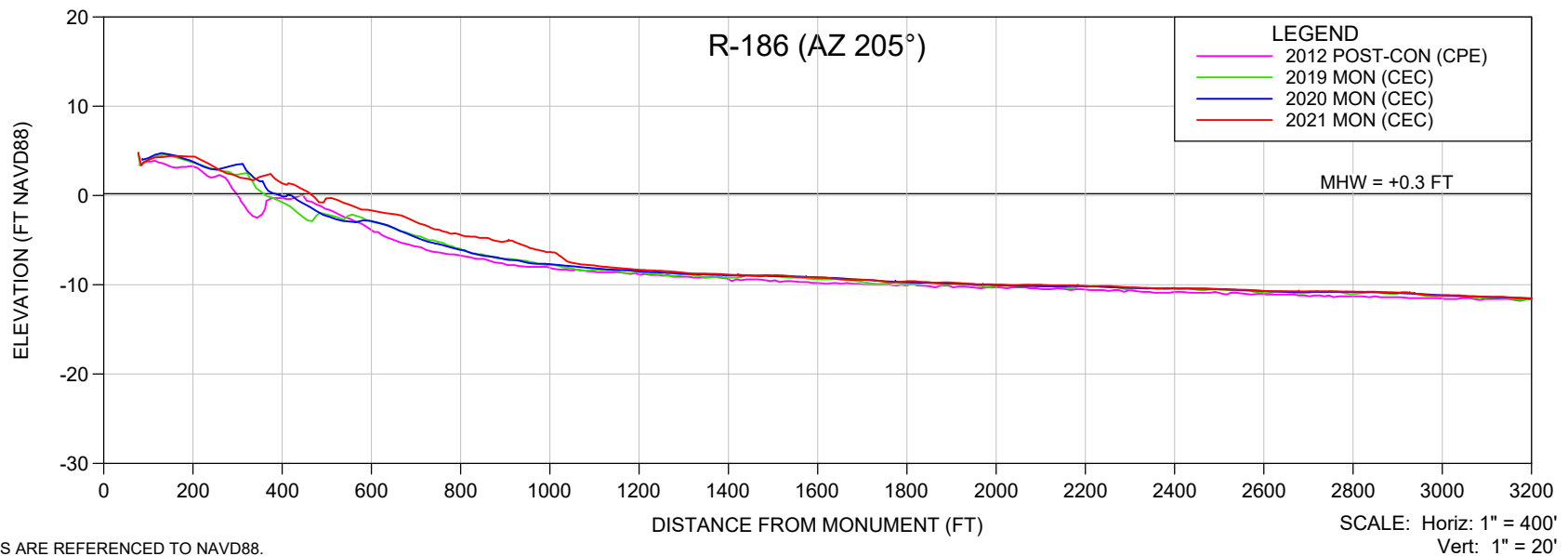
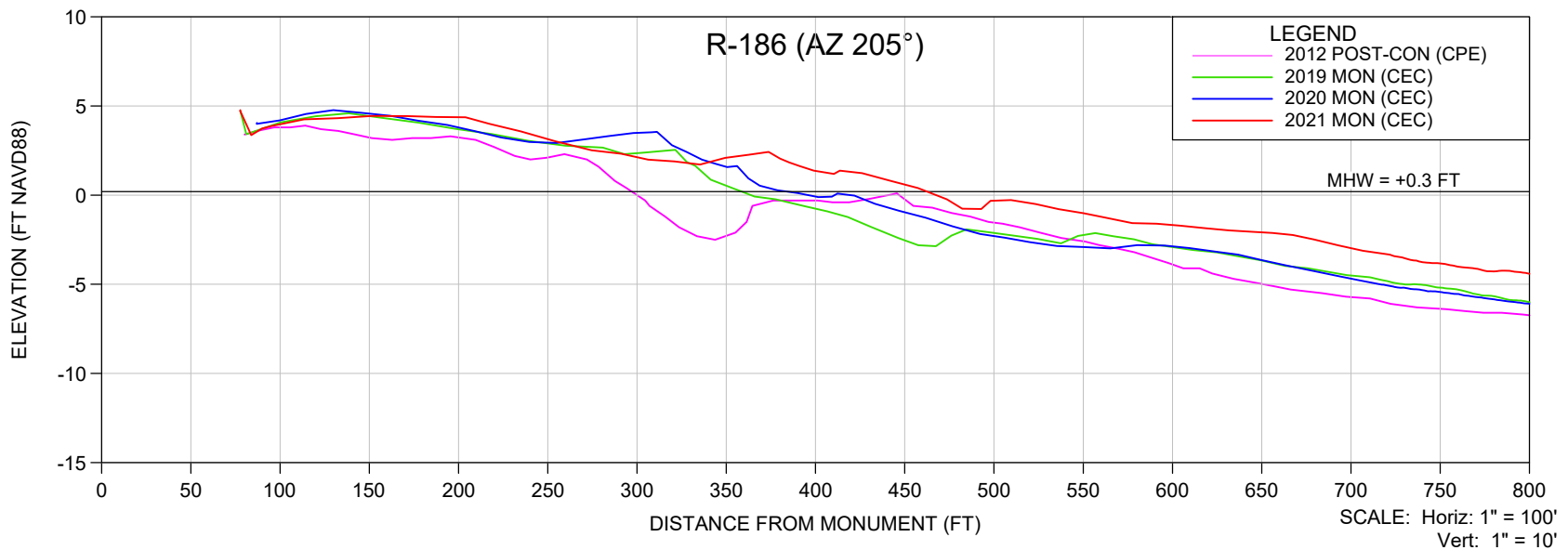
CLIENT: **LEE COUNTY**
 TITLE: **R-184 (AZ 205°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:
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SHEET 15 FILE NO.: 21102-R-185-AZ200	 COASTAL ENGINEERING CONSULTANTS INC. Serving Florida Since 1977 28421 BONITA CROSSINGS BLVD BONITA SPRINGS, FLORIDA 34135 PHONE: (239)643-2324 FAX: (239)643-1143 www.coastalengineering.com E-Mail: info@ceciff.com	CLIENT: LEE COUNTY	DATE: 6/7/2021 DRAWN: VVA CHECKED: MTP SEC. TWP. RNG. ACAD NO. 21102 Estero Island Profiles.dwg REF. NO. 21.102	SCALE: AS SHOWN F.B. PG. NO. DATE BY REVISION DESCRIPTION
		TITLE: R-185 (AZ 200°) MONITORING SURVEY		
		NO. DATE BY REVISION DESCRIPTION		
		NO. DATE BY REVISION DESCRIPTION		
		NO. DATE BY REVISION DESCRIPTION		



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 16
FILE NO.: 21102-R-186 AZ205

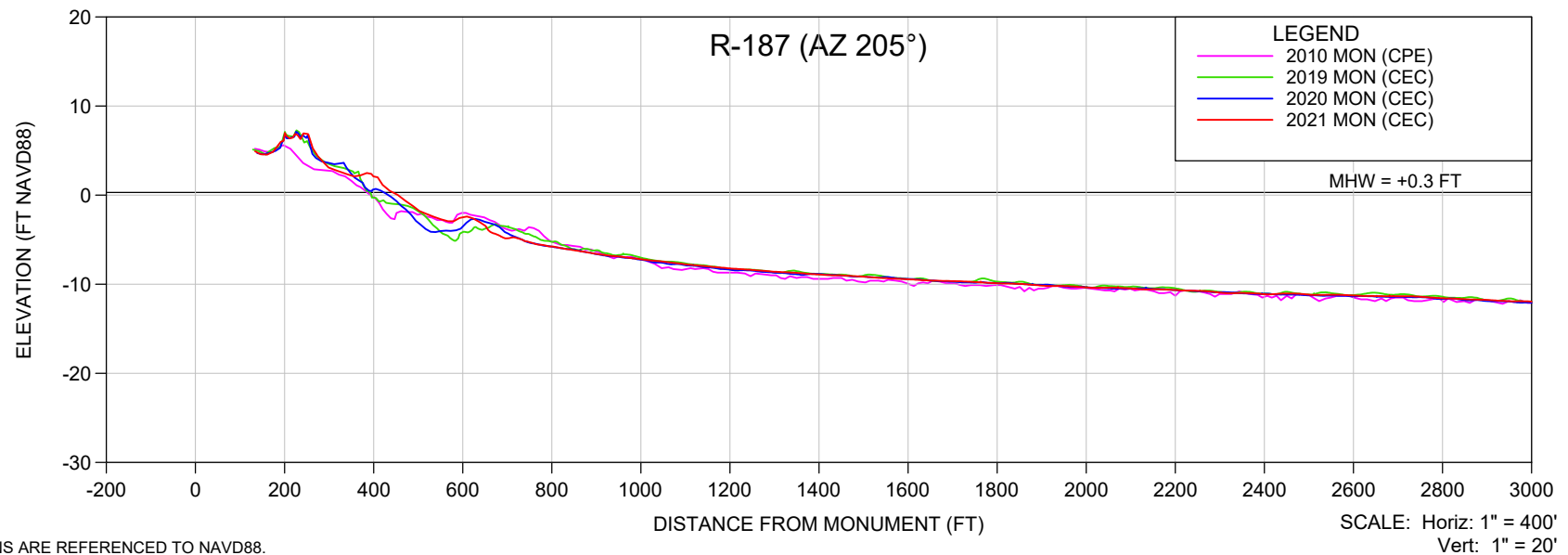
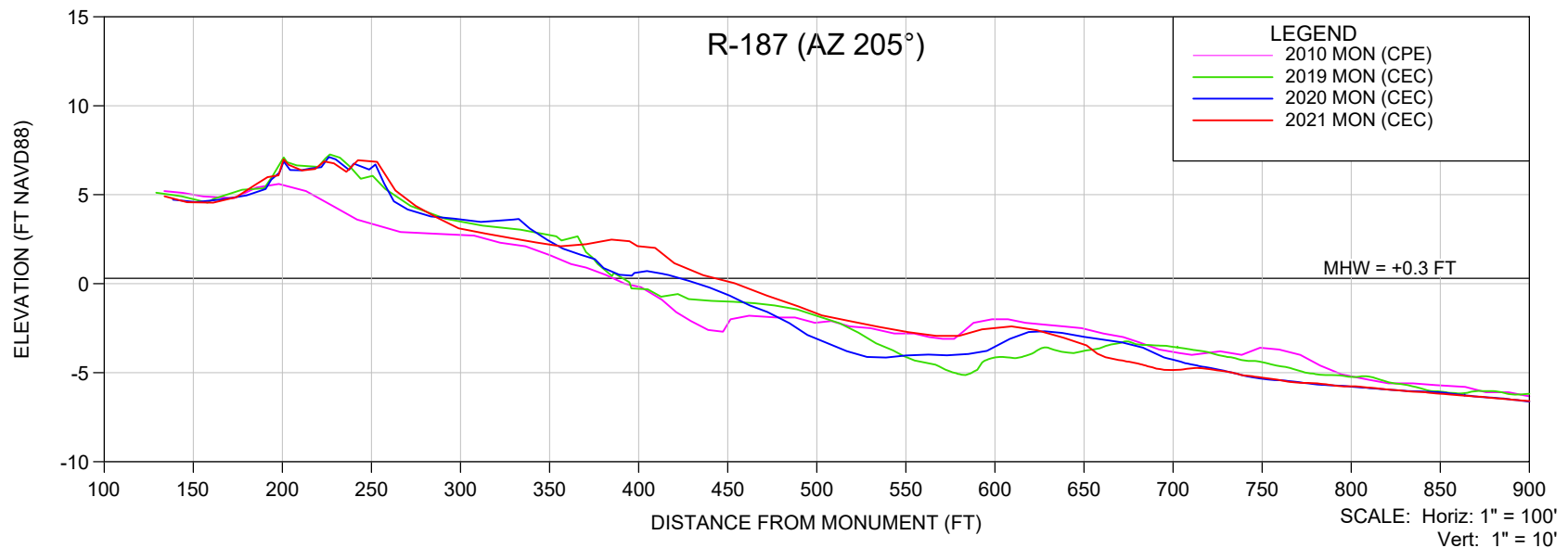
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CLIENT: **LEE COUNTY**
 TITLE: **R-186 (AZ 205°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 17
FILE NO.: 21102-R-187-AZ205

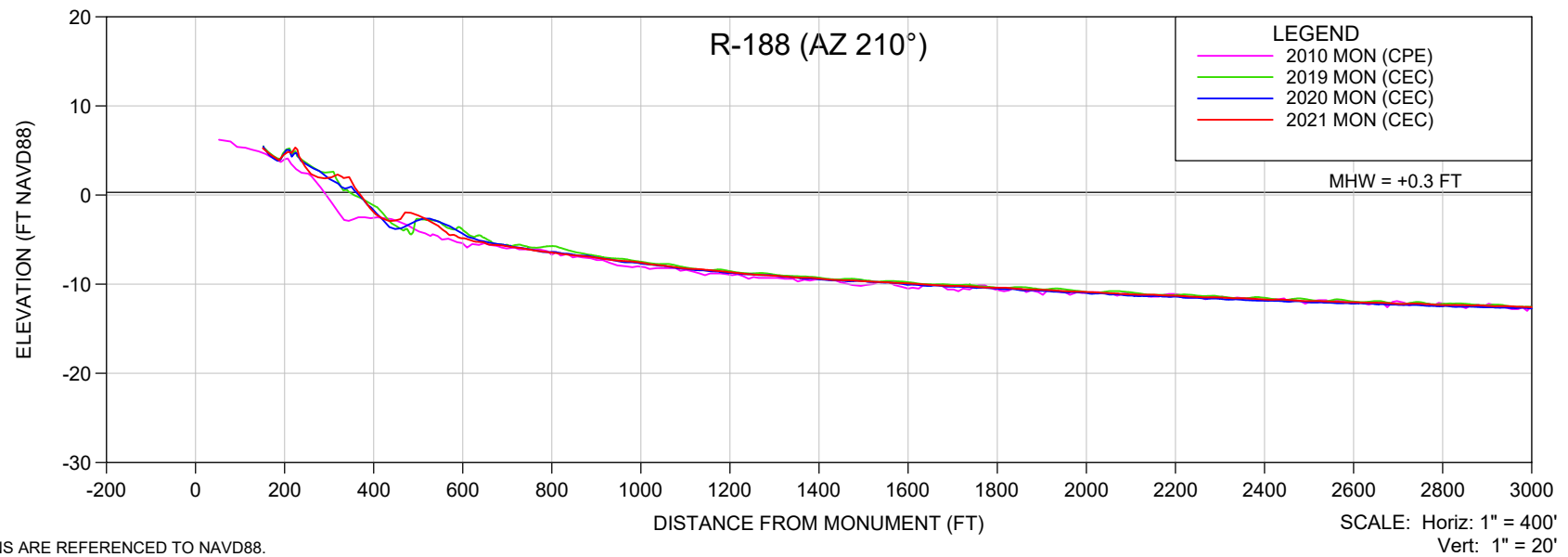
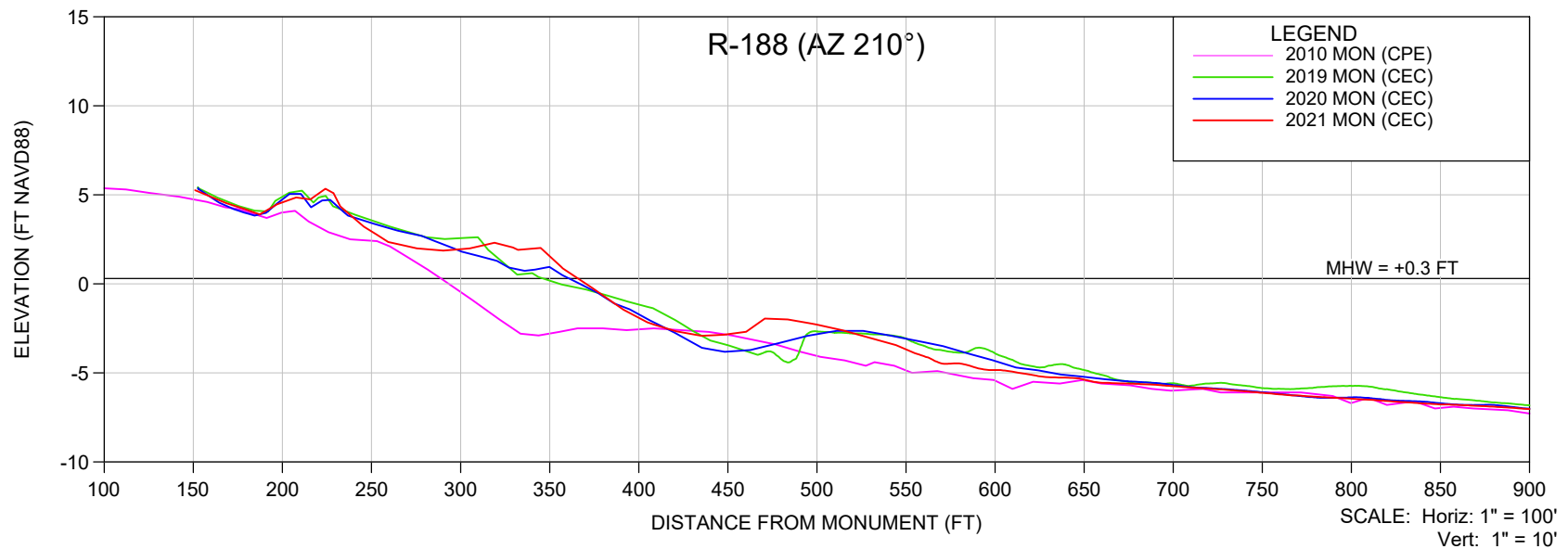
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CLIENT: **LEE COUNTY**
 TITLE: **R-187 (AZ 205°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

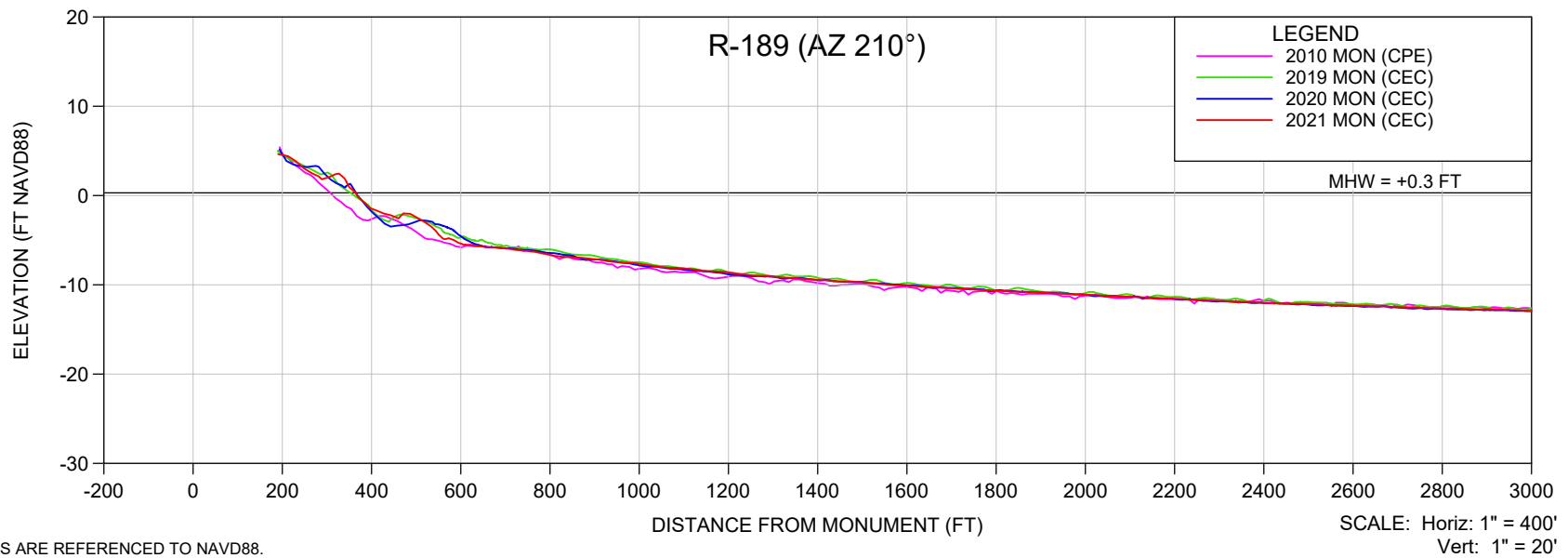
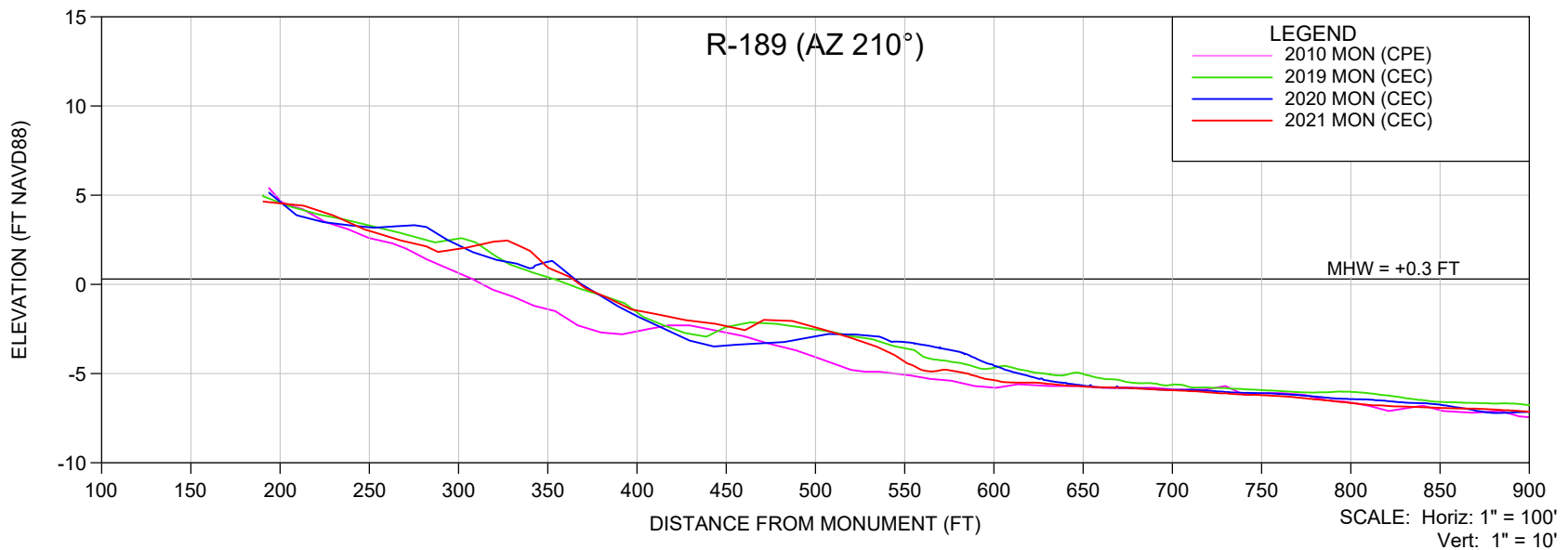
SHEET 18
FILE NO.: 21102-R-188-AZ210

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CLIENT: **LEE COUNTY**
 TITLE: **R-188 (AZ 210°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 19
FILE NO.: 21102-R-189-AZ210

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TITLE:

R-189 (AZ 210°) MONITORING SURVEY

DATE:

6/7/2021

DRAWN:

VVA

CHECKED:

MTP

SEC.

TWP.

RNG.

ACAD NO.

21102 Estero Island Profiles.dwg

REF. NO.

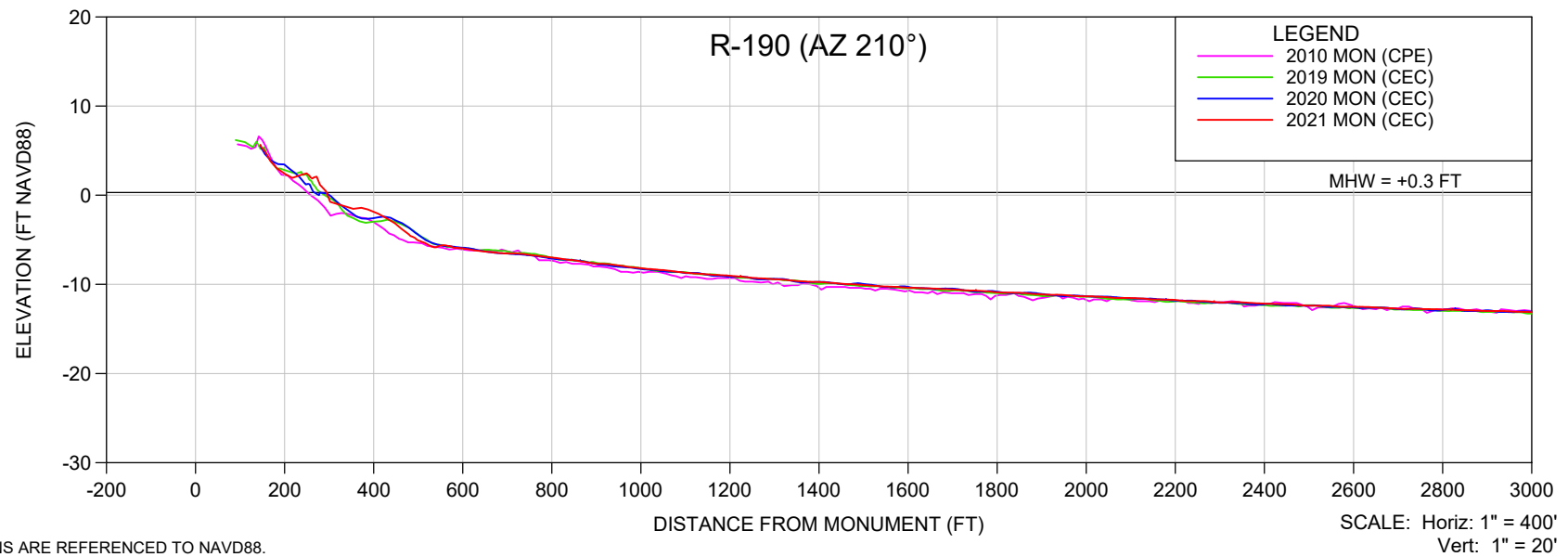
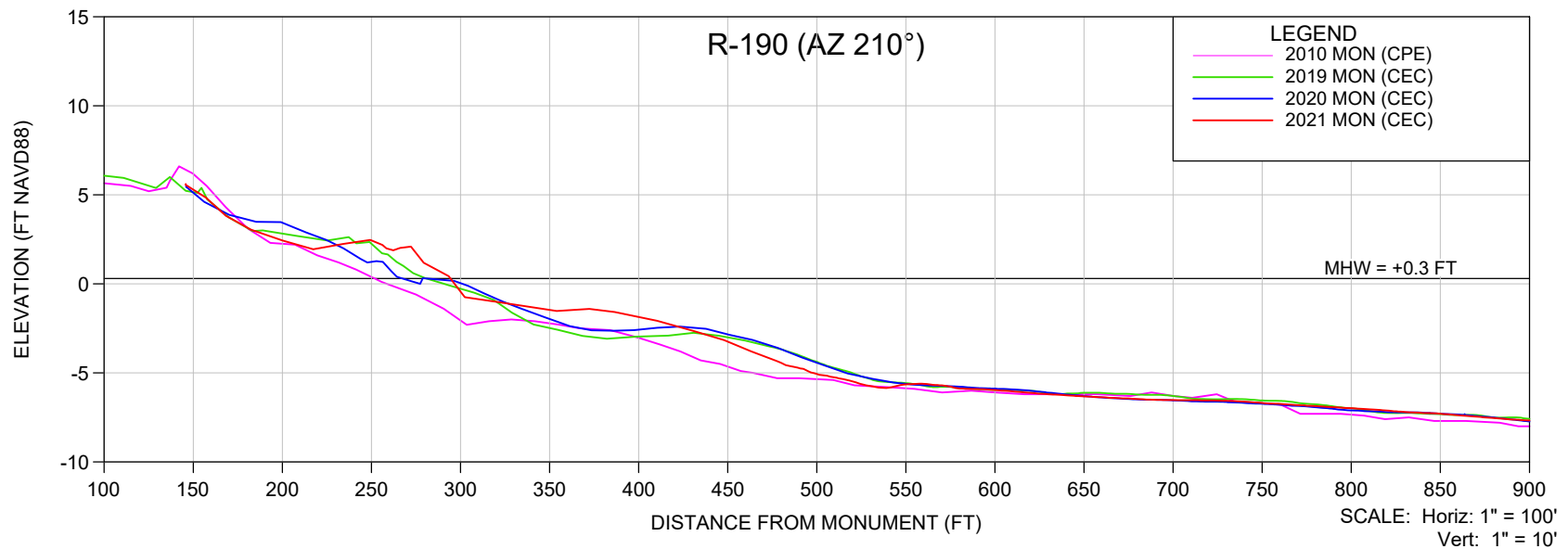
SCALE:

AS SHOWN

F.B.

PG.

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 20
FILE NO.: 21102-R-190-AZ210

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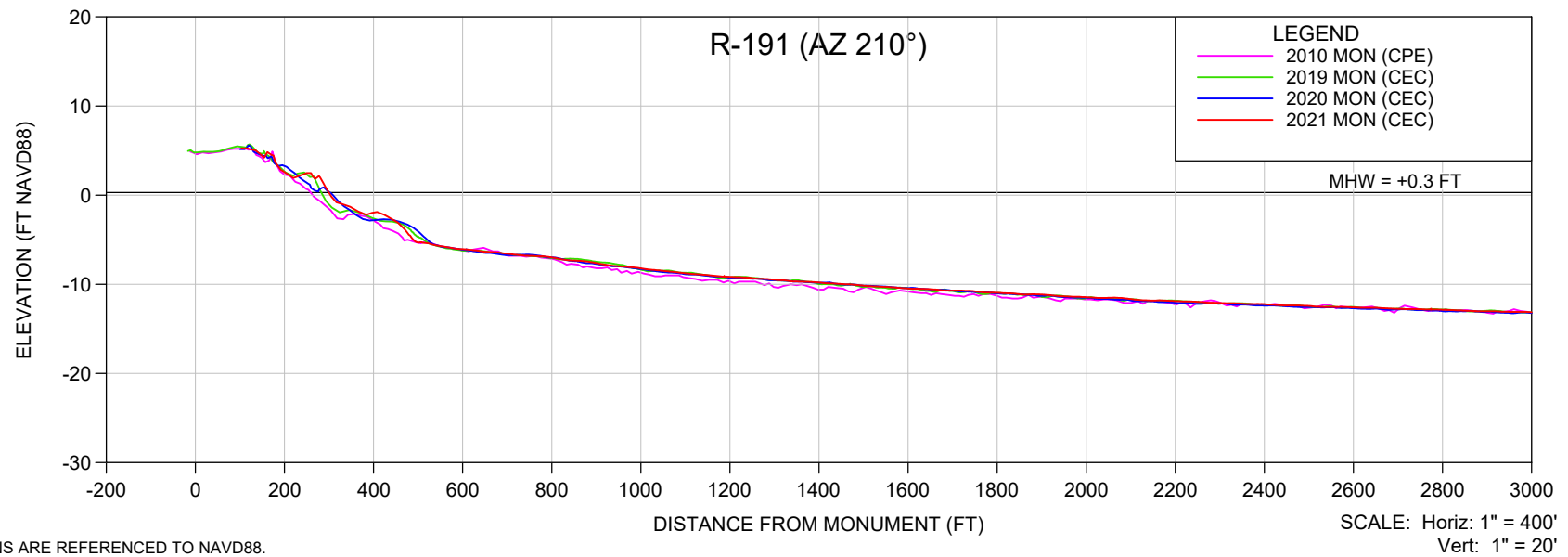
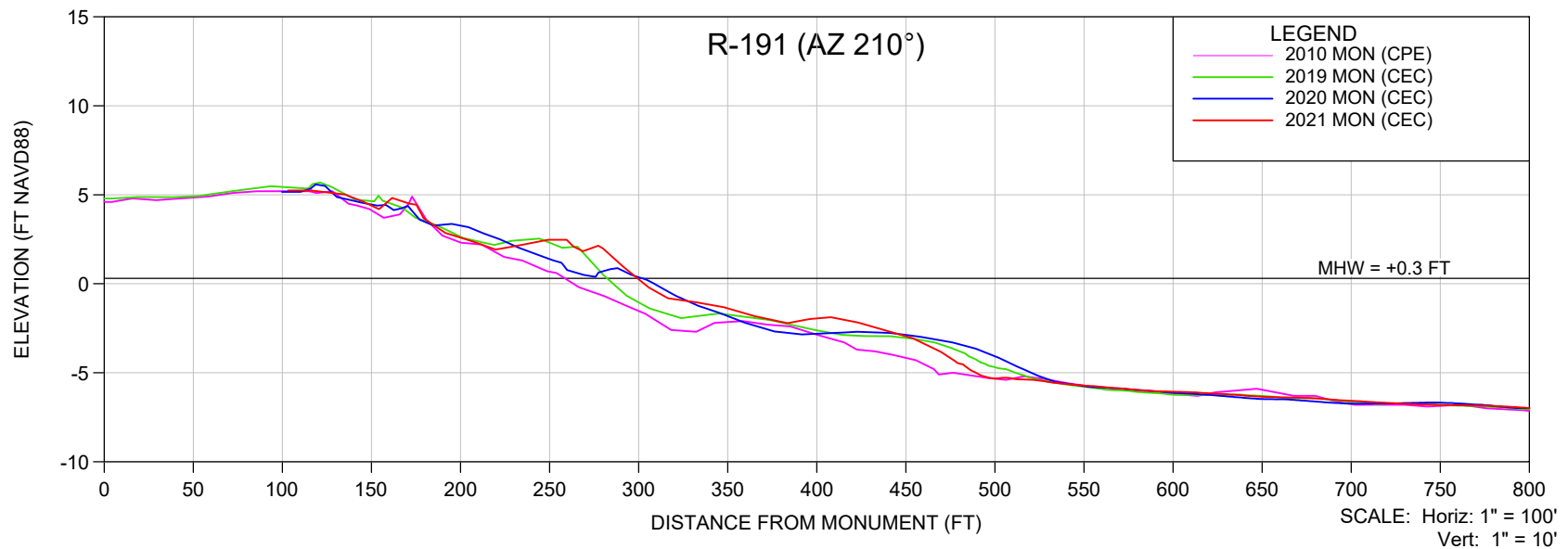
CLIENT:

LEE COUNTY

TITLE:

R-190 (AZ 210°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 21
FILE NO.: 21102-R-191-AZ210

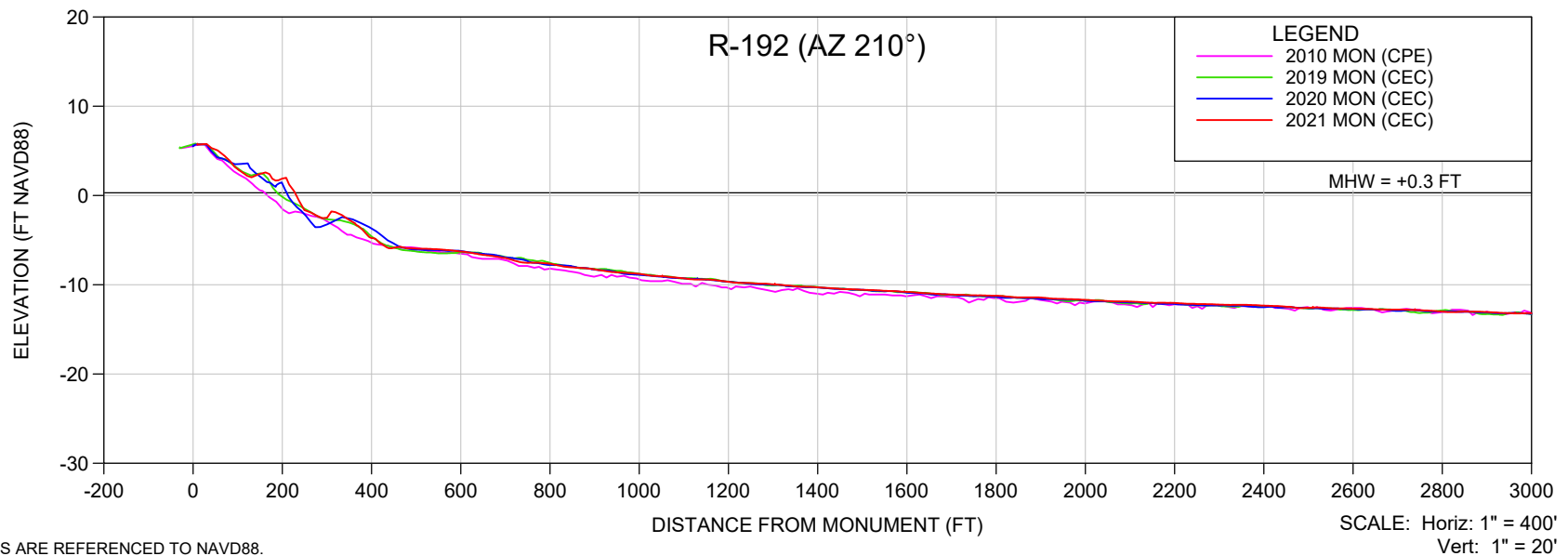
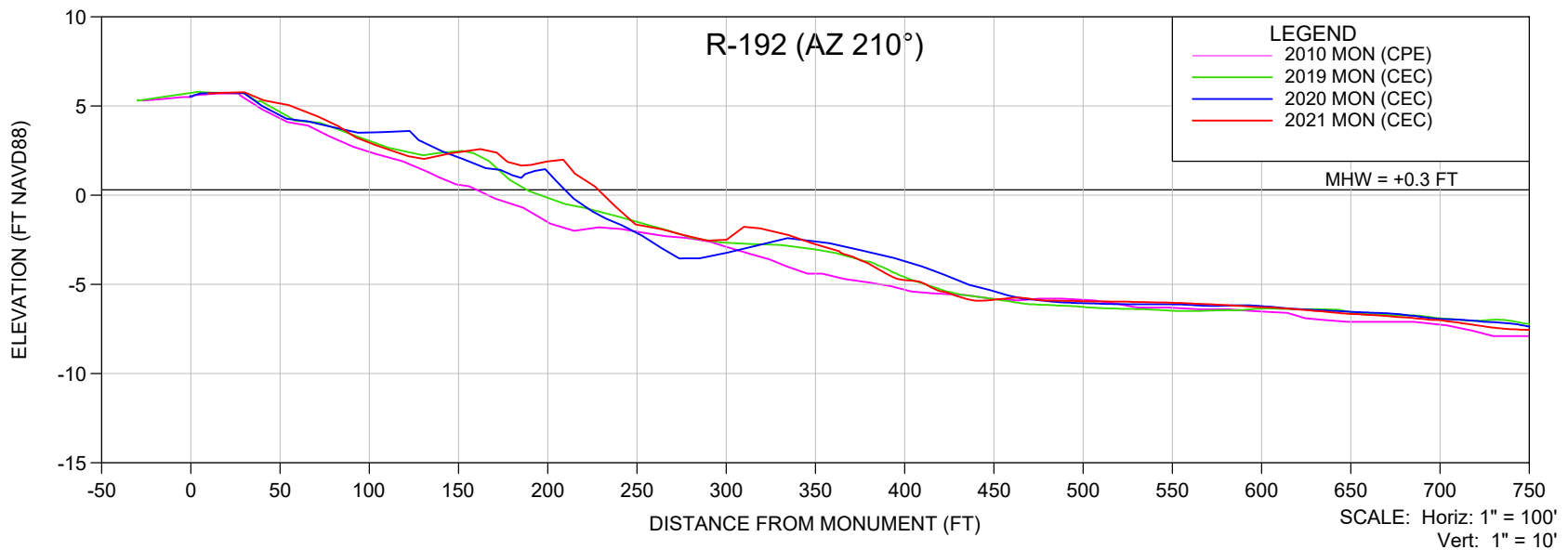
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 TITLE: **R-191 (AZ 210°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 22
FILE NO.: 21102-R-192-AZ210

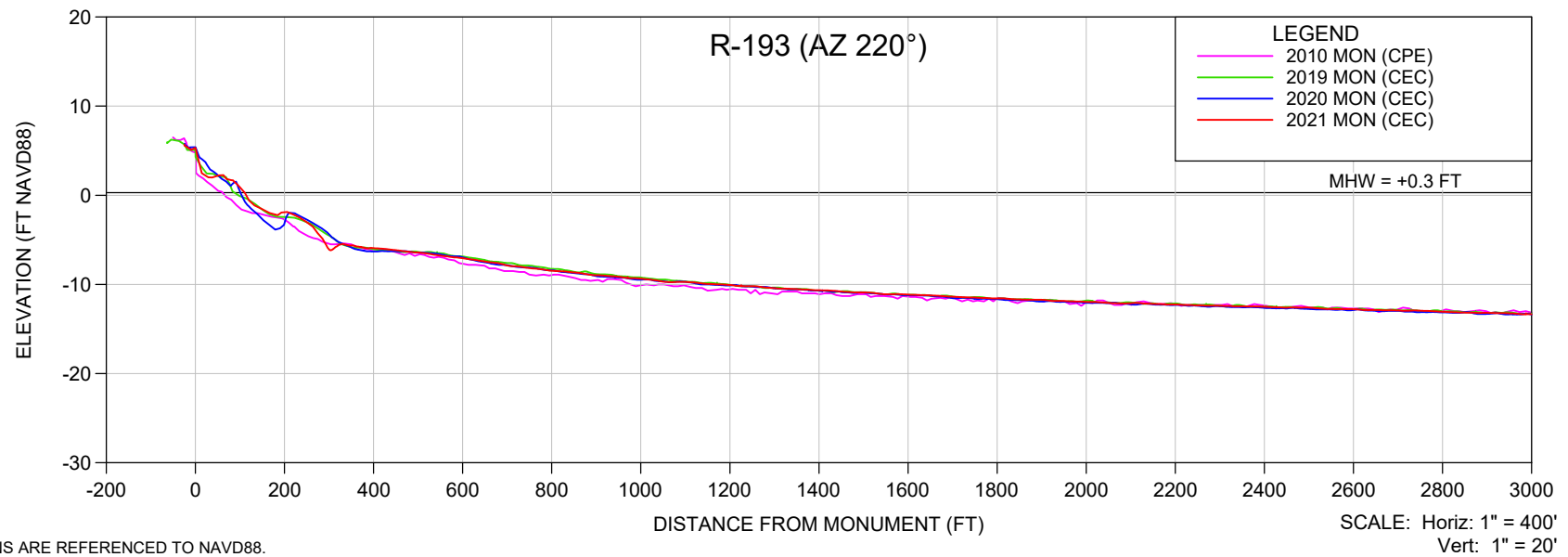
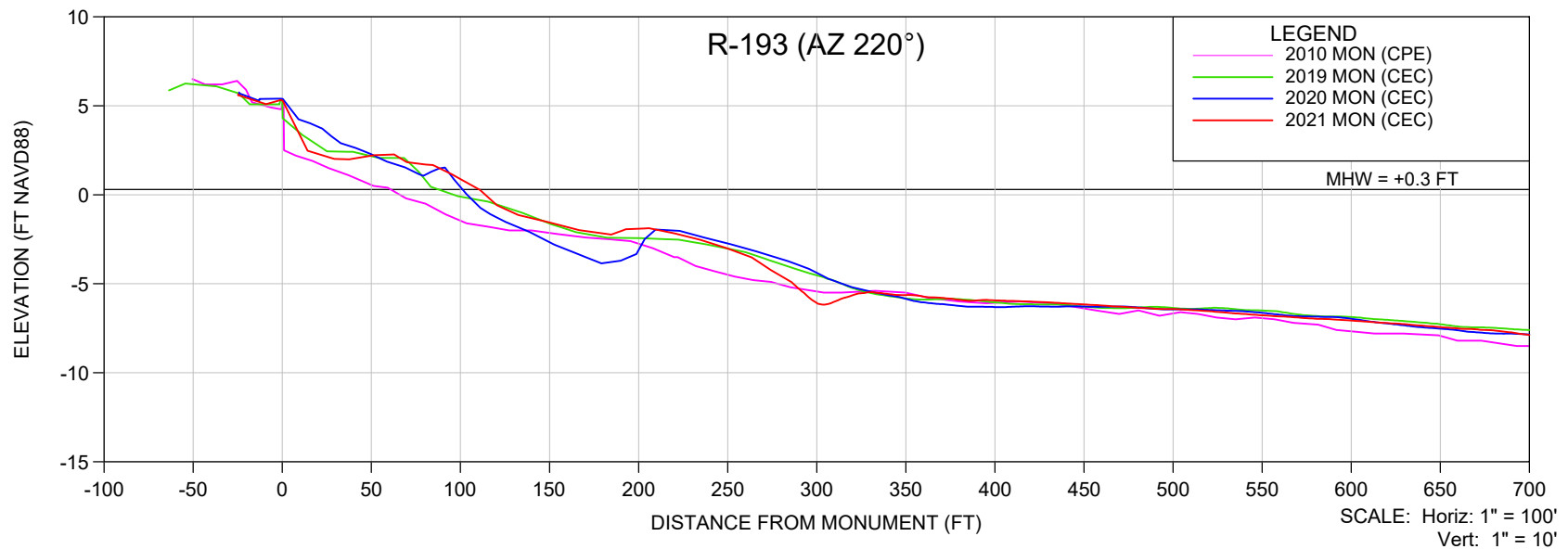
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TITLE: **R-192 (AZ 210°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 23
FILE NO.: 21102-R-193 AZ220

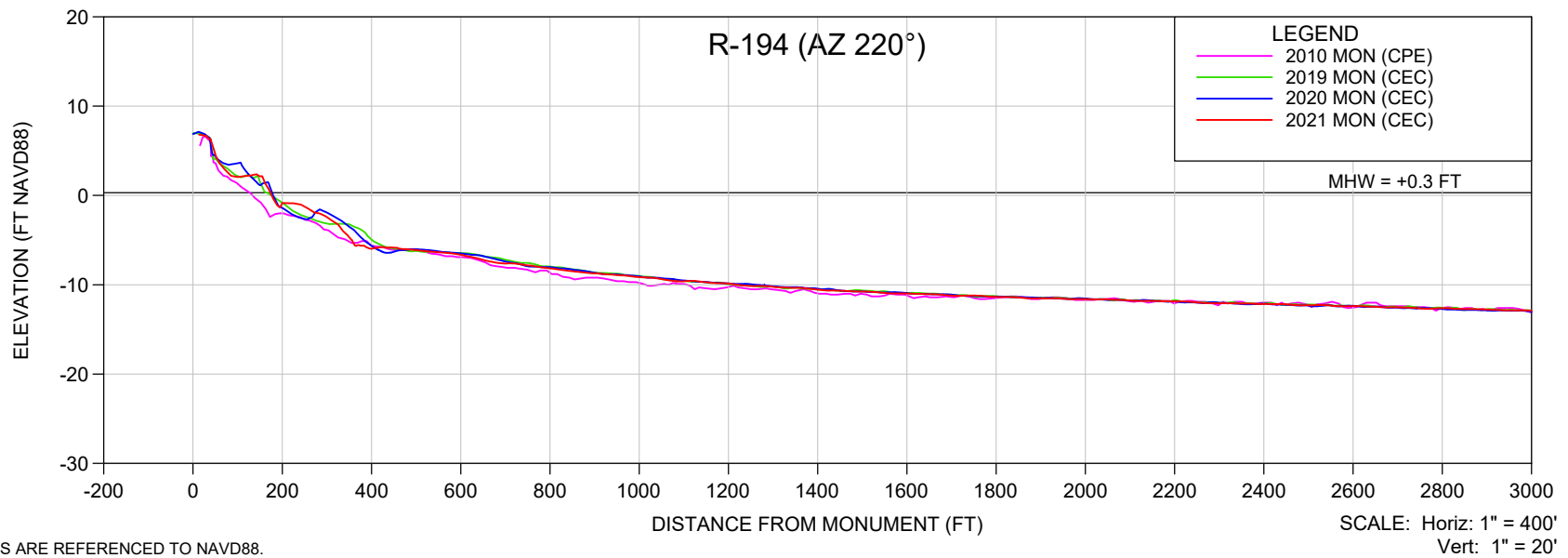
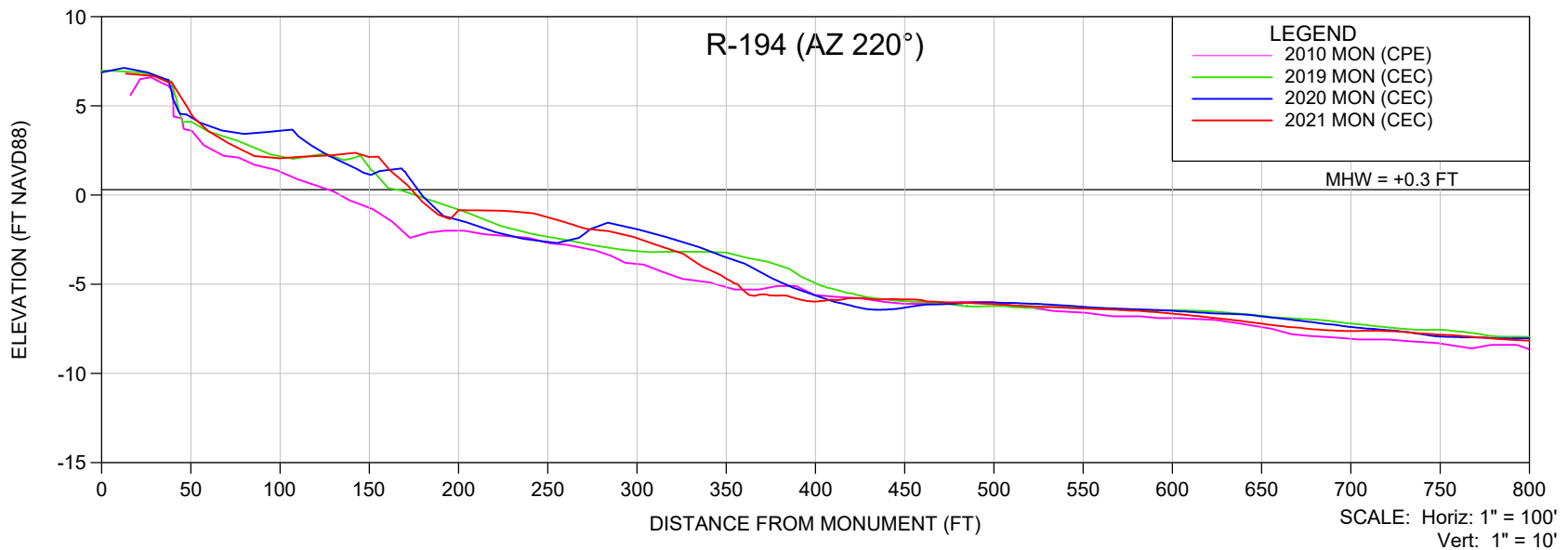
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TITLE: **R-193 (AZ 220°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
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CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 24
FILE NO.: 21102-R-194 AZ220

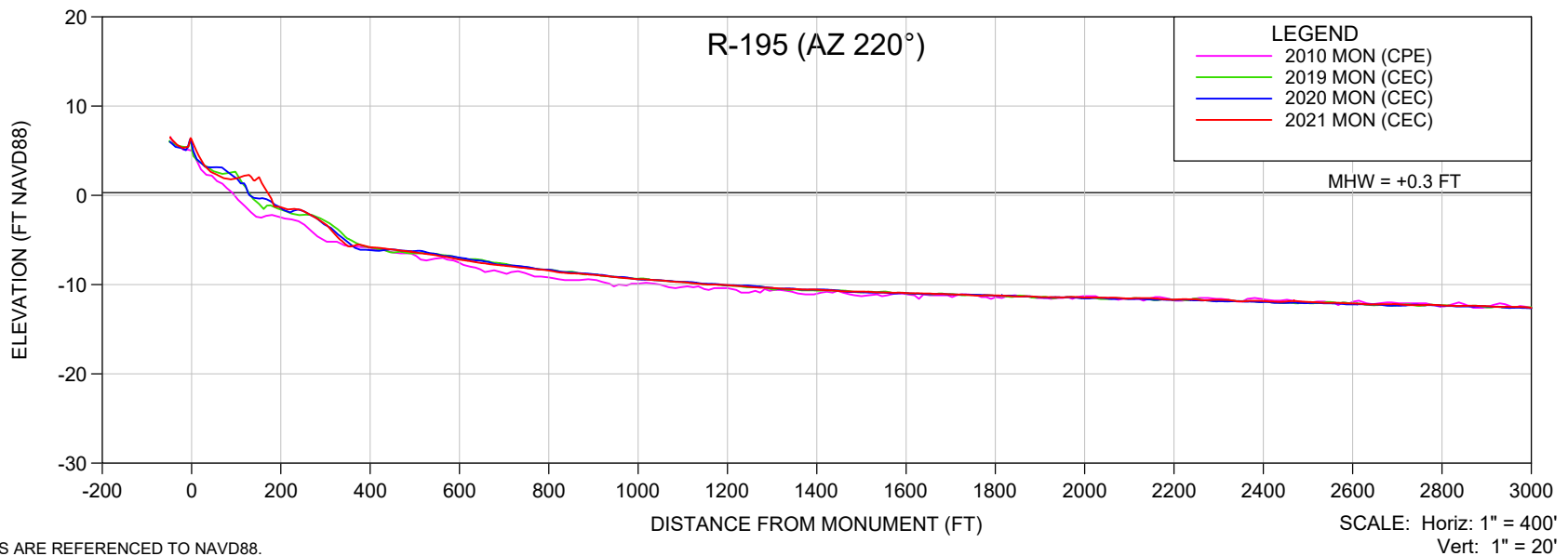
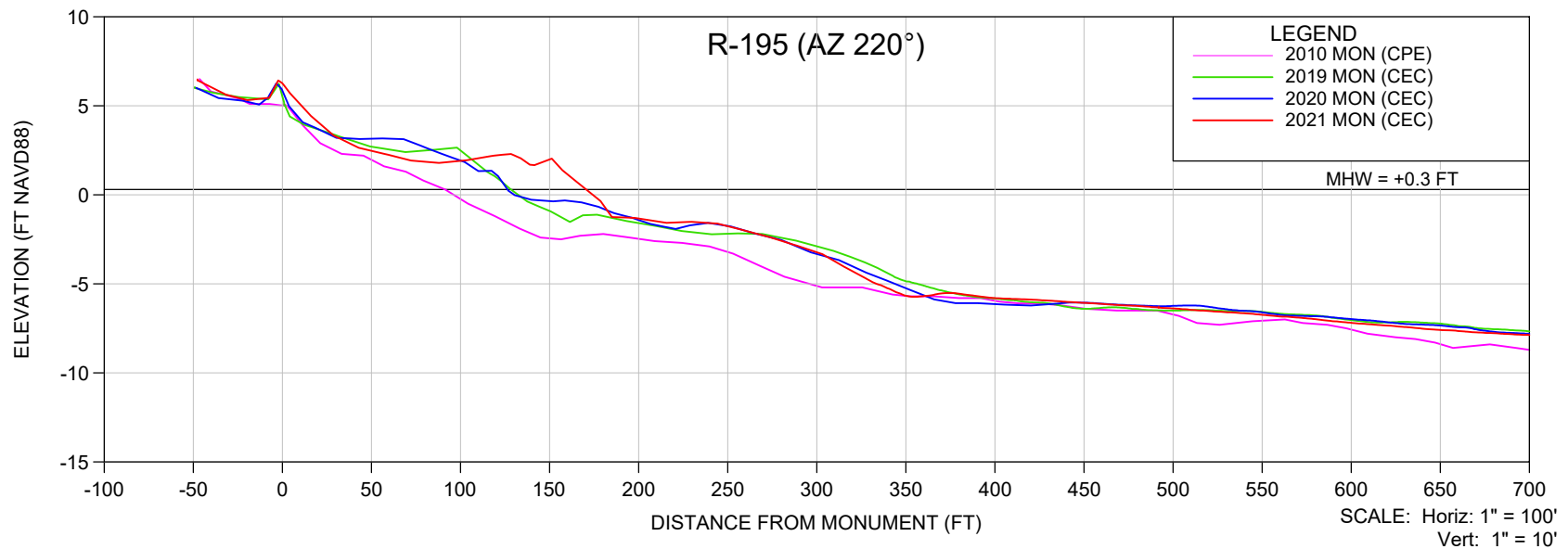
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CLIENT: **LEE COUNTY**
TITLE: **R-194 (AZ 220°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

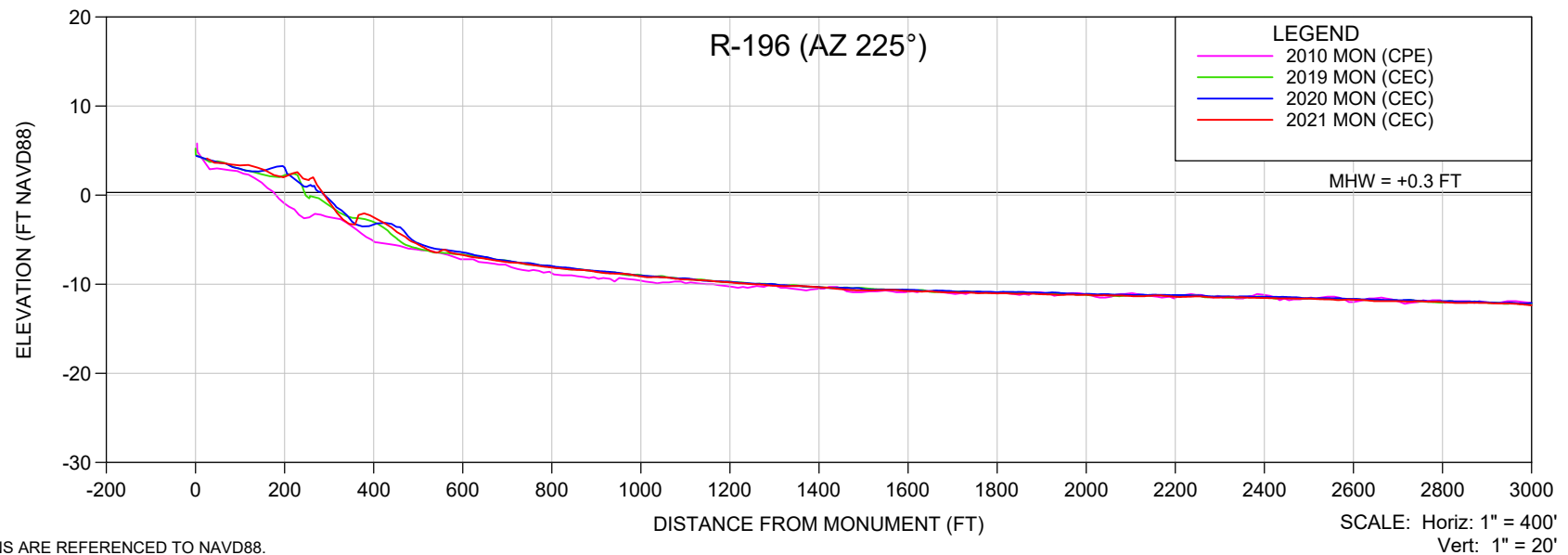
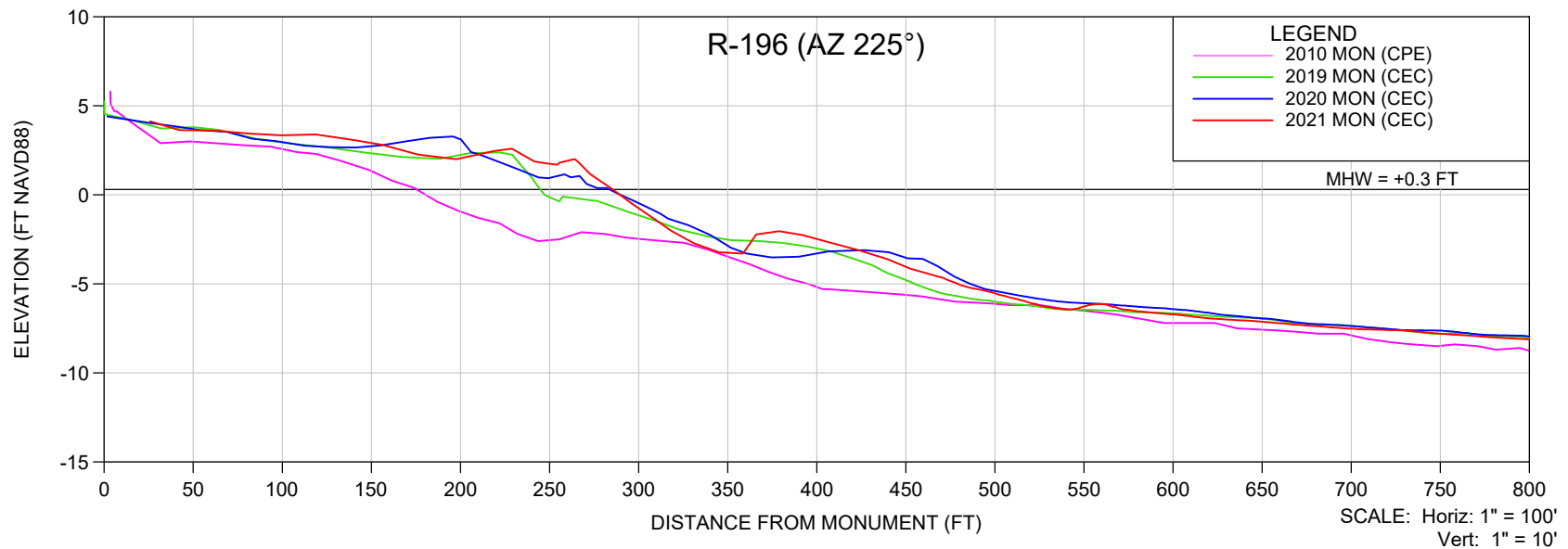
SHEET 25
FILE NO.: 21102-R-195-AZ220

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CLIENT: **LEE COUNTY**
TITLE: **R-195 (AZ 220°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

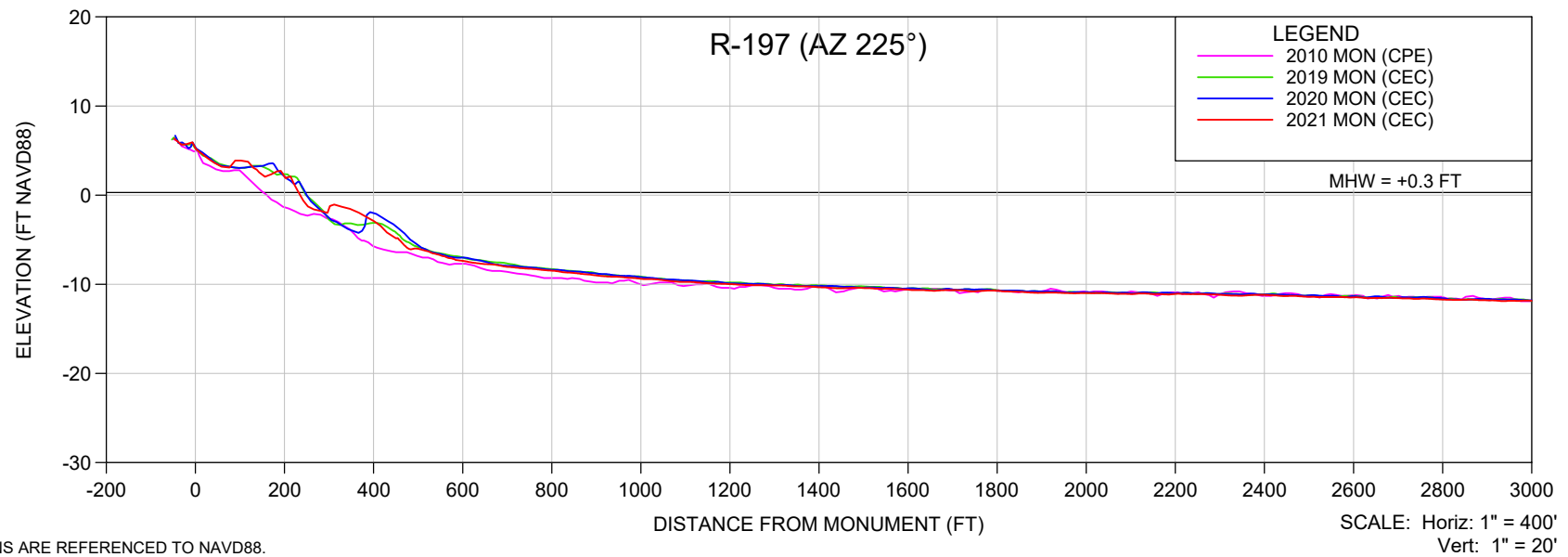
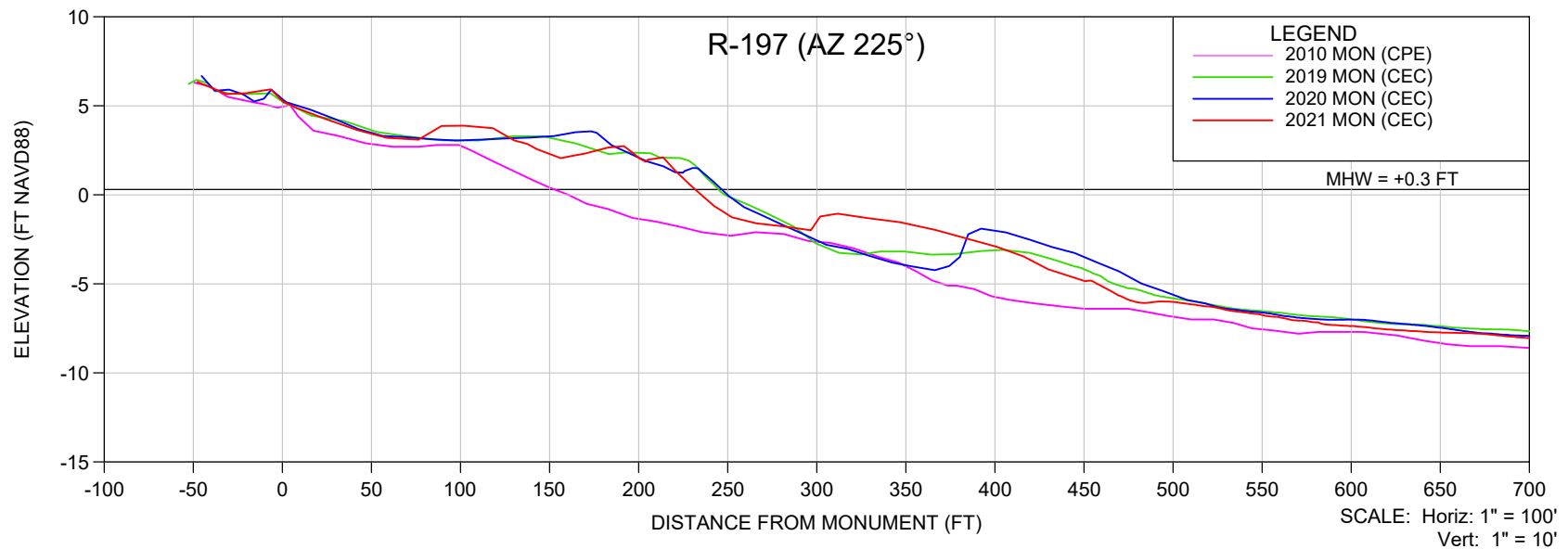
SHEET 26
FILE NO.: 21102-R-196 AZ225

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CLIENT: **LEE COUNTY**
TITLE: **R-196 (AZ 225°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

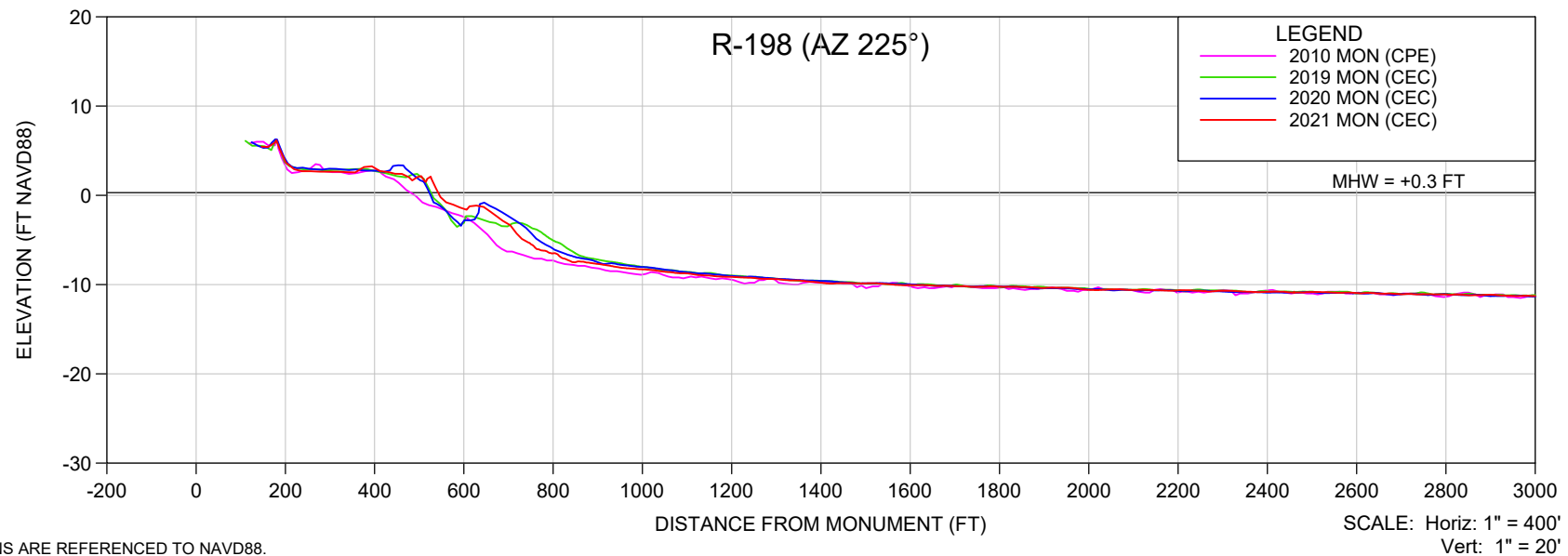
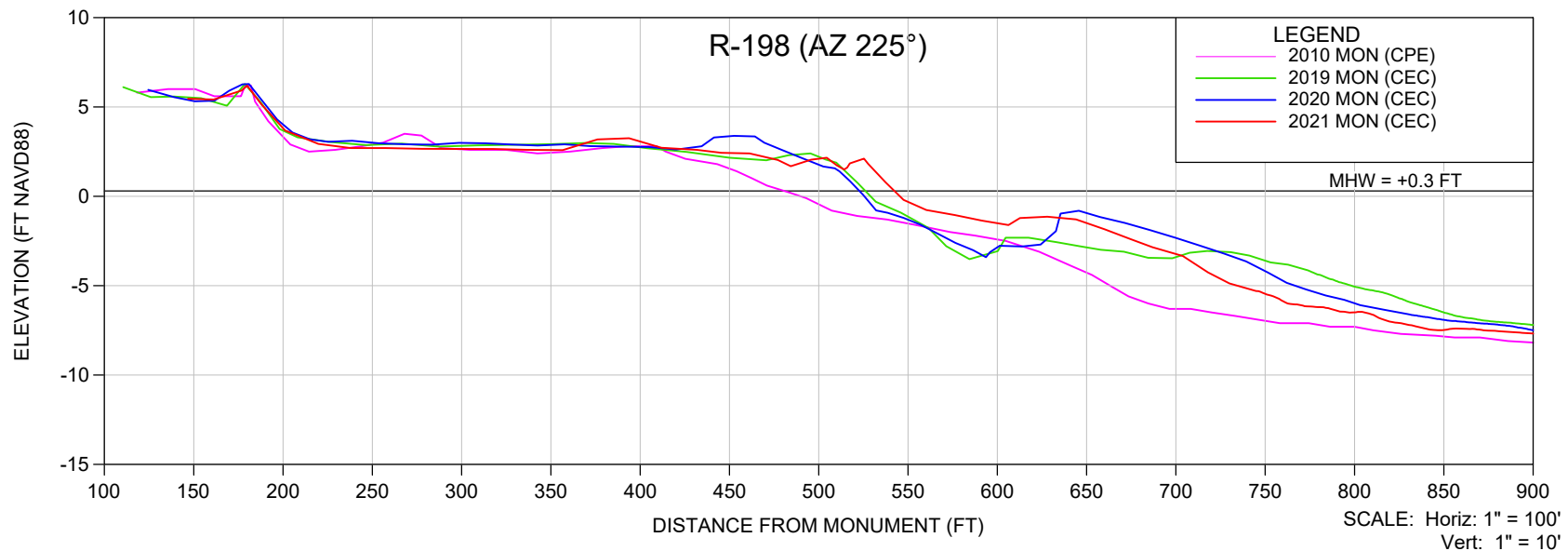
SHEET 27
FILE NO.: 21102-R-197-AZ225

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CLIENT: **LEE COUNTY**
TITLE: **R-197 (AZ 225°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 28
FILE NO.: 21102-R-198-AZ225

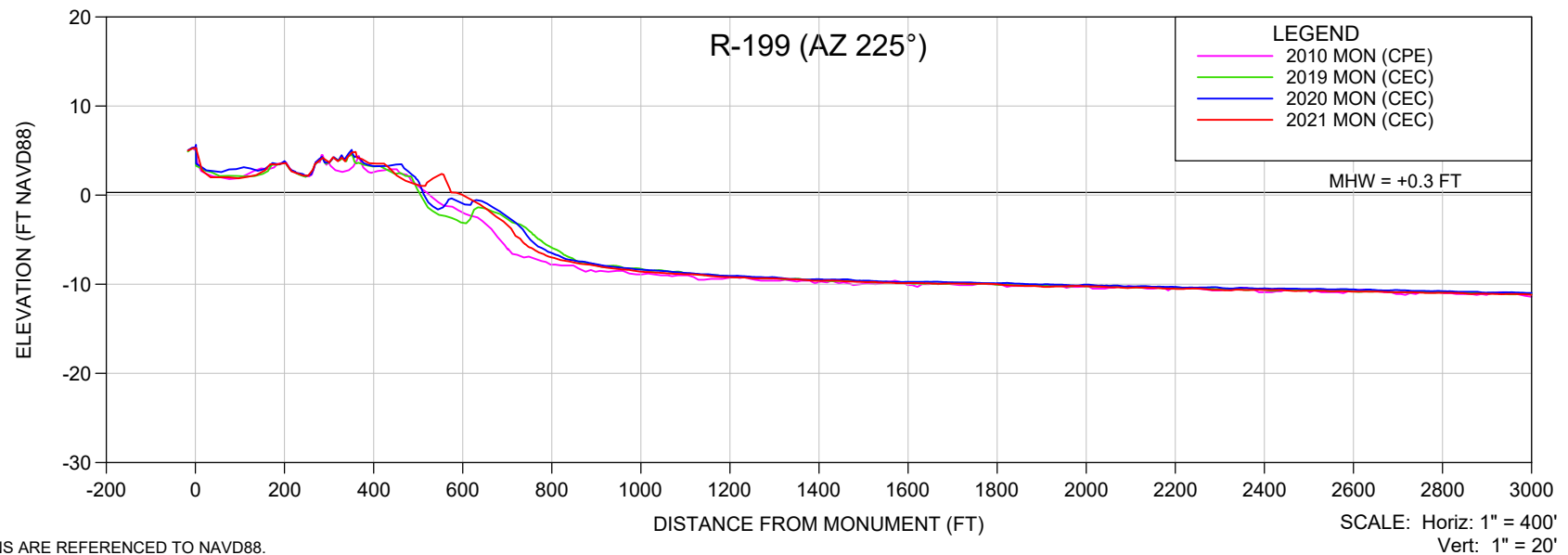
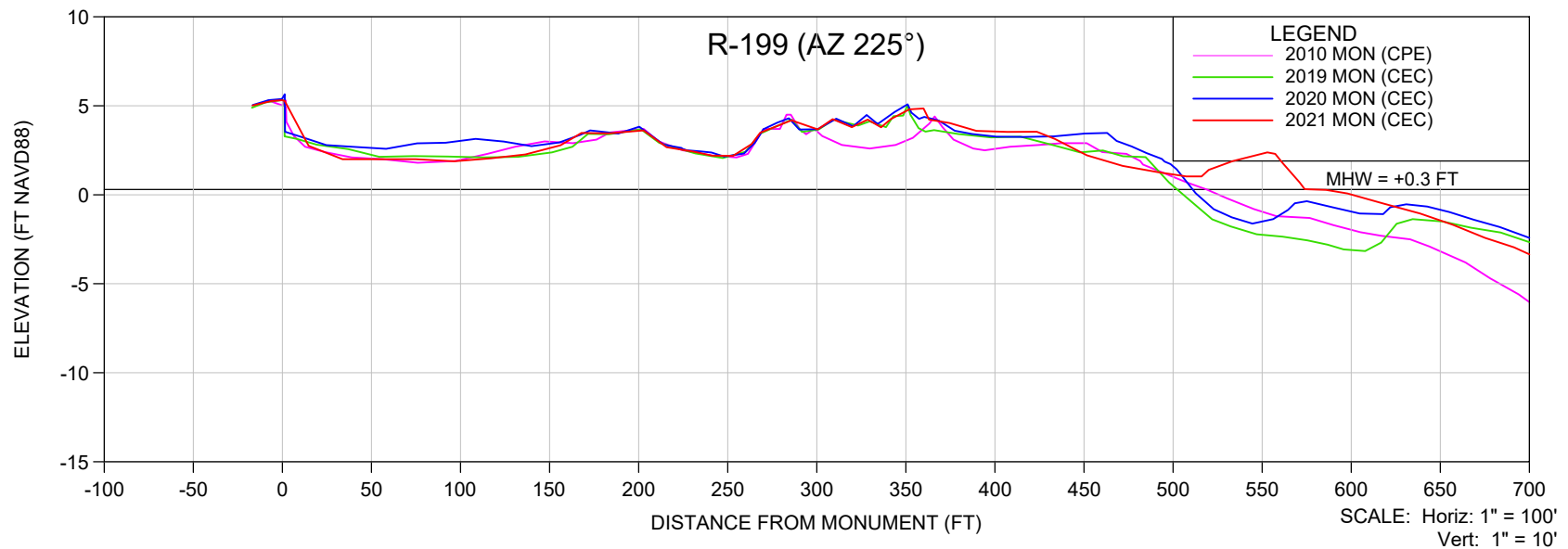
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CLIENT: **LEE COUNTY**
 TITLE: **R-198 (AZ 225°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC AND CPE.

SHEET 29
FILE NO.: 21102-R-199-AZ225

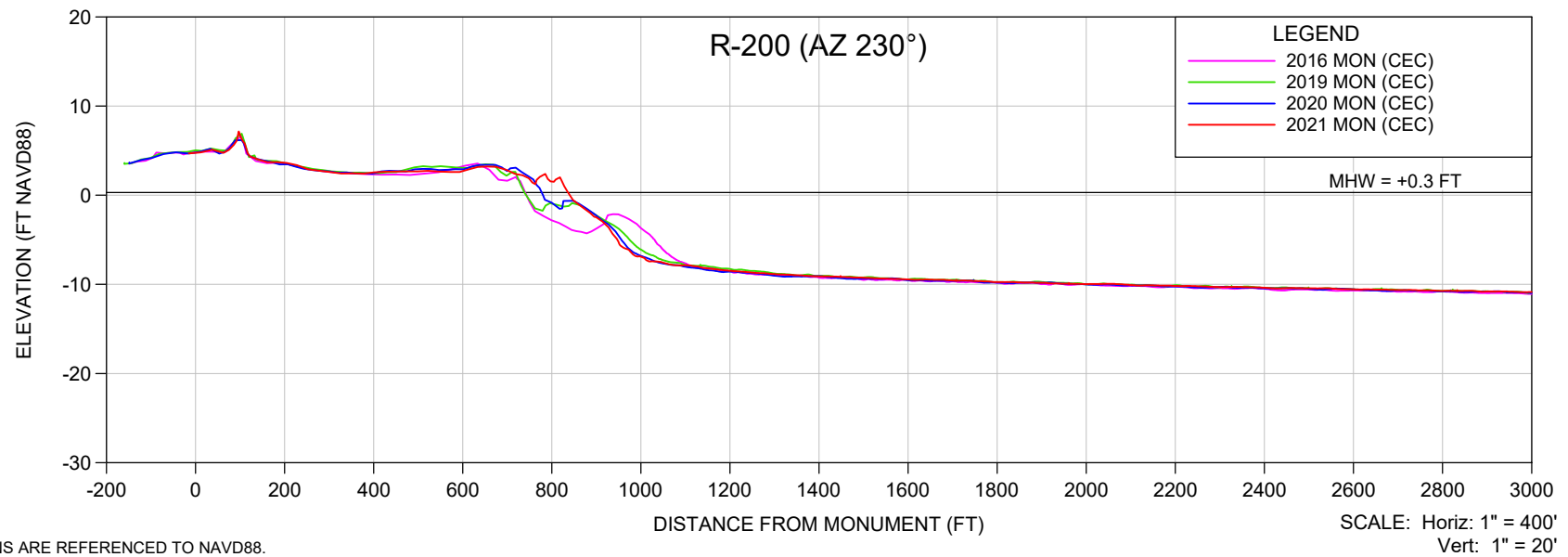
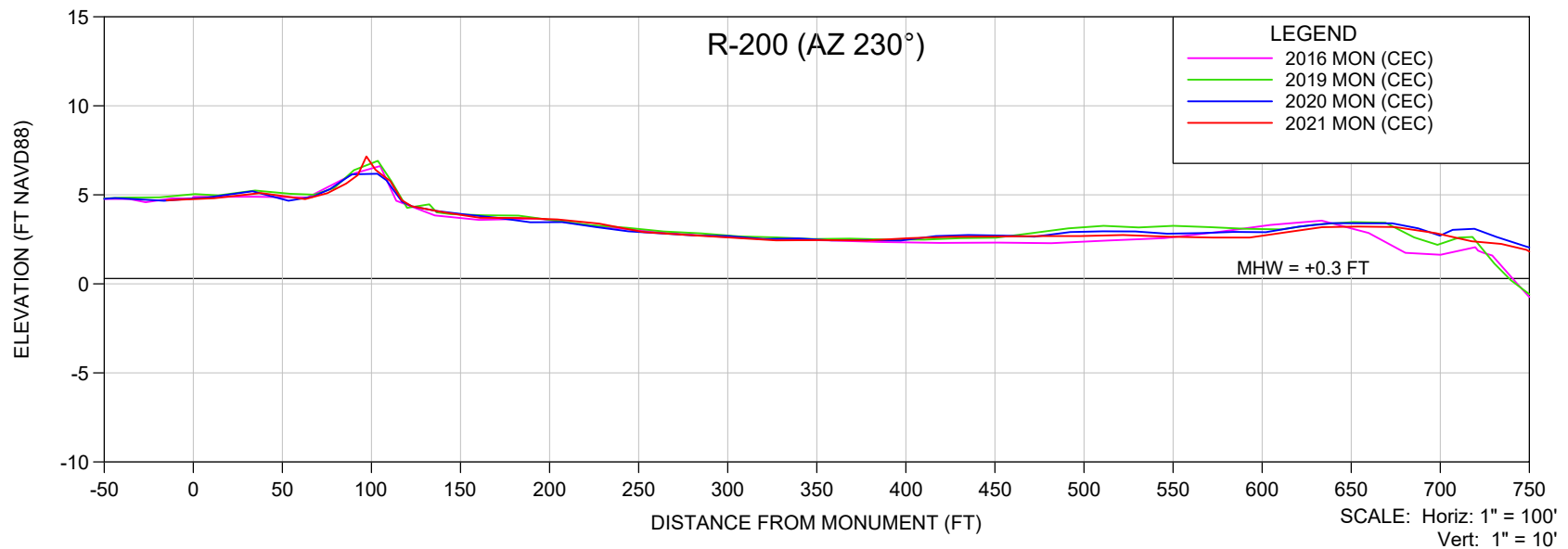
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 TITLE: **R-199 (AZ 225°) MONITORING SURVEY**

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CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE

BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 30
FILE NO.: 21102-R-200 AZ230

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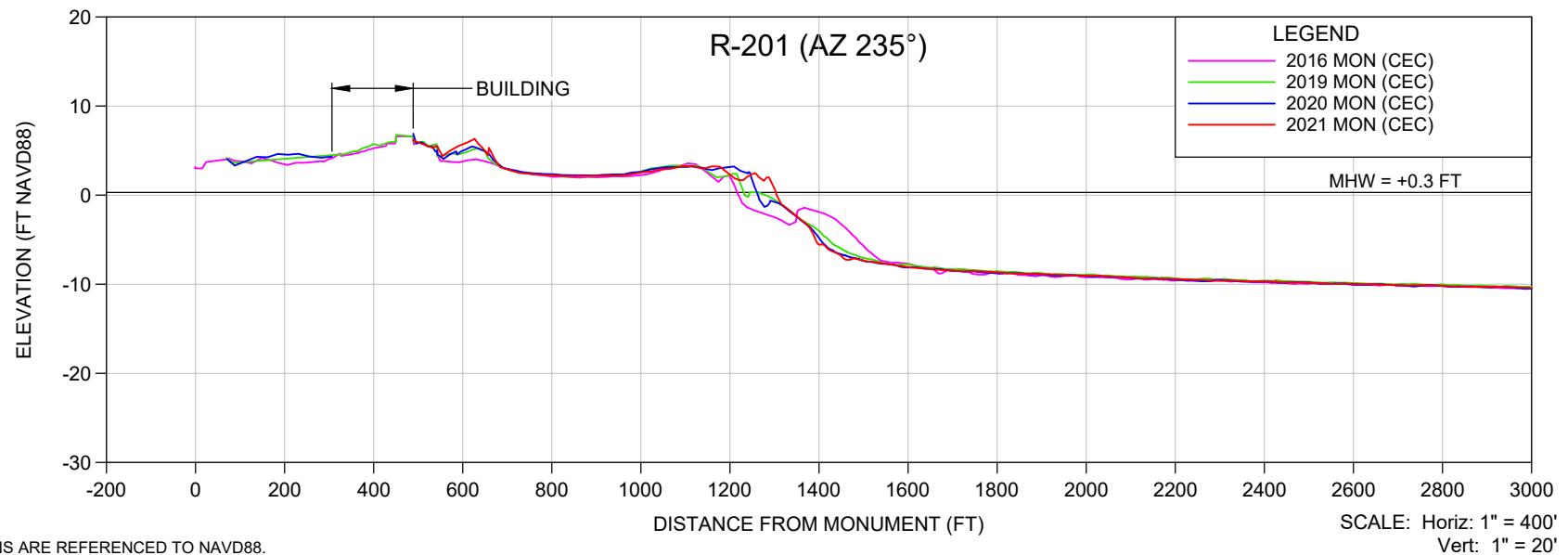
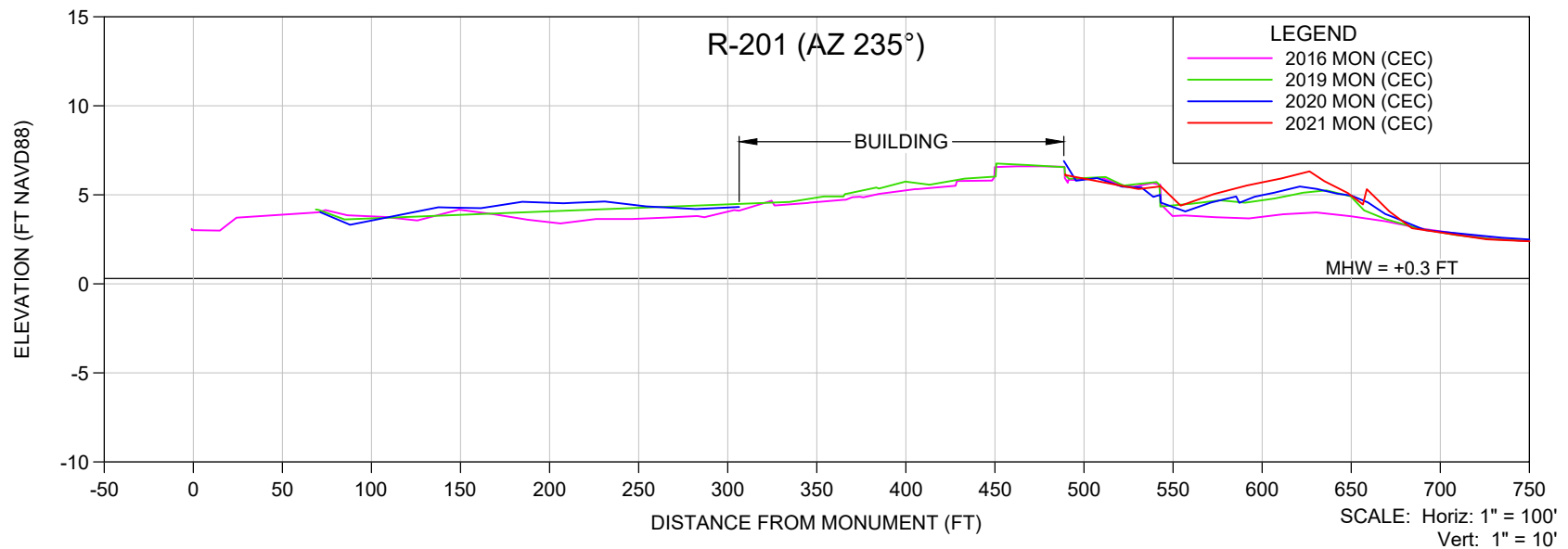
CLIENT:

LEE COUNTY

TITLE:

R-200 (AZ 230°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
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SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 31
FILE NO.: 21102-R-201 AZ235

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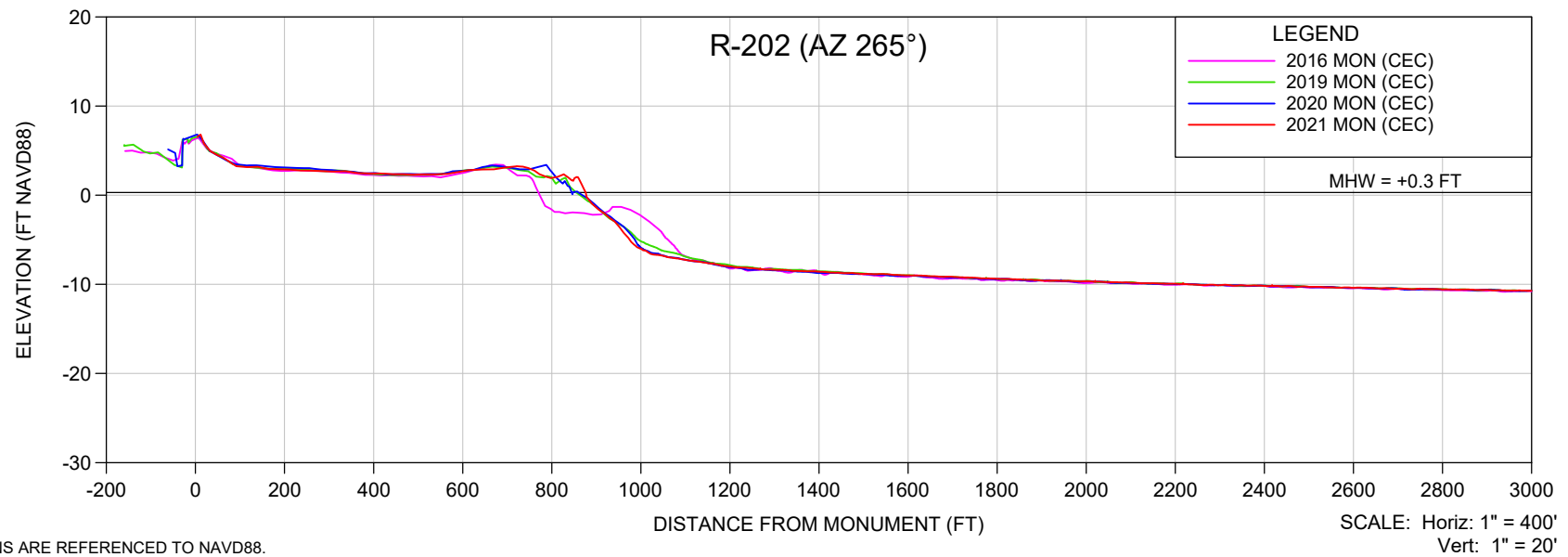
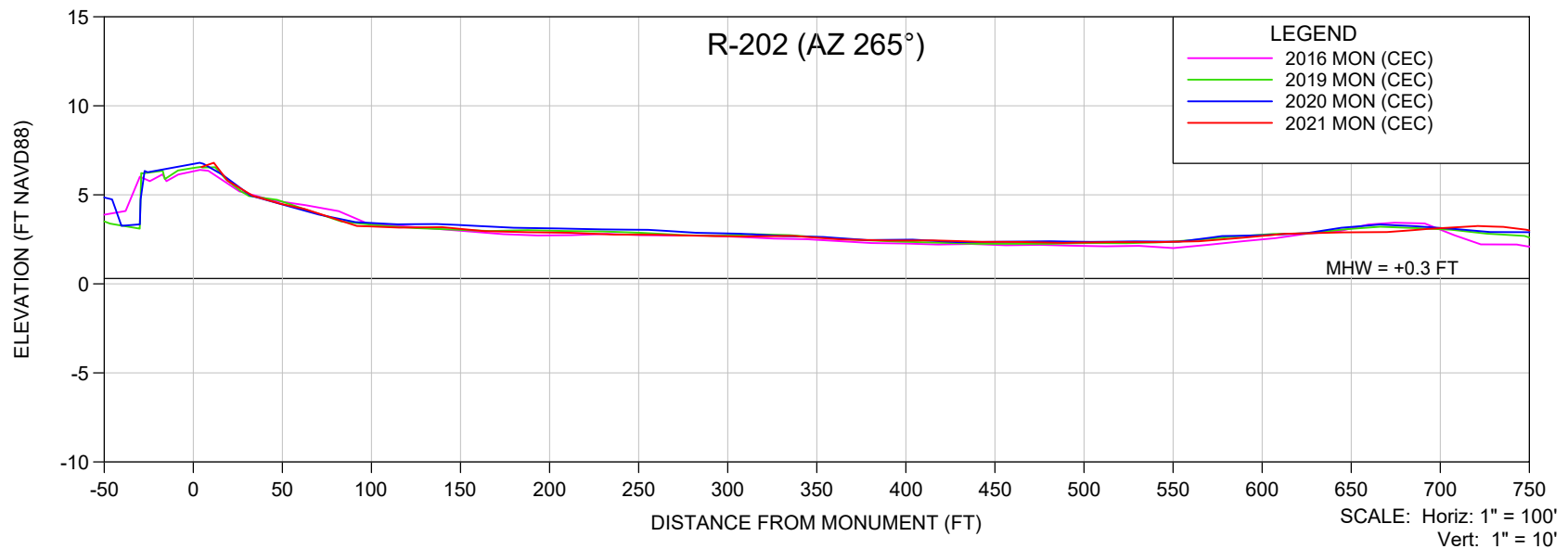
CLIENT:

LEE COUNTY

TITLE:

R-201 (AZ 235°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 32
FILE NO.: 21102-R-202-AZ265

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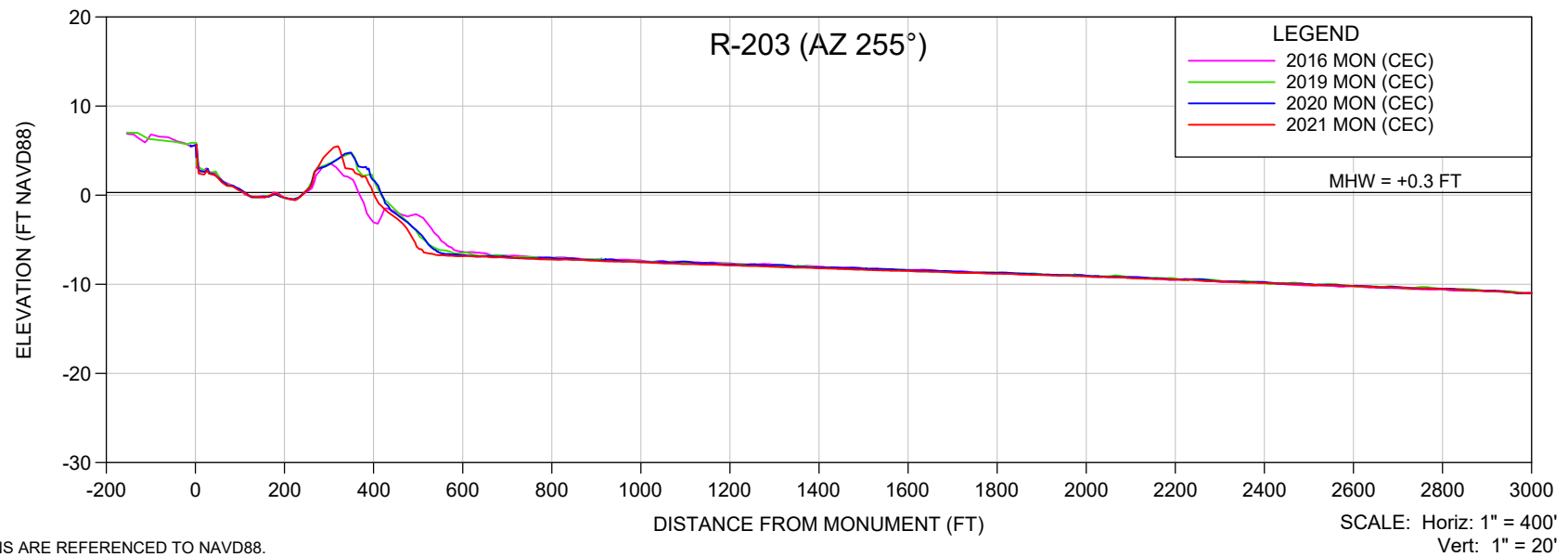
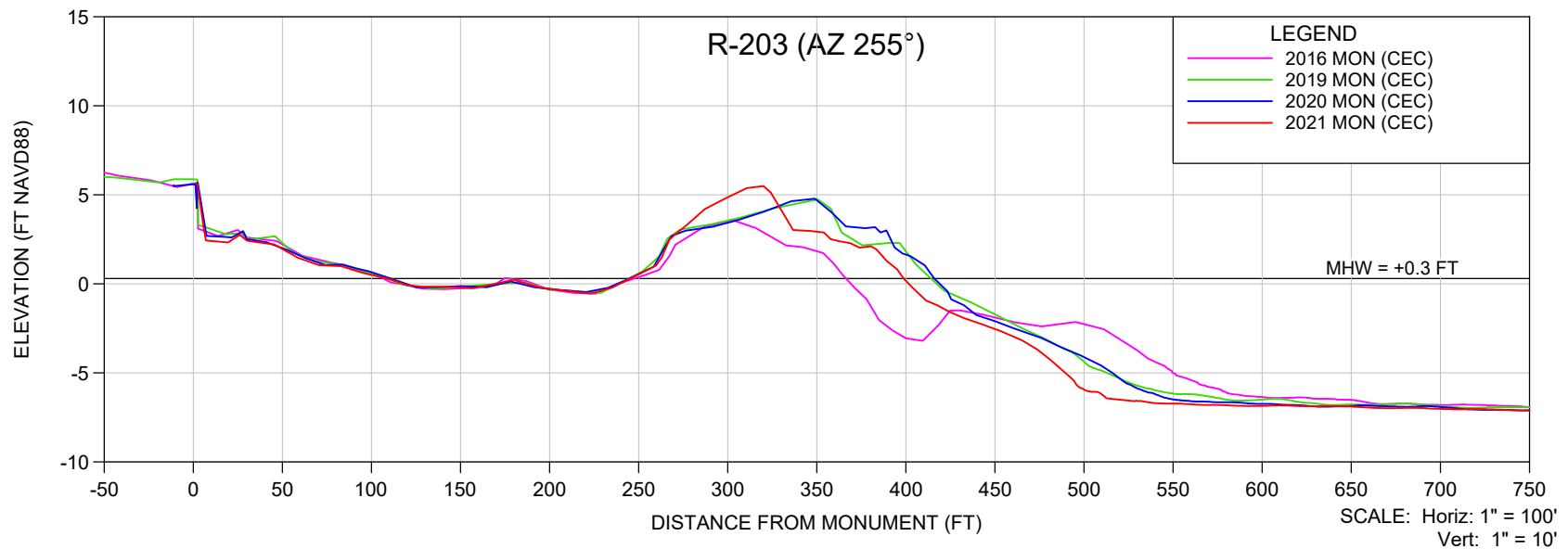
CLIENT:

LEE COUNTY

TITLE:

R-202 (AZ 265°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC.

SHEET 33
FILE NO.: 21102-R-203-AZ255

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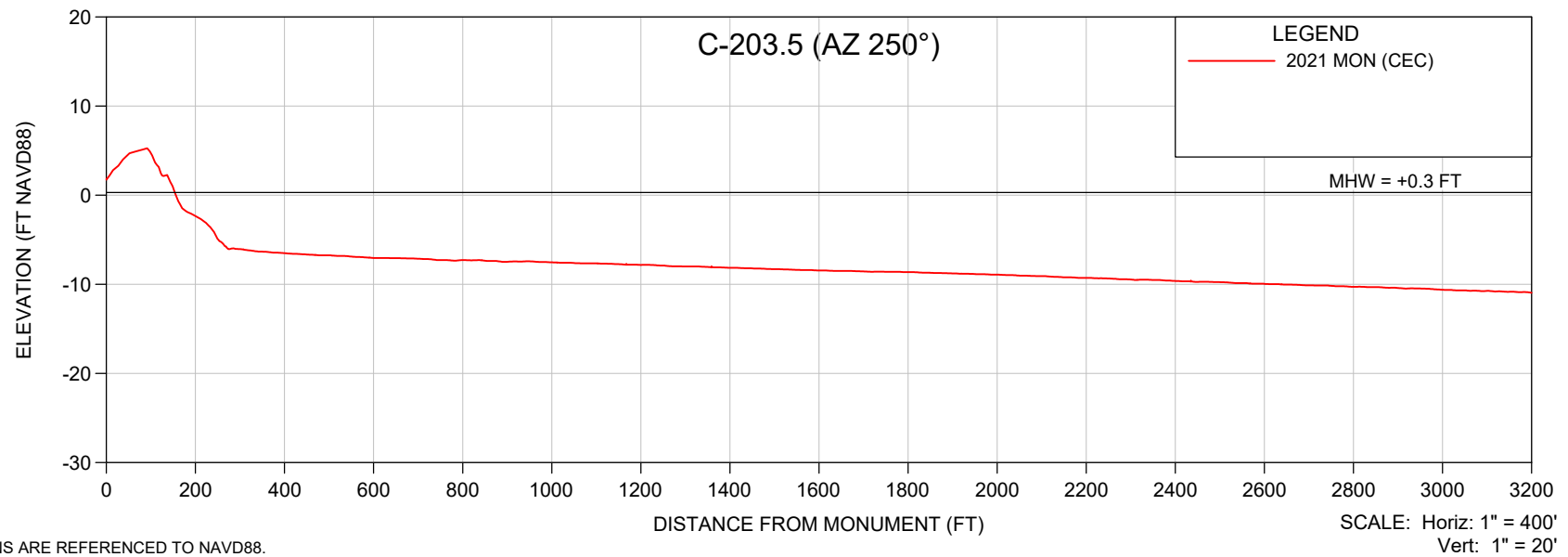
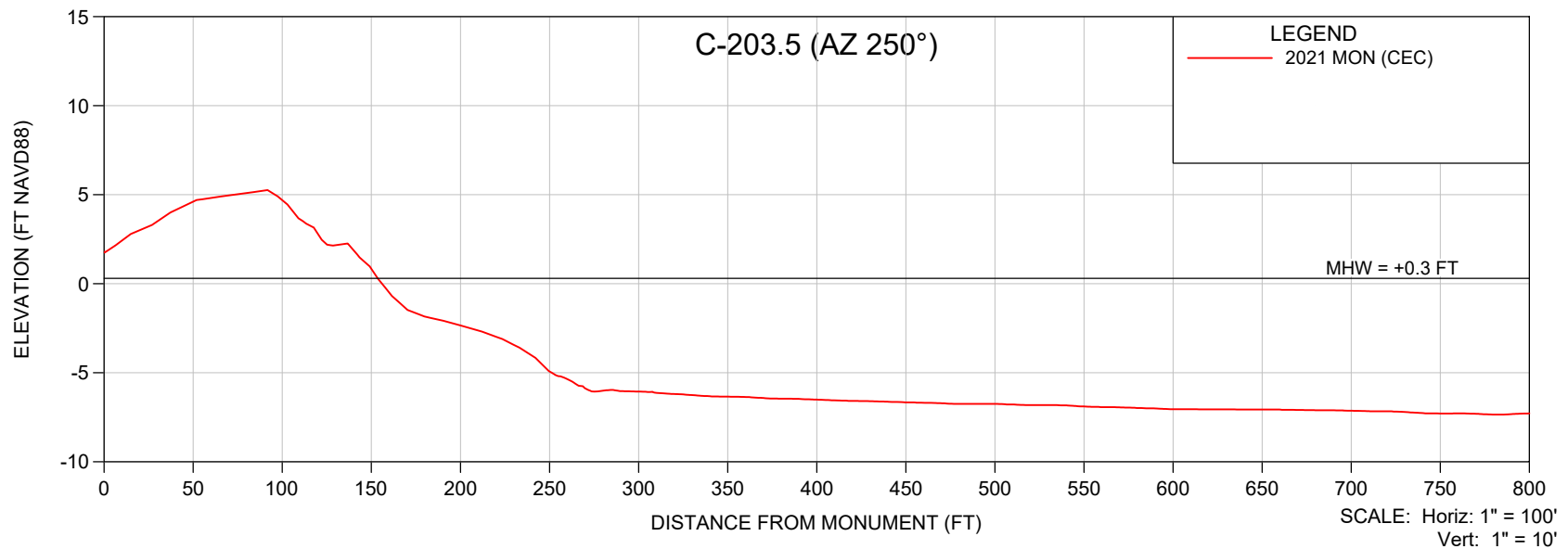
CLIENT:

LEE COUNTY

TITLE:

R-203 (AZ 255°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 34
FILE NO.: 21102-R203.5 AZ250

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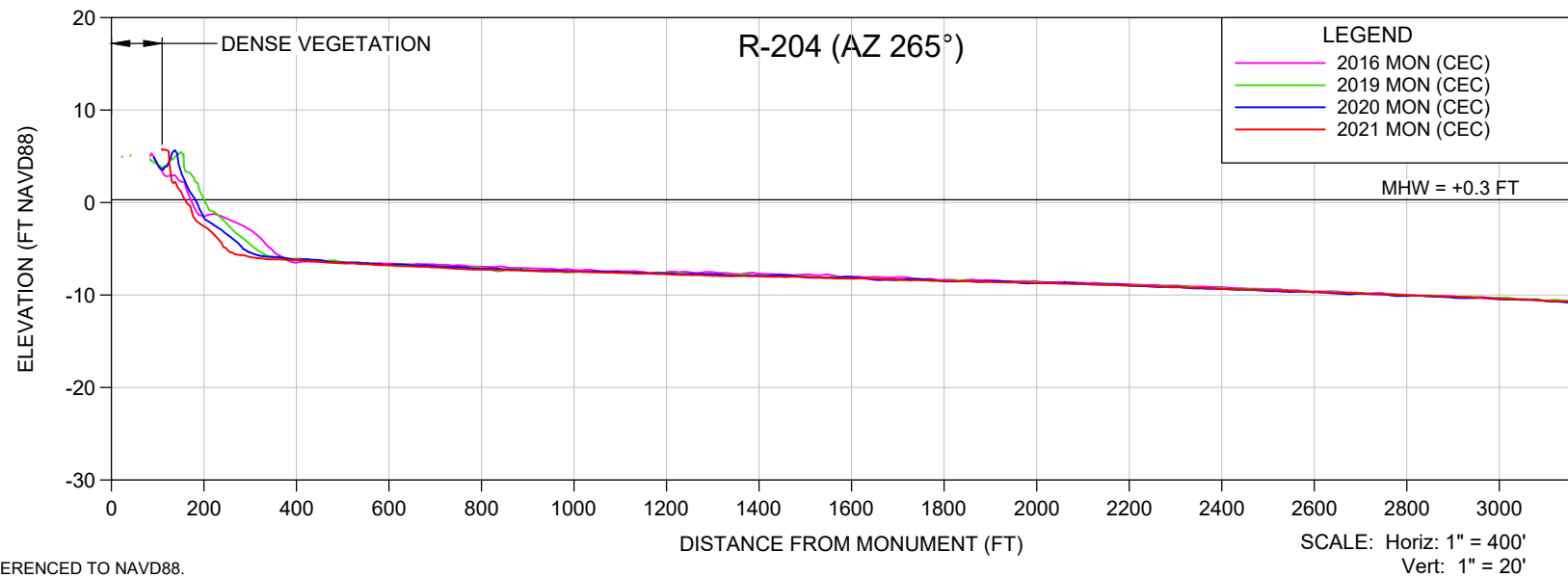
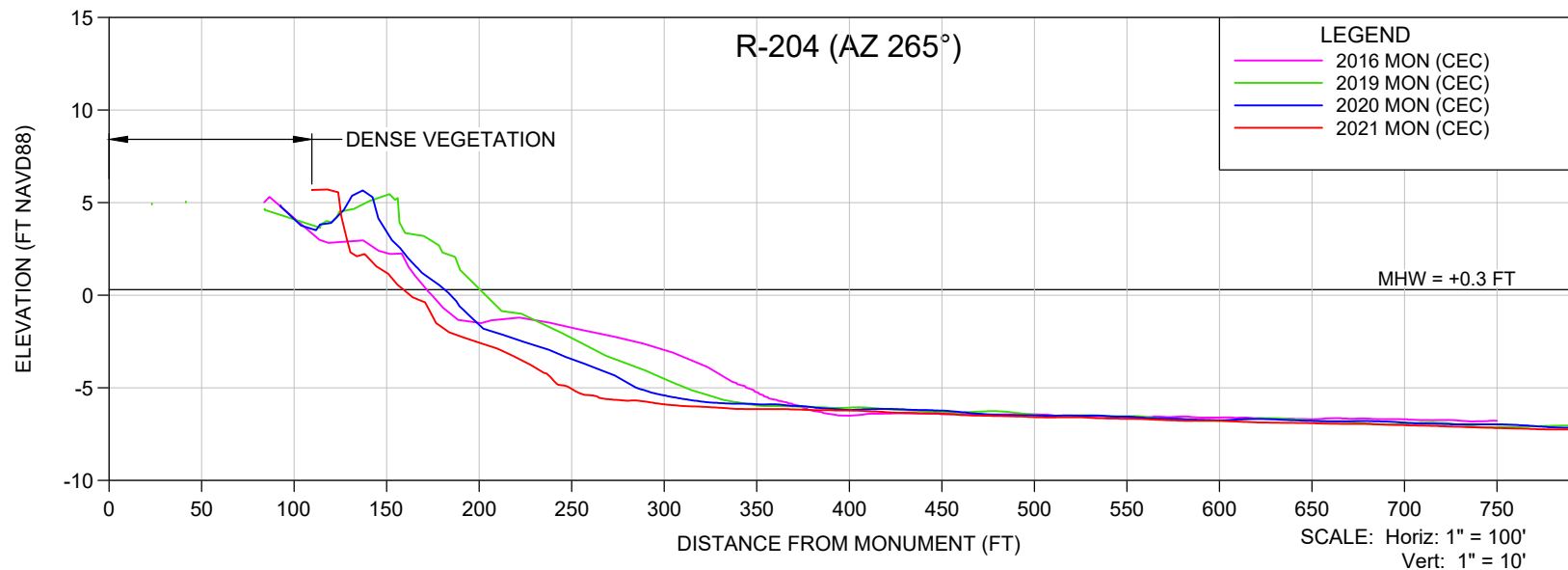
CLIENT:

LEE COUNTY

TITLE:

R-203.5 (AZ 250°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC.

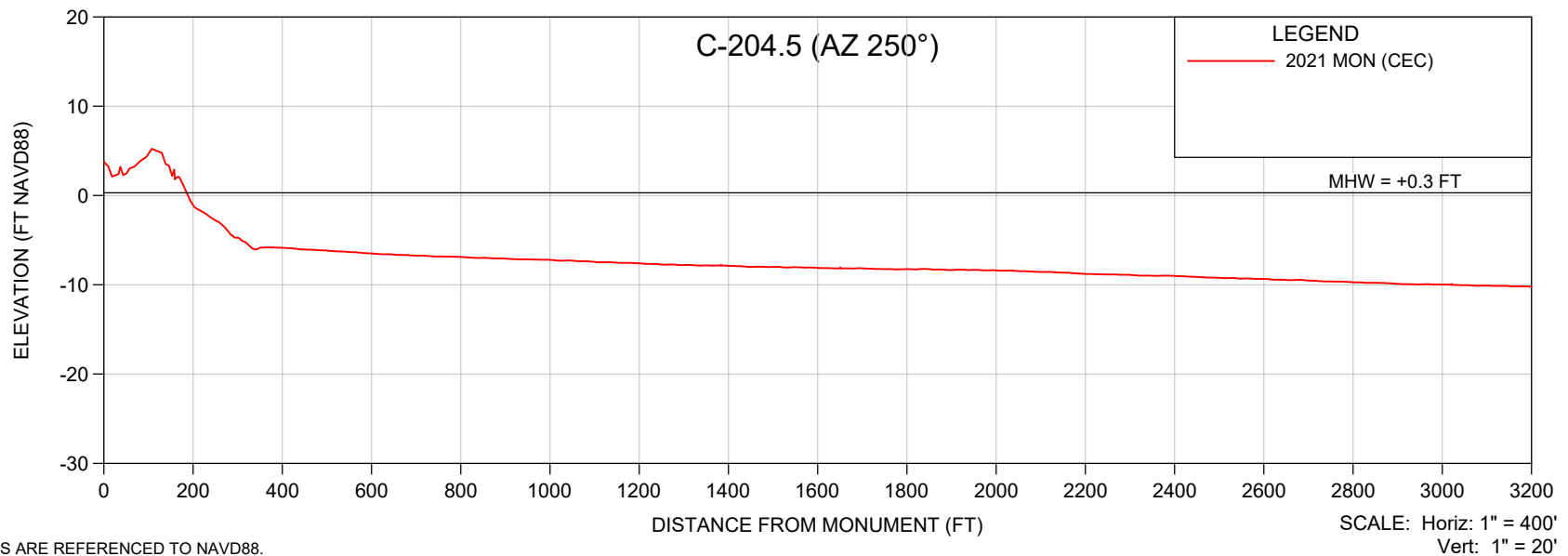
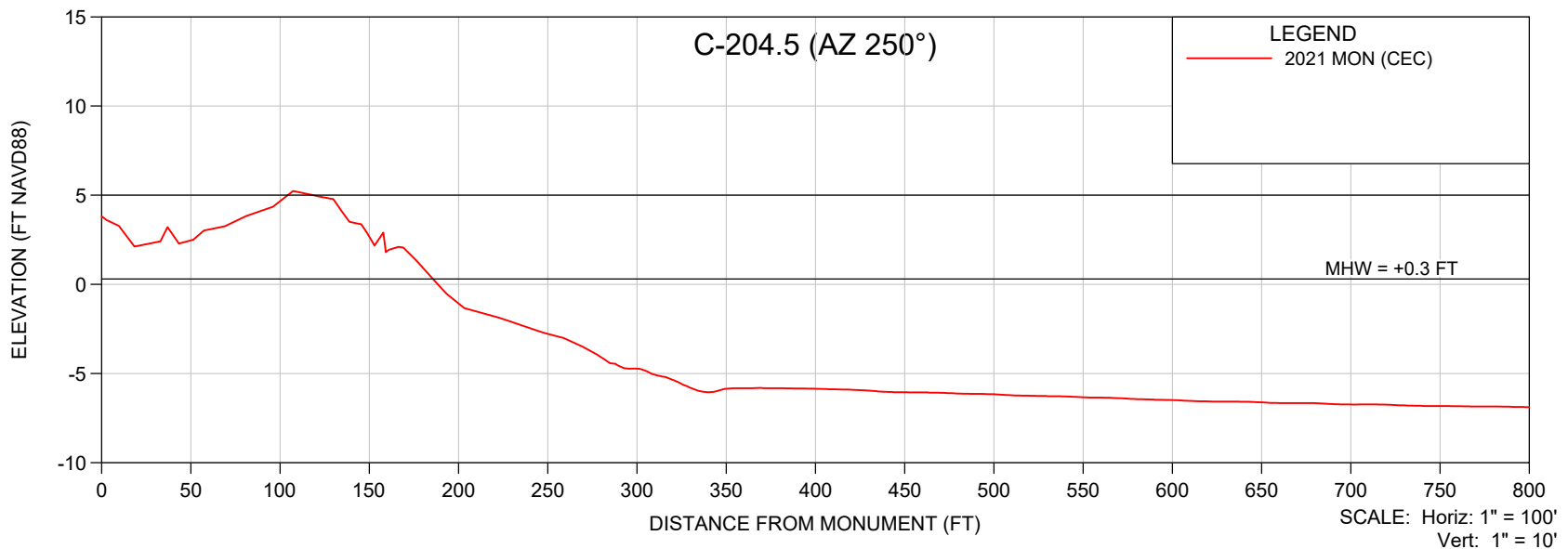
SHEET 35
FILE NO.: 21102-R-204 AZ265

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CLIENT: **LEE COUNTY**
 TITLE: **R-204 (AZ 265°) MONITORING SURVEY**

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 36
FILE NO.: 21102-R204.5 AZ250

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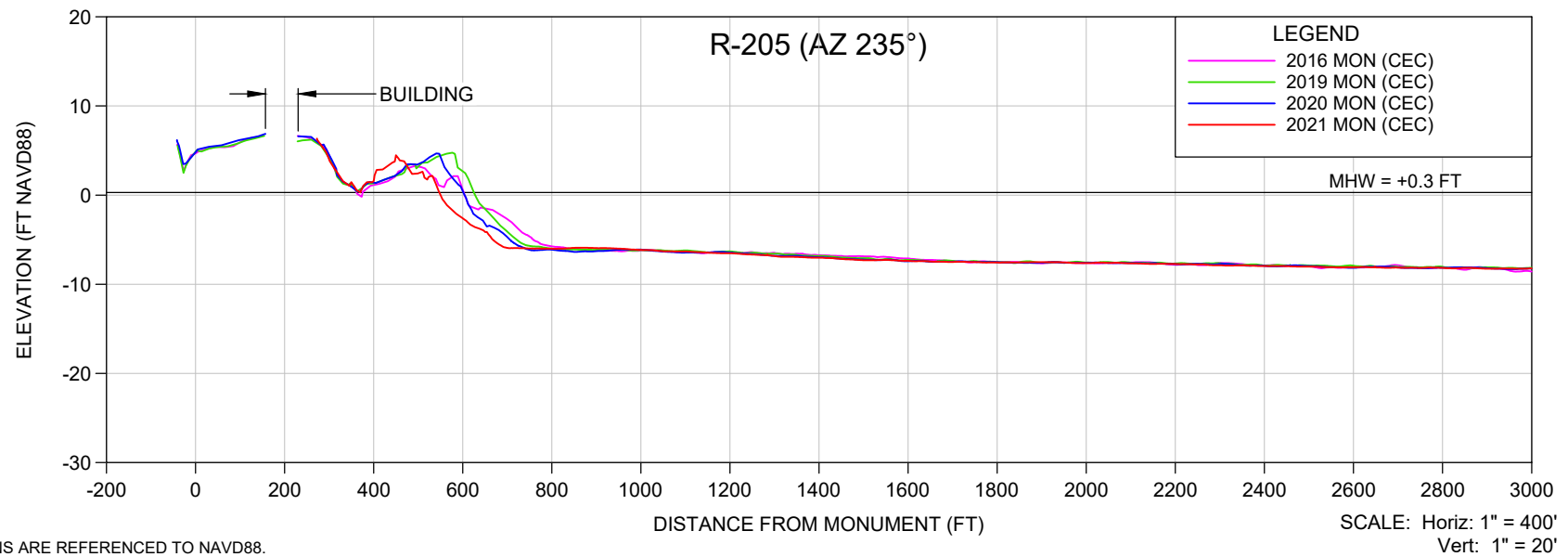
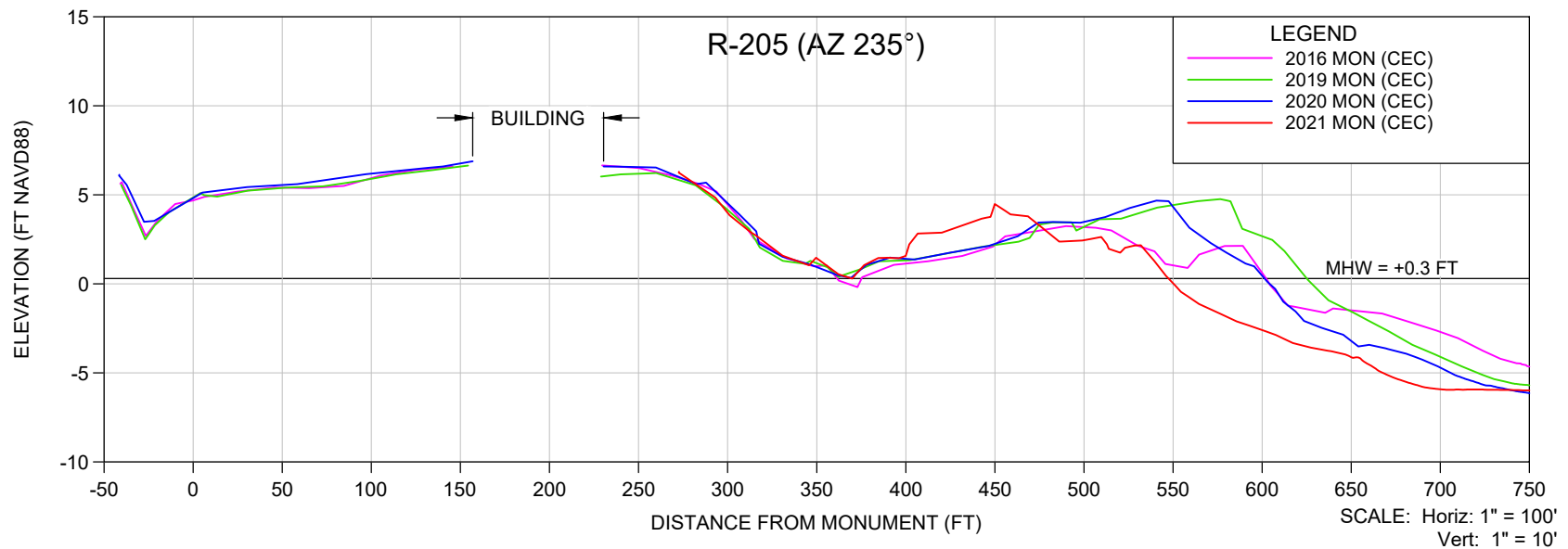
CLIENT:

LEE COUNTY

TITLE:

R-204.5 (AZ 250°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 37
FILE NO.: 21102-R-205 AZ235

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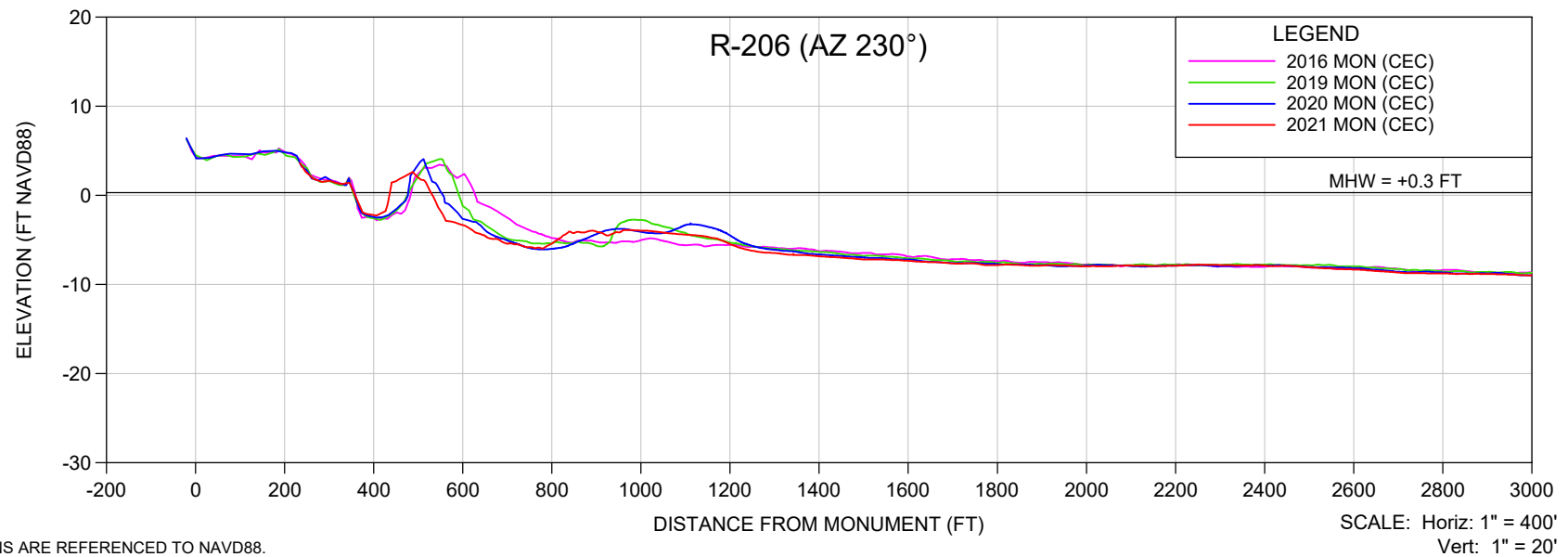
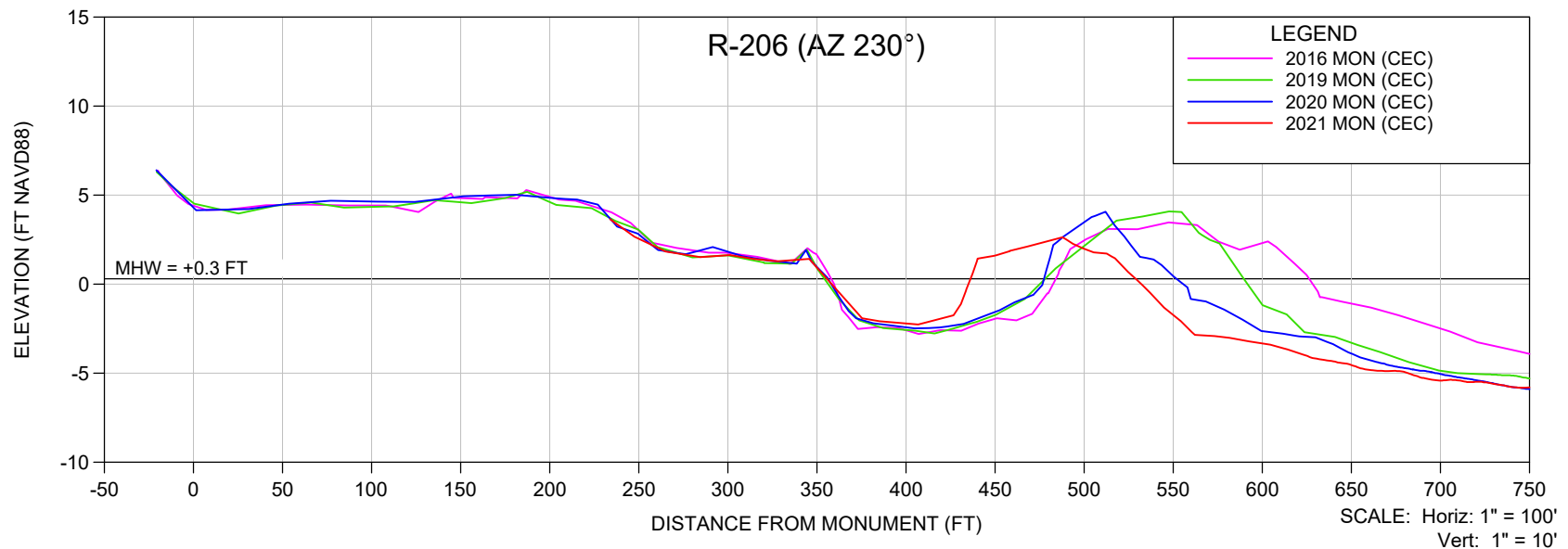
CLIENT:

LEE COUNTY

TITLE:

R-205 (AZ 235°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
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NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 38
FILE NO.: 21102-R-206 AZ230

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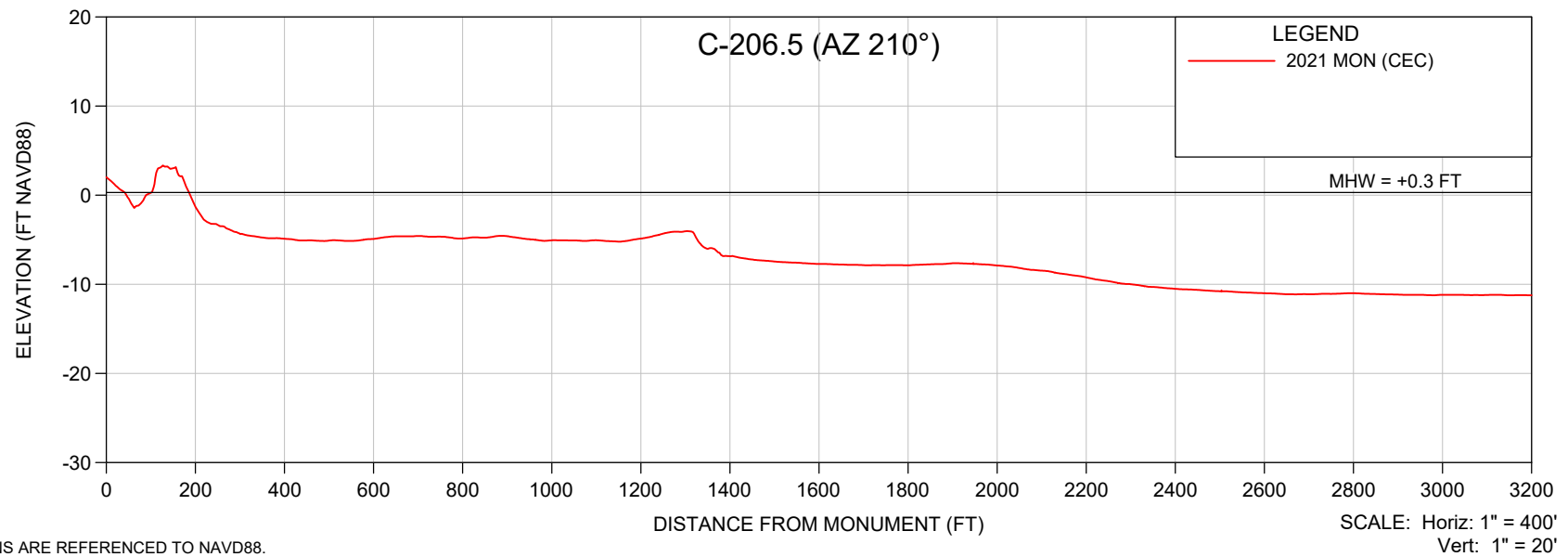
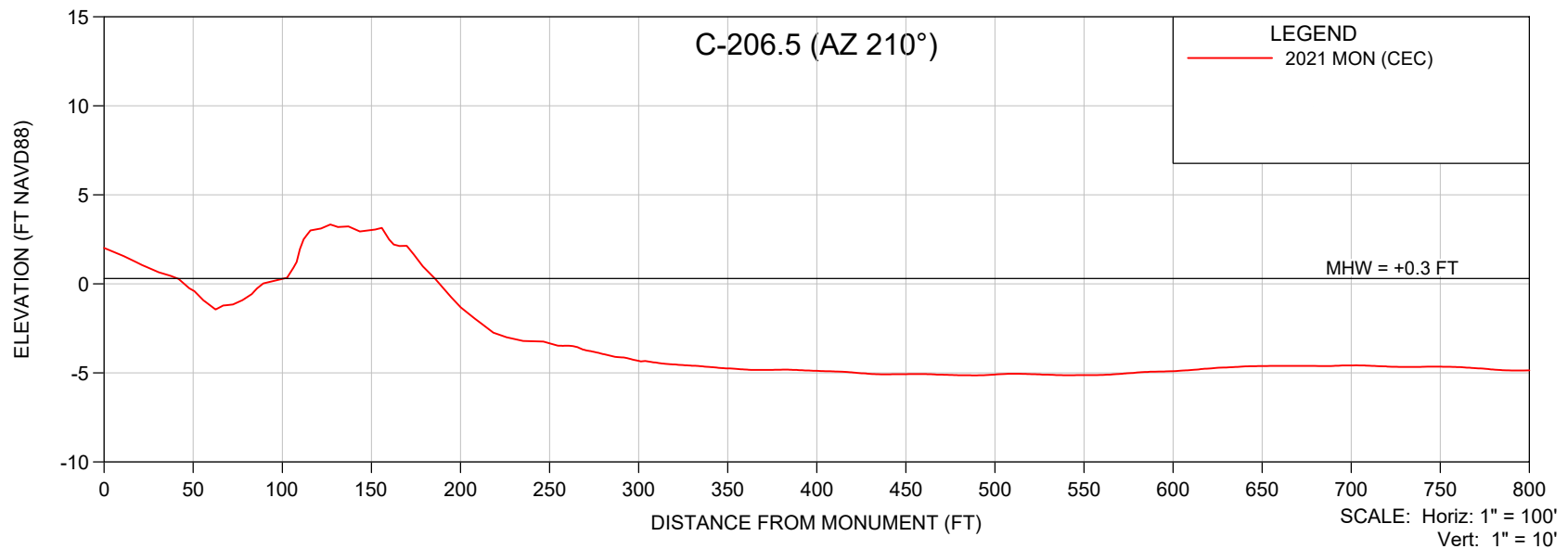
CLIENT:

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TITLE:

R-206 (AZ 230°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
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1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 39
FILE NO.: 21102-R206.5 AZ11

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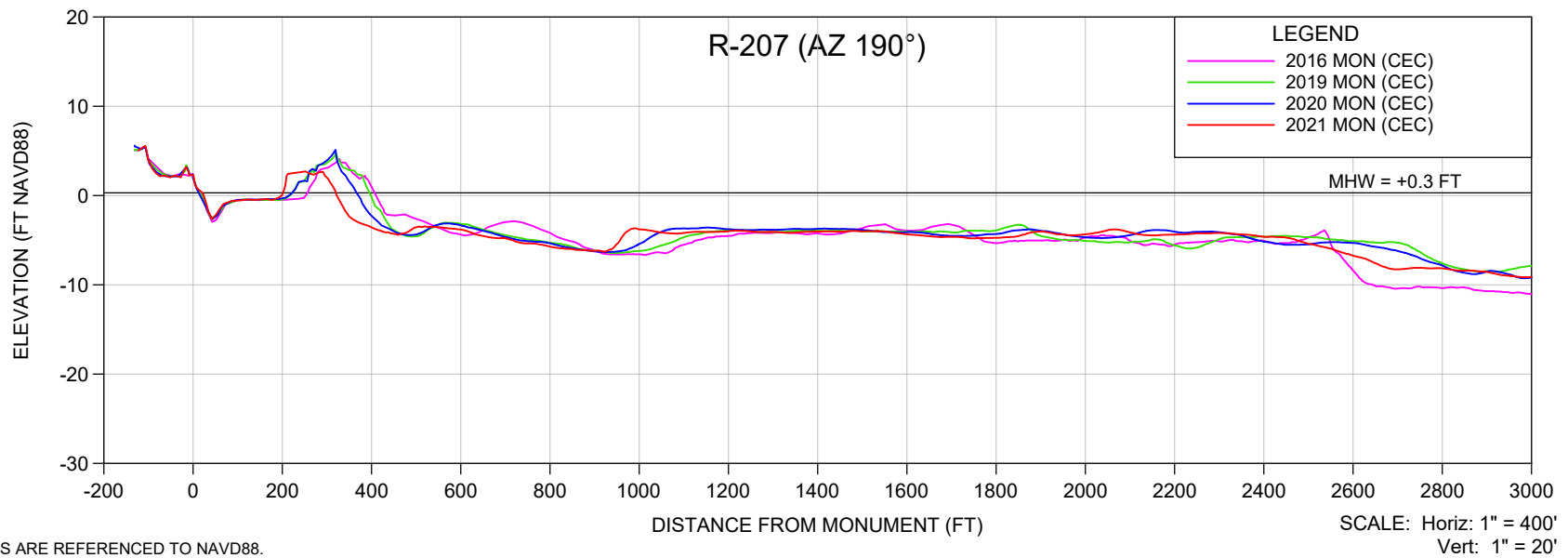
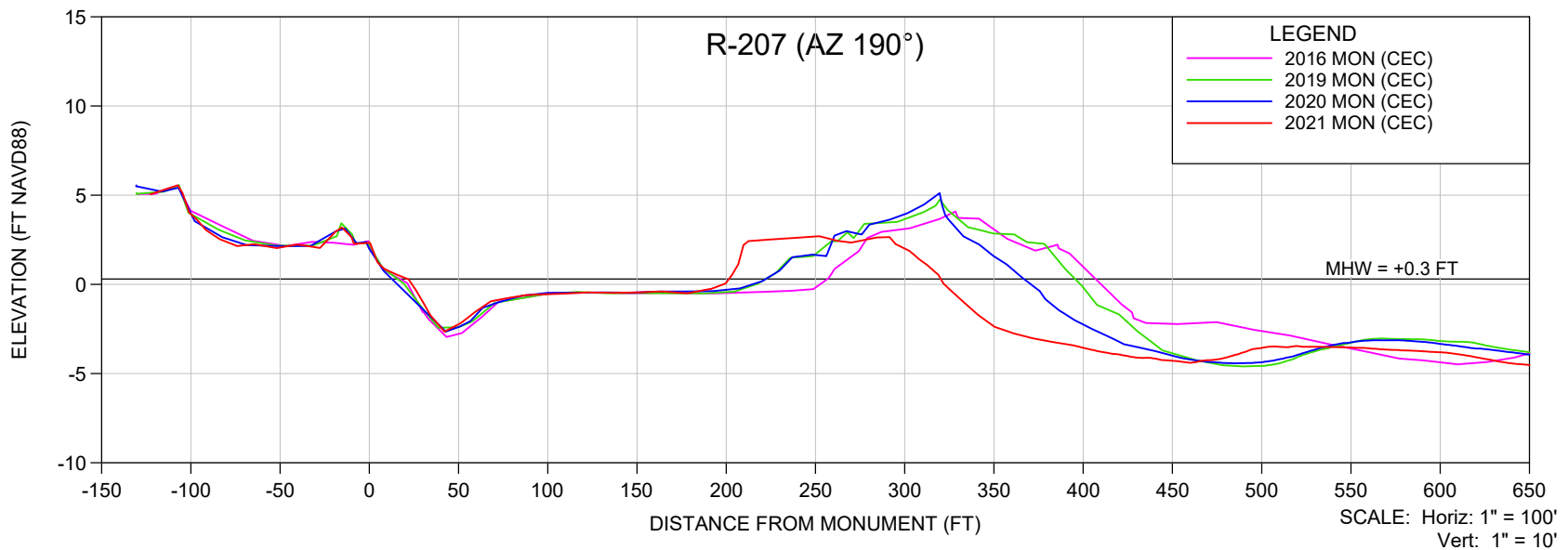
CLIENT:

LEE COUNTY

TITLE:

R-206.5 (AZ 210°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE BY REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
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SHEET 40
FILE NO.: 21102-R-207 AZ 190°

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 E-Mail: info@ceciff.com

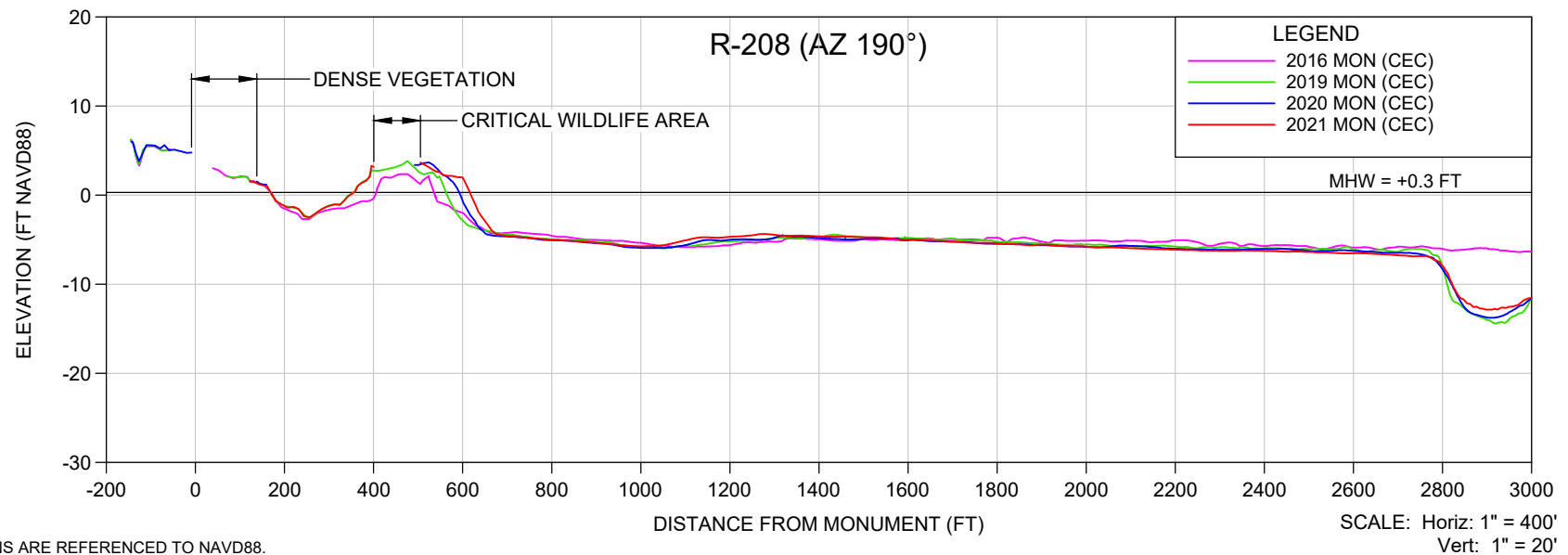
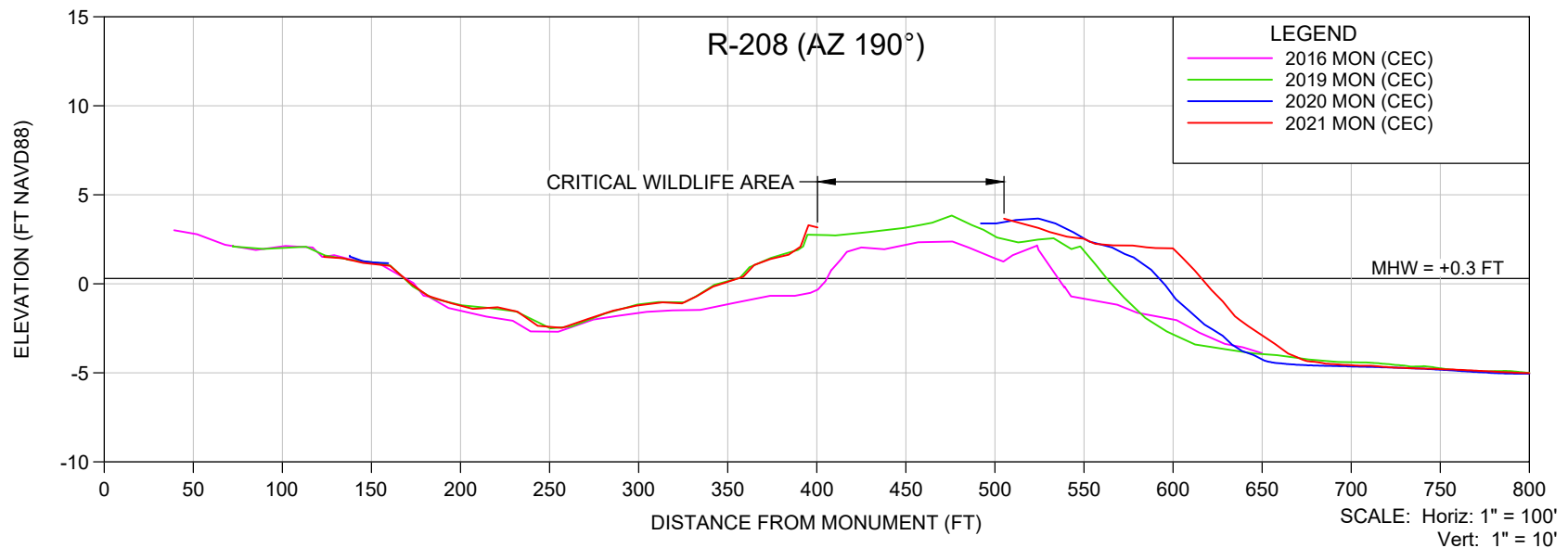
CLIENT:

LEE COUNTY

TITLE:

R-207 (AZ 190°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC.

SHEET 41
FILE NO.: 21102-R-208 AZ 190°

**COASTAL
ENGINEERING
CONSULTANTS
INC.**
Serving Florida Since 1977
28421 BONITA CROSSINGS BLVD
BONITA SPRINGS, FLORIDA 34135

COASTAL & MARINE ENGINEERING
ENVIRONMENTAL & GEOLOGICAL SERVICES
SURVEY & MAPPING
ENGINEERING: CA 2464
SURVEYING: LB 2464
PHONE: (239)643-2324
FAX: (239)643-1143
www.coastalengineering.com
E-Mail: info@ceciff.com

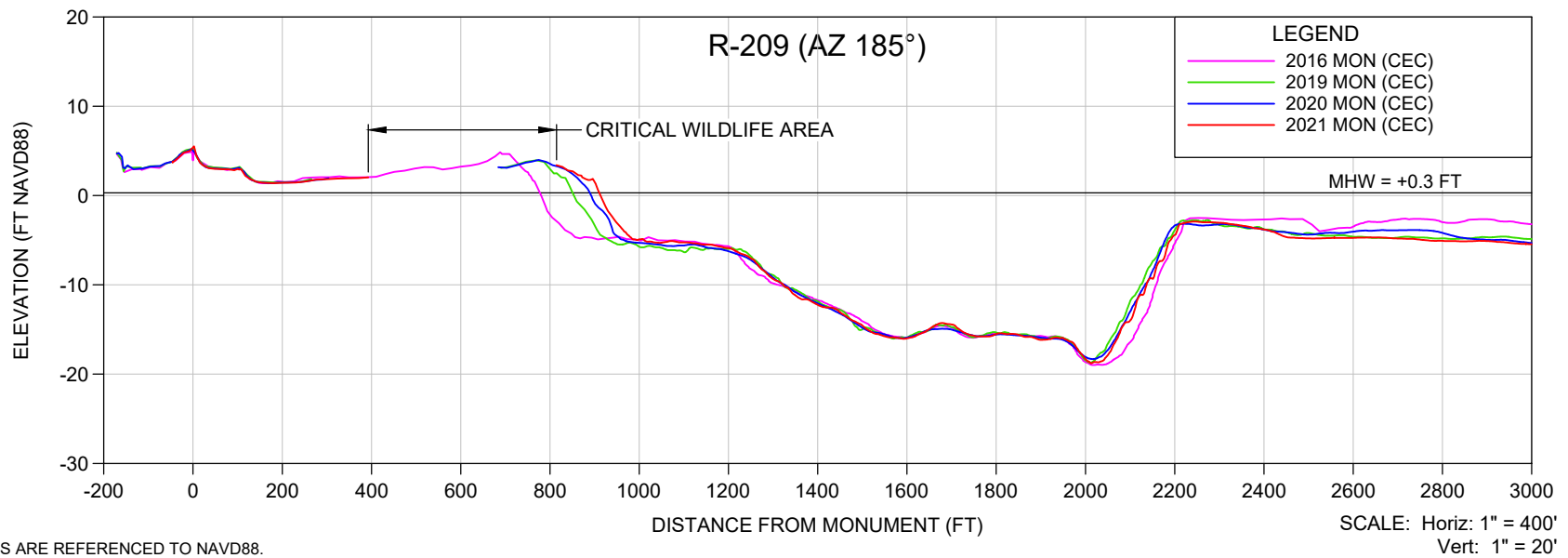
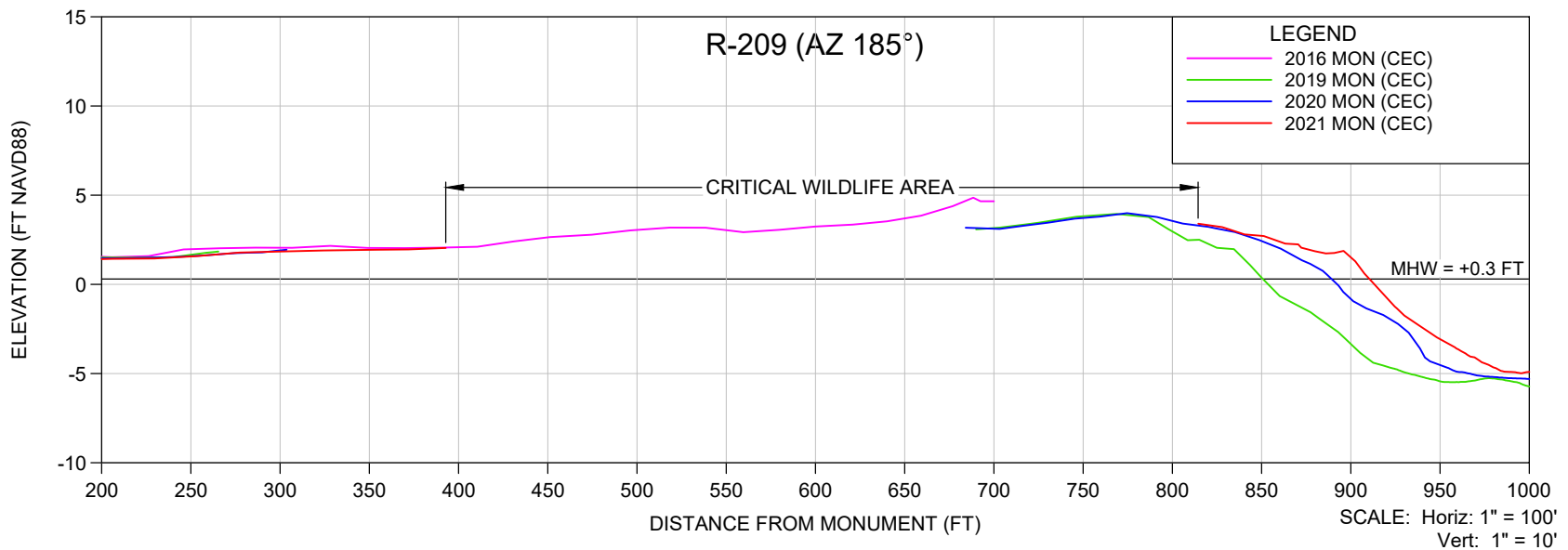
CLIENT:

LEE COUNTY

TITLE:

R-208 (AZ 190°) MONITORING SURVEY

DATE:	6/7/2021	SCALE:	AS SHOWN
DRAWN:	VVA	F.B.	
CHECKED:	MTP	PG.	
SEC.	TWP.	RNG.	
ACAD NO.	21102 Estero Island Profiles.dwg		
REF. NO.	21.102	NO.	DATE
		BY	REVISION DESCRIPTION



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC.

SHEET 42
 FILE NO.: 21102-R-209 AZ 185

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CLIENT:

LEE COUNTY

TITLE:

R-209 (AZ 185°) MONITORING SURVEY

DATE:

6/7/2021

DRAWN:

VVA

CHECKED:

MTP

SEC.

TWP.

RNG.

ACAD NO.

21102 Estero Island Profiles.dwg

REF. NO.

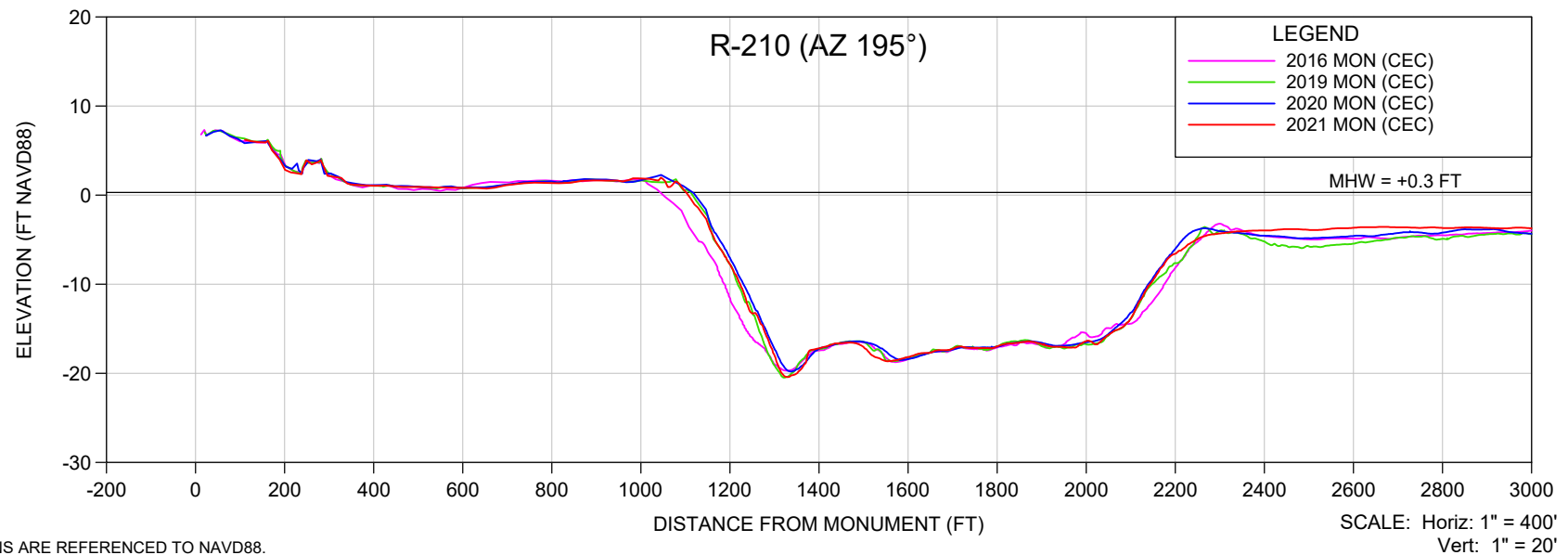
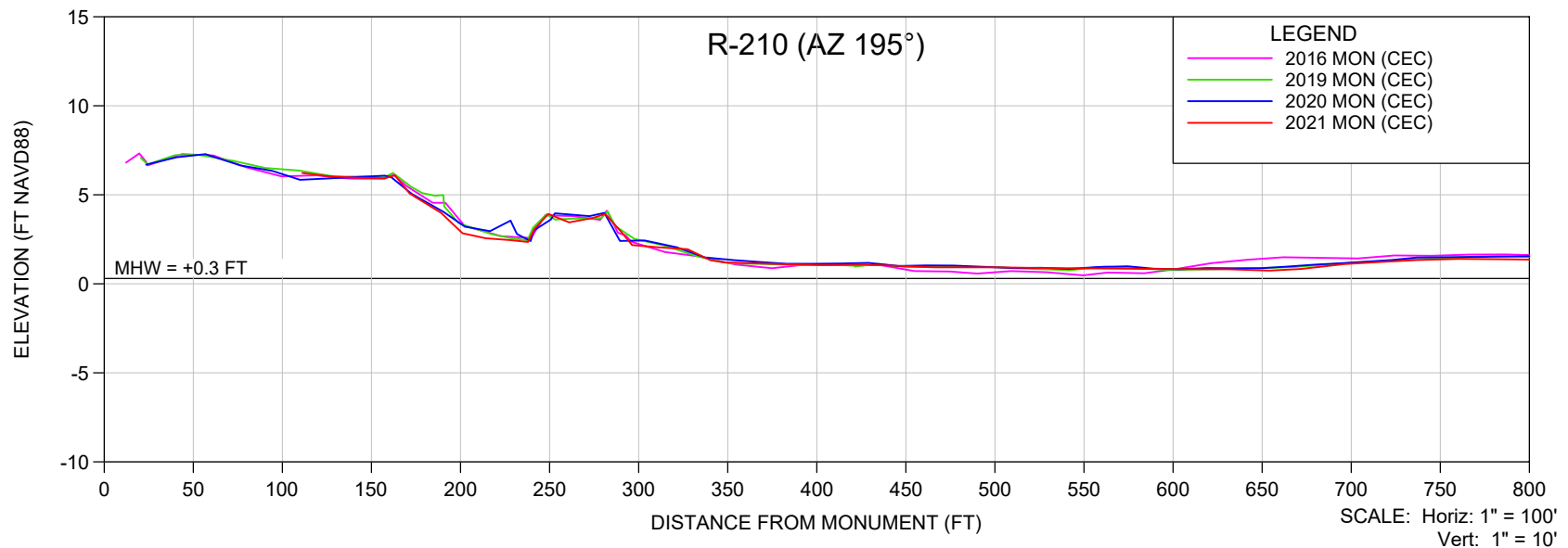
SCALE:

AS SHOWN

F.B.

PG.

NO.	DATE	BY	REVISION DESCRIPTION	



NOTES:

1. ELEVATIONS ARE REFERENCED TO NAVD88.
2. PROFILE DATA IS FROM SURVEYS BY CEC.

SHEET 43
FILE NO.: 21102-R-210 AZ 195

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PHONE: (239)643-2324
FAX: (239)643-1143
www.coastalengineering.com
E-Mail: info@ceciff.com

CLIENT: **LEE COUNTY**
TITLE: **R-210 (AZ 195°) MONITORING SURVEY**

DATE: 6/7/2021
DRAWN: VVA
CHECKED: MTP
SEC. TWP. RNG.
ACAD NO. 21102 Estero Island Profiles.dwg
REF. NO. 21.102

SCALE: AS SHOWN
F.B.
PG.

NO.	DATE	BY	REVISION DESCRIPTION

**TOURIST DEVELOPMENT TAX GRANT FUNDING AGREEMENT
BETWEEN
LEE COUNTY BOARD OF COUNTY COMMISSIONERS
AND
THE TOWN OF FORT MYERS BEACH
FOR
BEACH EROSION MONITORING (403278)**

THIS GRANT AGREEMENT is entered into by and between LEE COUNTY BOARD OF COUNTY COMMISSIONERS, a political subdivision and charter county of the State of Florida, hereinafter referred to as the “**COUNTY**” and the TOWN OF FORT MYERS BEACH hereinafter referred to as “**RECIPIENT**”, for funding provided pursuant to the **COUNTY’S** Tourist Development Plan and Florida Statutes Section 125.0104.

WITNESSETH:

WHEREAS, pursuant to Florida Statutes §125.0104 and Lee County Ordinances No. 13-14 and 16-18, and as may be further amended from time to time, Lee County collects tourist development tax; and

WHEREAS, the **COUNTY** has the authority to enter into this Agreement and distribute Tourist Development Tax funds in the amount and manner set forth in this Agreement; and

WHEREAS, the **COUNTY** and **RECIPIENT** acknowledge that the Tourist Development Tax may only be spent in accordance with state law, case law and the Tourist Development Plan adopted by Lee County; and

WHEREAS, the **COUNTY** approved the **RECIPIENT’S** request for funding under its Tourist Development Tax Plan for implementation of the following project:

A8
12/07/21 R

NAME: *Beach Erosion Monitoring*

NUMBER: *403278*

NOW, THEREFORE, for and in consideration of the covenants and obligations set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties intending to be legally bound hereby agree to perform the duties described herein in this Agreement as follows:

1. SCOPE OF WORK

The **RECIPIENT** will perform the work necessary to complete the Project in accordance with the Project Request (attached). **RECIPIENT** may not make any major alterations, changes or substitutions to the Project without obtaining prior approval from the **COUNTY**. The Director of the Visitor and Convention Bureau or designee may approve minor changes, alterations and/or substitutions. **RECIPIENT** shall be solely responsible for managing and controlling the Project, including the hiring and supervising of any consultants or contractors it engages.

- 1.1 The parties agree that time is of the essence in the performance of each obligation under this Agreement.
- 1.2 The parties acknowledge that the Project is for *monitoring of beach erosion on Fort Myers Beach*.

2. CONTRACT PERIOD

This Agreement is effective as of October 1, 2021 (the "Effective Date") and shall continue until the earlier occurs (a) September 30, 2022 (the "Expiration Date") or (b) the date on which either Party terminates this Agreement (the "Termination Date"). The **RECIPIENT** shall not be eligible for reimbursement for any work that is commenced, or costs that are incurred, prior to the effective date of this Agreement.

3. FUNDING

This Agreement is a cost reimbursement Agreement. The parties agree that the total cost of the Project will be Thirty two thousand thirteen dollars (\$32,013.00). The **COUNTY** will reimburse the **RECIPIENT** for an amount not to exceed Thirty two thousand thirteen dollars and no cents (\$32,013.00) during the **COUNTY'S** fiscal year 2021/2022.

- 3.1 The **RECIPIENT** shall pay Project costs prior to requesting reimbursement from the **COUNTY**. The **COUNTY** shall reimburse the **RECIPIENT** for the **COUNTY'S** share of allowable Project costs in accordance with the Project Budget set forth in the Project Plan.
- 3.2 To receive payment, the **RECIPIENT** shall submit request for reimbursement and supporting documentation to the **COUNTY** within forty-five (45) days after completion of the Project. The invoices must describe the services performed, show proof of payment, and all supporting documentation related to the expenses. The **COUNTY** will forward the documentation to the Clerk of Courts Office for payment. Any other additional documentation requested by the Clerk shall be provided. At no point in time will the **COUNTY'S** reimbursement amount under this Agreement exceed *Thirty two thousand thirteen dollars. (\$32,013.00)*
- 3.3 The **RECIPIENT** may contract with consultant(s), contractor(s) or both to accomplish the Project without approval of the **COUNTY**.
- 3.4 The parties acknowledge that the Project was approved for funding by the **COUNTY** based upon the benefits expected to be achieved by the Project. The parties also acknowledge that the **RECIPIENT** is solely responsible for implementing the Project in such a manner that the expected benefits are achieved. If at any point during the progression of the Project, the **COUNTY** determines that it is likely that the Project will not be completed, the **COUNTY** shall provide the **RECIPIENT** with fifteen (15) days advance written notice that the **COUNTY** shall withhold payments to the **RECIPIENT** until such time as the **RECIPIENT** demonstrates that the Project shall reach completion, to provide the **RECIPIENT** with an opportunity to cure the deficiencies.
- 3.5 **RECIPIENT** shall provide the **COUNTY** evidence of substantial activity within six (6) months of the beginning of the fiscal year the grant funding is awarded.
- 3.6 Unspent or unencumbered funds remaining at the end of the fiscal year may not be carried over into the next fiscal year unless approved by the Board of County Commissioners.
- 3.7 In the event any dispute or disagreement arises during the course of the Project, including whether expenses are reimbursable under accordance with the Project Request, the **RECIPIENT** is under a duty to seek clarification and resolution of any issue, discrepancy, or dispute by providing the details and basis of the dispute to the Director, Visitor and Convention Bureau, no later than ten (10) days after the precipitating event. If not resolved by the Director, Visitor and Convention Bureau, within ten (10) days of receipt of notice the dispute will be forwarded to the Assistant County

Manager assigned to the Visitor and Convention Bureau. The Assistant County Manager in consultation with the County Attorney's Office will issue the COUNTY'S final determination. The RECIPIENT'S continuation of the Project work as required under this subparagraph shall not constitute a waiver of any legal remedy available to the RECIPIENT concerning the dispute.

4. COMPLETION DATES

The **RECIPIENT** shall commence and complete the Project and meet the deadlines in accordance with the Project Schedule set forth in the Project Plan. In the event of hurricanes, tornado, floods, acts of God, acts of war, or other such catastrophes, or other man-made emergencies such as labor strikes or riots, which are beyond the control of the **RECIPIENT**, the **RECIPIENT'S** obligation to meet the time frames provided in this Agreement shall be suspended for the period of time the condition continues to exist. During such suspension, this Agreement shall remain in effect. When the **RECIPIENT** is able to resume performance of its obligations under this Agreement, in whole or in part, it shall immediately give the **COUNTY** written notice to that effect and shall resume performance no later than two (2) working days after the notice is delivered. The suspension of the **RECIPIENT'S** obligations provided for in this paragraph shall be the **RECIPIENT'S** sole remedy for the delays set forth herein.

5. REPAYMENT

- 5.1 Notwithstanding anything in this Agreement to the contrary, **COUNTY** has an absolute right to recoup Grant Funds. **COUNTY** may refuse to reimburse **RECIPIENT** for any cost if **COUNTY** determines, in its sole discretion, that such cost was not incurred in compliance with the terms of this Agreement. **COUNTY** may demand return of the Grant Funds if **COUNTY** terminates this Agreement.
- 5.2 In the event the **RECIPIENT** is obligated to repay the **COUNTY** under any paragraph of this Agreement, the **RECIPIENT** shall repay the **COUNTY** within a reasonable time, as determined by the **COUNTY** in its sole discretion.
- 5.3 The **RECIPIENT** shall pay attorney's fees and costs incurred by the **COUNTY**, including appeals, as a result of the **RECIPIENT'S** failure to repay the **COUNTY** as required by this Agreement.
- 5.4 This Repayment Paragraph, including all subparagraphs, shall survive the expiration or termination of this Agreement.

6. PROJECT RECORDS

The **RECIPIENT** shall maintain accurate records of all expenditures, and **RECIPIENT** shall make records related to this Agreement available at all reasonable time for inspection, review or audit by the **COUNTY**.

Records shall be kept for a period of at least three (3) years following the end of the funding period. Each party shall comply with Chapter 119, F.S., the Public Records Act, including allowing public access to the Project documents and materials made or received by either party.

Should either party assert any exemption to the requirements of Chapter 119, F.S., and the burden of establishing such exemption, by way of injunctive or other relief as provided by law, shall be upon the asserting party. This paragraph shall survive the expiration or termination of this Agreement.

7. REPORTS

7.1 **RECIPIENT** shall provide quarterly status updates to the **COUNTY** describing the progress of the Project, adherence to the Project Schedule and any developments affecting the Project. The **RECIPIENT** shall promptly advise the **COUNTY** of issues that arise that may impact the successful and timely completion of the Project. Quarterly reports shall be submitted to the **COUNTY'S** Manager, Visitor and Convention Bureau no later than forty-five (45) days following the completion of the quarterly reporting period.

7.2 **RECIPIENT** will submit quarterly expenditure reports to the **COUNTY**. Sufficient supporting invoices and documentation to support pre-audit and post-audit review must accompany expenditure reports. The Clerk of the Circuit Court, who may seek additional information, as the circumstances require, shall determine the sufficiency of said documentation.

7.3 The **RECIPIENT** shall provide the reports and documents referenced in this paragraph at no cost to the **COUNTY**.

8. LIABILITY AND INDEMNIFICATION

8.1 To the extent permitted by Florida law, the **RECIPIENT** assumes all risks relating to the Project and agrees to be solely liable for, and to indemnify and hold the **COUNTY** harmless from all claims, loss, damage and other expenses, including attorney's fees and costs and attorneys' fees and cost on appeal, arising from the project.

- 8.2 The **COUNTY** shall not be liable to any person, firm or corporation that contracts with the **RECIPIENT** to provide goods and services associated with the project conducted with the funding. Nor shall the **COUNTY** be liable to any person, firm or corporation for claims against the **RECIPIENT** or debts incurred by the **RECIPIENT**.
- 8.3 This Liability and Indemnification paragraph, including all subparagraphs, shall not be construed as a waiver of the **RECIPIENT'S** sovereign immunity or an extension of the **RECIPIENT'S** liability beyond the limits established in Section 768.28, F.S., nor be construed as consent by the **RECIPIENT** to be sued by third parties in any manner arising out of this Agreement.
- 8.4 Nothing in this Agreement shall be interpreted as a waiver of the **COUNTY'S** sovereign immunity or an extension of its liability beyond the limits established in Section 768.28, F.S., nor be construed as consent by the **COUNTY** to be sued by third parties in any manner arising out of this Agreement. This Liability and Indemnification paragraph, including all subparagraphs, shall survive the expiration or termination of this Agreement

9. TERMINATION

- 9.1 The **COUNTY**, by written notice to **RECIPIENT** may terminate this Agreement immediately and cancel any unpaid disbursement if the **COUNTY** determines, in its sole discretion, that:
- a) **RECIPIENT** used any portion of the grant funds for purposes not included in the terms of this Agreement.
 - b) **RECIPIENT** is not making satisfactory progress toward the completion of the Project or has violated the terms of this Agreement.

Upon receipt of the written notice, **RECIPIENT** shall not provide any further deliverables after receiving the notice of termination. Within 30 days after receiving written notice from the **COUNTY** of such termination, the **RECIPIENT** shall return the funds reimbursed. The **COUNTY** will have no liability to pay the **RECIPIENT** any further sums in relation to this Agreement.

- 9.2 **RECIPIENT** may terminate this Agreement for inability to obtain all permits and local government approvals necessary to complete the Project or inability to complete the Project. To effect termination, **RECIPIENT** shall provide **COUNTY** with written "Notice of Termination". **RECIPIENT** shall refund all grant funds provided under this Agreement to the **COUNTY** for the Project within 30 days of termination.

10. LAW COMPLIANCE

The **RECIPIENT** shall comply with all applicable federal, state and local laws, rules, regulations and guidelines related to performance under this Agreement.

11. ASSIGNMENT

Except as otherwise provided in this Agreement, no party may assign any of its rights or delegate any of its obligations under this Agreement, including any operation or maintenance duties related to the Project, without the prior written consent of the other party. Any attempted assignment in violation of this paragraph is void. This paragraph shall survive the expiration or termination of this Agreement.

12. GOVERNING LAW

The laws of the State of Florida shall govern the construction, enforcement, and interpretation of this Agreement, regardless of and without reference to whether any applicable conflicts of laws principles may point to the application of the laws of another jurisdiction. The Parties expressly consent to exclusive jurisdiction and venue in any state court located in Lee County, Florida, and waive any defense of forum non conveniens, lack of personal jurisdiction, or like defense.

13. SEVERABILITY

If any paragraph or paragraphs of this Agreement shall be held to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining paragraphs shall not in any way be effected or impaired thereby. Notwithstanding the above, if a paragraph or paragraphs of this Agreement setting forth the requirements or expectations of the benefit of promoting tourism resulting from the Project is held to be invalid, illegal or unenforceable during the term of this Agreement, this Agreement shall terminate in accordance with the Repayment paragraph. This paragraph shall survive the expiration or termination of this Agreement.

14. COUNTERPARTS

The parties may execute this Agreement, and any amendments related to this Agreement, each of which constitutes an original, and all of which,

collectively, constitute only one Agreement. The signatures of all of the parties need not appear on the same counterpart.

15. MISCELLANEOUS

- 15.1 The **RECIPIENT** covenants to the **COUNTY** that it has lawful authority to enter into this Agreement and has authorized the execution of this agreement by its authorized representative.
- 15.2 This Agreement embodies the entire agreement of the Parties with respect to the subject matter hereof. There are no provisions, terms, conditions, or obligations other than those contained in this Agreement; and this Agreement supersedes all previous communications, representations, or agreements, either verbal or written, between the Parties. If a court of competent jurisdiction voids or holds unenforceable any provision of this Agreement, then that provision shall be enforced only to the extent that it is not in violation of law or is not otherwise unenforceable, and all other provisions shall remain in full force and effect.
- 15.3 This Agreement may not be modified, amended or extended orally. This Agreement may only be amended by written agreement executed by the governing bodies of both parties.

16. CONTACT INFORMATION

COUNTY

Lee County Board of County Commissioners
Director, Visitor and Convention Bureau
2201 Second Street, Suite 600
Fort Myers, FL 33901

RECIPIENT

*TOWN OF FORT MYERS BEACH, Town Manager
2525 Estero Blvd
Fort Myers Beach, FL 33931*

The Parties' respective contact and notice information is set forth in the immediately preceding paragraph, and may be subject to change at the Parties' discretion. If the contact information changes, the Party making such change will notify the other Party in writing. When the term "written notice" is used to specify a notice requirement herein, said notice shall be deemed to have been given (i) when personally delivered; (ii) when transmitted by email, if the sender on the same day sends a confirming copy of such notice by certified or registered mail; (iii) the next business day following the day on which the same has been delivered prepaid to a recognized overnight delivery service; or (iv) the third business day

following the day on which the same is sent by certified or registered mail, postage prepaid, with return receipt.

IN WITNESS WHEREOF, and in consideration of the mutual covenants set forth above, the Parties, through their duly-authorized representatives, sign this Agreement and represent and warrant that they understand the Agreement as of this 7th day of December, 20 21.

ATTEST:
LINDA DOGGETT, CLERK

BY: 
DEPUTY CLERK



BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: 

Commissioner Cecil L. Pendergrass, Chairman
Lee County Board of County Commissioners
District 2

APPROVED AS TO FORM FOR THE
RELIANCE OF LEE COUNTY ONLY

BY: 
OFFICE OF THE COUNTY ATTORNEY

ATTEST:
TOWN CLERK

BY: 

TOWN OF FORT MYERS BEACH, FLORIDA

BY: 

APPROVED AS TO FORM

BY: 
TOWN ATTORNEY'S OFFICE

1. **Requested Motion:**

Meeting Date: May 16, 2022

Approve Supplemental Task Authorization #14, in the not to exceed amount of \$109,886 for additional work on the Bay Oaks Redevelopment project and Community Pool and authorize the Town Manager to execute the Supplemental Task Authorization with DRMP Inc.

Why the action is necessary:

As required for expenditures exceeding \$25,000 per Town Purchasing Policy. This item will impact the loan.

What the action accomplishes:

Provides a scope and authorization for DRMP inc. on additional services for 100% design for the Bay Oaks Redevelopment Project and the Community Pool.

2. **Agenda:**

ADMINISTRATIVE AGENDA

3. **Requirement/Purpose:**

Other

4. **Submitter of Information:**

Chelsea O'Riley, Public Works
Director

5. **Background:**

The Town is working towards completion of final design, permitting, and bidding to improve the Bay Oaks Recreational Campus. This STA will provide funding for additional services needed:

- Additional surveying for South Florida Water Management District and Phase II archeological assessments
- Community Pool due to failing equipment
- Front parcel improvements for main entrance
- Final bidding and construction preparations

Attachments:

1. STA 14 Bay Oaks Additional Services and Pool Final

Financial Impact:

Only \$12,000 is guaranteed. The balance of \$97,886.00 is on an as-needed basis funded through the loan.

6. **Alternative Action**

Do not approve.

7. **Management Recommendations:**

Approve and authorize the Town Manager to execute the Supplemental Task Authorization with DRMP Inc.

8. **Recommended Approval:**

Jason Freeman, Public Works Manager
Alison Giesen, Director of Cultural, Parks & Recreation
John R Herin Jr, Town Attorney

Created/Initiated - 5/11/2022
Approved - 5/11/2022
Approved - 5/11/2022

Amy Baker, Town Clerk
Roger Hernstadt, Town Manager

Approved - 5/11/2022
Final Approval - 5/11/2022

**TOWN OF FORT MYERS BEACH SERVICE AGREEMENT
SUPPLEMENTAL TASK AUTHORIZATION**

X Supplemental Task Authorization

NO.: STA # 14

CONTRACT/PROJECT NAME: Bay Oaks – Additional Services

CONSULTANT: CONSULTANTS NAME

PROJECT NO.: _____

SOLICIT NO.: RFQ-19-06-PQ

CONTRACT NO.: RFQ-19-06-PW

REQUESTED BY: Jason Freeman, Public Works; Alison Giesen, Culture, Parks & Recreation

DATE OF REQUEST: 05/10/2022 PURCHASE ORDER NUMBER: _____

Upon the completion and execution of this Supplemental Task Authorization by both parties, the Consultant/Provider is authorized to and shall proceed with the following:

EXHIBIT "A" SCOPE OF PROFESSIONAL SERVICE: DATED: 05/10/2022

EXHIBIT "B" COMPENSATION & METHOD OF PAYMENT: DATED: 05/10/2022

EXHIBIT "C" TIME AND SCHEDULE OF PERFORMANCE: DATED: 05/10/2022

EXHIBIT "D" CONSULTANT'S/PROVIDER'S ASSOCIATED
SUB-CONSULTANT(S)/SUB-CONTRACTORS: DATED: 05/10/2022

It is understood and agreed that the acceptance of this modification by the
CONSULTANT/PROVIDER constitutes an accord and satisfaction.

RECOMMENDED:

By: _____ Date _____ By: _____ Date _____
Department Director Contracts Manager

By: _____ Date _____
Finance Department

ACCEPTED: DRMP, Inc.

By: _____ Date _____
Consultant/Provider

TOWN APPROVAL:

By: _____ Date _____ By: _____ Date _____
Town Manager Town Attorney

Date to Proceed: _____ Cost of STA: \$ _____

Completion Due Date: _____

EXHIBIT A

SCOPE OF PROFESSIONAL SERVICES
Bay Oaks Additional Services – May 2022

Overview

STA NO. 14: Bay Oaks – Additional Services – May 2022

The following services will be provided by DRMP, Inc:

Project Understanding

As an amendment to our existing engineering services agreement, the Town of Fort Myers Beach (Town) has requested DRMP (the Consultant) to provide final design, permitting, and bidding assistance to improve the Bay Oaks Recreational Campus. Over the course of the Project, the Town directed the Consultant to perform work outside of the original scope, as indicated in more detail below. Construction Administration services are to be covered under a future STA.

Project Assumptions

- This Agreement includes performing all services described herein on a one-time basis, unless otherwise noted. Rework due to Town directed changes is considered Supplemental Services. Fees for individual tasks may be moved from tasks with surplus budget to those with a deficit;
- Supplemental Services outside of this scope, and when requested by the Town, may require additional compensation;
- Design development shall be prepared utilizing conceptual plans previously prepared and approved by the Town. Town will provide survey for Consultant's use. Consultant will review upon receiving survey information and make recommendations on additional survey, if required;
- Opinions of probable construction costs provided by the Consultant are based on the Consultant's familiarity with the industry and are provided only to assist the Town's budget planning. Such opinions shall not be construed to provide a guarantee or warranty of the actual construction costs at the time construction bids are solicited or construction contracts negotiated;
- Town's decisions, approvals, reviews, and responses shall be communicated to the Consultant in a timely manner so as not to delay the performance of the Consultant services. Comments, if from a committee, multiple interested entities, must be a consolidation of all comments in order to provide clear direction to the Consultant and to avoid delays;
- Consultant will provide Construction Administration services to the Town during the construction portion of the project. The fees for this task are not included in this scope and will be negotiated during the construction phase of the project.

Scope of Work

Task 1: Additional Services

Task 1.1: Project Split and Extra Work (To be completed on an as-needed basis)

At the direction of the Town, Consultant performed the following extra work:

- Split the project into smaller projects to accelerate the construction of the project.
 - Duplication of efforts in permitting, estimates, bidding, contractor selection.
 - Preparation of construction schedules, and construction administration.
- Additional sidewalk design along School St was designed, permitted, and inspected during construction.
- Additional design and coordination efforts at school including court sports, sidewalk, covered parking, shade sail and playground selection.
- Assistance with grant applications and solar programs.
- Contractor scope and price review for splitting out ball field, parking areas, lighting, signage, and other attributes.
- Redesign of site plan due to final wetlands delineation.
- Redesign of driveways, parking lot, and drive aisle at Town's request.
- South Florida Water Management District triggered significant extra work effort by adding the following permitting requirements (outside of Consultants control):
 - Final wetlands delineation and site plan redesign
 - Attenuation of stormwater outfall into tidal body of water
 - Additional nutrient treatment
 - Phase 2 Cultural Resource Assessment (field work, analysis, and report)
- Additional meetings and coordination for all of the above

Task 1.2: Pool Equipment Improvements

At the direction of the Town, Consultant performed site visits and assessments of the failing equipment at the pool. Consultant coordinated with commercial pool equipment designers to develop a scope. Consultant will hire Sub-consultant to perform complete assessment and develop a scope and fee for final design.

Total Cost (of Job): NTE \$109,886.00

EXHIBIT BDate: 05/10/2022COMPENSATION AND METHOD OF PAYMENT FORBay Oaks Additional Services – May 2022Section 1. BASIC SERVICES/TASK(S)

The TOWN shall compensate the CONSULTANT for providing and performing the Task(s) set forth and enumerated in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "A". In accordance with Agreement Article 5.02(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
1.1	BORC Additional Work	\$97,886.00	NTE Billed Monthly on an as needed basis	WIPP
1.2	Pool Improvements	\$12,000	LS	
TOTAL		NTE \$109,886.00		

(Unless list is continued on next page)

Section 2. ADDITIONAL SERVICES

The TOWN shall compensate the CONSULTANT for such ADDITIONAL SERVICES as are requested and authorized in writing for such amounts or on such a basis as may be mutually agreed to in writing by both parties to this Agreement. The basis and/or amount of compensation to be paid the CONSULTANT for ADDITIONAL SERVICES requested and authorized in writing by the TOWN shall be as set forth in Article 4 of this Agreement.

Should it be mutually agreed to base compensation for ADDITIONAL SERVICES on an hourly rate charge basis for each involved professional and technical employee's wage rate classification, the applicable hourly rates to be charged are as set forth and contained in ATTACHMENT NO. 1 hereto dated 05/10/2022, entitled "CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE".

Section 3. REIMBURSABLE EXPENSES AND COSTS

When the CONSULTANT'S compensation and method of payment is based on an hourly rate for professional and/or technical personnel, the CONSULTANT shall, in addition to such hourly rates as are set forth in Attachment No. 1 hereto, be entitled to reimbursement of out-of-pocket, non-personnel expenses and costs as set forth in ATTACHMENT NO. 2 hereto 05/10/2022 entitled "NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: 05/10/2022

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE FOR Bay Oaks – Additional
Services

Consultant or Sub-consultant Name: DRMP, Inc.
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Standard Rate Schedule As Included with Proposal Per RFQ-19-06-PQ			

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative & overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 2 TO EXHIBIT B

Date: 05/10/2022

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS FOR JOB NAME

CONSULTANT OR SUB-CONSULTANT NAME: DRMP, Inc.
(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Items as directed by the Town, backup provided.	
Per RFQ-19-06-PQ	
NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the Town, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

EXHIBIT C

Date: 05/10/2022

TIME AND SCHEDULE OF PERFORMANCE FOR

Bay Oaks – Additional Services – MAY 2022

This EXHIBIT “C” establishes times of completion for the various phases and tasks required to provide and perform the services and work set forth in EXHIBIT "A" of this Agreement. The times and schedule of performance set forth hereinafter is established pursuant to this Agreement.

Phase and/or Task Reference As Enumerated in EXHIBIT “A”	NAME OR TITLE Of Phase and/Task	Number Of Calendar Days For Completion Of Each Phase And/or Task	Cumulative Number Of Calendar Days For Completion From Date of Notice to Proceed
#1.1	Additional Services	180 days	180 days
#1.2	Pool Improvements	180 days	180 days

EXHIBIT D

Date: 05/10/2022

CONSULTANT'S ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S) FOR

Bay Oaks – Additional Services – MAY 2022

CONSULTANT has identified the following Sub-Consultant(s) and/or Subcontractor(s) which may be engaged to assist the CONSULTANT in providing and performing services and work on this Project:

(If none, enter the word "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm				Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
					Yes	No
Landscape Architecture	Ensite, Inc.					
Archeologist	Archeological and Historical Conservancy, Inc.					
Commercial Pool Design	Martin Aquatic Design & Engineering					