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US. Army Corps of Engineers
Attention: Carolyn Farmer, Project Manager
Jacksonville Regulatory Division
South Permits Branch
Palm Beach Gardens Permit Section
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, FL 33410

RE: SAJ-2004-12518-CHF (St John Marina)
Transmitted VIA E-MAIL 04-25-2020

Dear Ms. Farmer,

Please accept this letter, the Responses to the Completeness Summary and the supporting Exhibits as The Summer's End Group, LLC's (Applicant) response to that certain request for additional information regarding the above referenced application dated March 26, 2020, and timely filed in accordance with the extension of time, granted at our request, until May 25, 2020. Thank you for the opportunity to submit this information.

Sincerely,

John H Sprague

CC Chalieese Summers, csummers@summersendvi.com
katherineenglish@paveselaw.com

Completeness Summary/ Request for Additional Information

Description and Narratives:

1. Please provide a table that compares all previously proposed activities with currently proposed activities.
 - This table at a minimum shall include all past proposed activities which are no longer part of the current proposal; it should include all proposed works, including but not limited to upland activities, docking structures, piles, mooring slips, mooring buoys, navigation channel, riprap, removal of vessels, coral/ seagrass relocation or transplantation, mangrove impacts, stormwater management activities, fill activities, wave attenuator, mitigation efforts, etc.
 - Please include all permanent, temporary, and/or secondary impacts with the quantities of the impact and type.

Response:

Exhibit 1 RAI Table

Please see the RAI Table, Exhibit 1 for the information requested in this item. The table compares all previously proposed activities with the currently proposed activities. The table also details the significant avoidance and minimization efforts made by Applicant following the USACE's Engineering with Nature® concepts that resulted from discussions and numerous interagency meetings and phone conferences with the Corps and multiple federal agencies from 2009 - 2020

The project impacts are also delineated in the table as requested. Minor changes in the project result in reductions of project impacts and inclusion of a boardwalk which is a community benefit improving pedestrian safety and the public's ability to interact with the marine environment, to better understand and appreciate its importance and value. Through cooperative, communicative, and compliant efforts, Applicant agreed to these minor modifications which resulted from continued discussions and input from consulting agencies and the Corps reviewer as well as the amount of time that it has taken for the federal process from 2009 - 2020.

These efforts made by Applicant demonstrate Applicant's desire to further avoid, minimize, and mitigate for the project impacts. Additionally, the application for this project has been assigned and re-assigned to four different Corps reviewers in the last twelve months. Each re-assignment has created months of delays in processing this application. Adding to the significant amount of time that this application has been pending approval, are the unavoidable delays resulting from the 2017 two category 5 hurricanes and now the COVID-19 pandemic. Applicant has endured extreme pressure and significant damages due to the delays of change in Corp personnel and emergency events none of which have been the fault of Applicant.

- Please note that if the project varies from the previous Corps issued Public Notice dated July 9, 2015, a new public notice may be required.

Response:

Exhibit 25 Department Letter to USFWS August 10, 2018

Exhibit 26 USFWS Letter to Department August 23, 2018

Applicant submitted an application for this project that was received by the Corps on April 16, 2014, and for which a Public Notice was issued on January 7, 2015. Public comments were received by the Corps and Applicant was required to respond to the comments. Additionally, and after this process was completed and upon U.S. Fish and Wildlife Service withdrawing from their Federal lead agency role for this project, the Corps required Applicant to re-submit an entirely new application.

Applicant re-submitted a permit application on June 10, 2015. The Corps re-noticed the project on July 9, 2015 and ran the notice for multiple and extended terms allowing public comments to be received. Applicant again reviewed and responded to all public comments to the satisfaction of the Corps reviewer. Applicant feels that it would be unreasonable for a third notice to be considered for this project due to only minor changes resulting in project reductions, mitigation efforts, and community benefit at a significant cost to Applicant.

This project has been noticed twice before. Any modifications or changes to the current proposed project that have occurred since the 2015 public notice are changes resulting in project reductions to avoid impacts or an increase in proposed mitigation efforts by Applicant. These common changes are expected during the federal permitting process as any Applicant works with the Corps and consulting agencies to protect and preserve the environment which may include additional mitigation efforts, evolving through continued discussions, as well as reductions in project impacts which you will see detailed on the avoidance and minimization section of the corresponding table.

In an effort to reduce project impacts, in 2014, Applicant eliminated proposed repairs to rip rap near main walkway of the docks. In 2016, Applicant eliminated two driveway culverts and fill activities that were previously proposed works in the ghut located between parcel 10-41 Rem and 13b. As a result as of these changes, the Corps reviewer notified Applicant that the application would continue to be reviewed under Section 10 of the Rivers and Harbor Act of 1899, but that the project was no longer subject to review under Section 404 of the Clean Water Act due to the elimination of the fill and rip rap work. Further, the reviewer and his supervisor informed Applicant that the letter of objection filed by EPA relative to the Section 404 activities was no longer an issue in the application since those activities had been eliminated.

Between 2016 and 2018, the Corps reviewer worked with the applicant and was informed of all reductions and minor modifications to the current proposed project which include all proposed work and mitigation activities. No additional public notice was suggested as a result of those changes. No additional changes to the proposed project have occurred since this time. Accordingly, Applicant believes the project has been sufficiently noticed to allow the concerns of the public to be addressed. The reduction in proposed project impacts and modification to address mitigation requirements are not sufficient to warrant additional public notice.

In 2018, the reviewer determined the application to be complete and initiated consultation with the U.S. Fish and Wildlife Service and National Marine Fishers PRD and HCD divisions in accordance with statutory requirements.

In a letter dated August 10, 2018, the Corps reviewer sent a letter to Mr. Edwin Muniz, Field Supervisor with USFWS detailing the review process and specific progress and extensive efforts that have been made by the Applicant and the Corps reviewer to complete the evaluation of the proposed project:

*"On July 9, 2015, the Corps issued a Public Notice (PN) regarding the referenced permit application. Via e-mail dated August 4, 2015, the U.S. Fish and Wildlife Service (USFWS), provided comments in response to the PN. On October 22, 2015, we asked the applicant to address the comments provided by USFWS, as well as those provided by other Federal agencies and the general public in response to the PN. Therein, we also asked the applicant to provide additional information necessary for the Corps to complete the required regulatory evaluation, processing, and interagency coordination of the permit application. **Since the issuance of the PN, the Corps has been engaged in extensive coordination with the applicant to obtain the relevant information necessary to complete the evaluation of the proposed marina.** As part of this coordination, the Corps issued two additional requests for information on October 26, 2017 and January 26, 2018. To address the Corps' requests for information, the applicant presented several studies and analysis, and submitted extensive information packages on August 15, 2017, December 18, 2017, February 27, 2018, March 15, 2018, and June 21, 2018."*

Additionally, the letter provided the dates and description of actions as follows:

1. *Enclosure 1 - DA permit application, received on June 10, 2015*
2. *Enclosure 2 - Environmental Assessment Report (EAR) - Upland, received on June 10, 2015*
3. *Enclosure 3 - Environmental Assessment Report (EAR) - Marina, received on June 10, 2015*
4. *Enclosure 4 - DA Public Notice, issued on July 9, 2015*
5. *Enclosure 5 - Corps request for additional information dated October 22, 2015*
6. *Enclosure 6 - SEG additional information submittal dated August 15, 2017*
7. *Enclosure 7 - Corps request for additional information dated October 26, 2017*

8. *Enclosure 8 - SEG additional information submittal dated December 18, 2017*
9. *Enclosure 9 - Corps request for additional information dated January 26, 2018*
10. *Enclosure 10 - SEG additional information submittal dated February 27, 2018*
11. *Enclosure 11 - SEG additional information submittal dated March 15, 2018*
12. *Enclosure 12 - SEG additional information submittal dated August 21, 2018*
13. *Enclosure 13 - Project Drawings, submitted on August 21, 2018*
14. *Enclosure 14 - Coral Bay Community Council Comments, August 20, 2015*
15. *Enclosure 15 - Coral Bay Community Council and Save Coral Bay Comments, May 4, 2018*

"Through the above listed submittals the applicant has documented the steps that have been taken and the measures that would be implemented to avoid and minimize the potential impacts of the proposed project on the aquatic environment, including federally protected species and habitats under the purview of USFWS."

"After evaluating the proposed project and the information submitted by the applicant, the Corps has determined that the proposed project would have no effect on nesting individuals of the federally listed threatened Green (Chelonia mydas) and Loggerhead (Caretta caretta) sea turtles, and the federally listed endangered Hawksbill (Eretmochelys imbricata) and Leatherback (Dermochelys coriacea) sea turtles. There are no suitable nesting beaches for the above listed sea turtle species in the defined action area for the proposed project. In addition, the Corps has determined that the proposed project may affect but is not likely to adversely affect the federally listed threatened West Indian Manatee (Trichechus manatus). We hereby request your concurrence with this determination pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1536). According to guidance provided in the Endangered Species Consultation Handbook dated March 1998, the Corps requests that you please provide a response within 30 days of receipt of this request."

The Department received a timely response from Mr. Muniz from USFWS on August 23, 2018 concluding that the USFWS concurred with the above determination from the Department.

"Based on the information provided, we concur with the Corps determination of not likely to adversely affect, therefore, no further consultation is required."

As consultation with USFWS is complete, the only remaining consultation process is with NMFS, both PRD and HCD. Applicant has had a number of conferences with staff from PRD and HCD and the Corps to assure coordinated, collaborative, and communicative efforts to develop the appropriate scope for field work, modeling and analysis to address the agencies' remaining concerns effectively. Applicant is providing sufficient scientific data and analysis to address the Divisions' concerns regarding potential impacts of the proposed project and to allow staff to evaluate appropriate compensatory mitigation for impacts identified in the analysis. The St. John Marina Numerical Modeling Analysis, Sonar, and Sea Diversified Letter

addressing the questions raised in this RAI specifically provides the data and analysis showing that the proposed project will not impact corals resources. The Applicant requests that the project be re-evaluated based on the newly submitted information showing that there are no anticipated impacts to ESA-listed corals and non-listed corals as shown in the data and analysis provided.

Additionally, the previous Corps reviewer notified Applicant that a draft Record of Decision (ROD) had been prepared for the permit awaiting only the completion of consultation with NMFS. Applicant has requested a copy of the draft ROD from the subsequent reviewer Kelley Egan, but has not received it.

2. Please clarify the parcels where the proposed works are to take place and provide a table to include what portion of the proposed works are to occur on each individual parcel and identify the ownership of the parcels.
 - It is unclear from the provided information if upland activities are still to occur as there are various documents that still reference such.
 - If activities located on the uplands are no longer part of this proposed project, all documents (including drawings) shall be revised to exclude the upland activities and be provided for review.

Response:

Exhibit 2: Upland Proposed Works and ownership

Exhibit 3: Upland Proposed Works by Parcel

Exhibit 4: Final Civil Drawings

Please find attached the upland proposed works in detail. All documents and civil drawings are up to date and reflect the current proposed upland works.

Upland Proposed Works and ownership, Exhibit 2 delineates the ownership of each parcel.

Upland Proposed Works by Parcel, Exhibit 3 is the requested table of proposed works detailed per individual parcel.

Final Civil Drawings, Exhibit 4 is the full set of civil drawings detailing the proposed upland works. All of which are up to date.

3. Thank you for the submitted circulation study which was conducted to assess the action area (question 1 in your 12/13/19 response), however it appears that the calibration and validation of the model study was not provided.
 - Please provide this information to continue review of the study.

Response:

Exhibit 5 Model Study-Calibration Validation

Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433

At the request of the Corps, Sea Diversified has provided the CMS model calibration verification as requested. The results indicated good calibration/validation.

- Also, please note that the model did not take into account the design of a navigational channel nor did it account for a buffer that vessels would need from existing resources so as not to impact those resources with sedimentation.

Response:

Exhibit 7 Channel Bathymetry

Exhibit 8 St. John Marina Numerical Modeling Analysis

Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433

Applicant is not proposing to create or design a new channel. There is a naturally wide and deep historical channel for Coral Harbor that already exists and has been used for centuries. The historical channel and the designated navigation channel within it that will be used for the proposed project is illustrated on Exhibit 5: Channel Bathymetry. The navigation channel for ingress and egress for vessels is clearly depicted as a 150' wide identified area within the historical channel (the same width as most of the USACE ICW channel on the east coast of Florida but deeper than the 10 & 12' design depths congress authorized).

Due to the nature and width of Coral Harbor's entrance, a clear buffer area exists for resources that are located more than 500' away on either side of the navigation channel. The clearance distances from the designated navigation channel from the channel to Harbor Point is 548' and to Penn Point is 515'. In addition to the buffer distance between the identified navigation channel and identified resources, the illustration clearly details the bathymetry of the naturally deep historical channel ranging from 20' – 28' reducing the possibility of turbidity impacting these resources since the water is deep enough to reduce the likelihood of suspension of sediments into the water column. Further, modeling generated in response to previous inquiries demonstrates that any suspended sediments would remain in deeper water and far beyond the two reef areas.

Modeling data and the nature of the channel support assurances that the proposed project operations will not have sedimentation impacts to these resources. Please see the response from Sea Diversified in the Sea Diversified Letter to Response RAAI SER-2018-19433 document and the full St. John Marina Numerical Modeling Analysis document to detail the complete modeling analysis.

- Please provide an overlay of the resources and the in-situ measurements

from the study.

Response:

[Exhibit 7 Channel Bathymetry](#)

[Exhibit 8 St. John Marina Numerical Modeling Analysis](#)

[Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433](#)

The bathymetric exhibit described above depicts the location of resources (Penn Point and Harbor Point reefs) relative to the proposed marina footprint and navigation channel. The St. John Marina Numerical Modeling Analysis (Circulation Study) also identifies the locations of these resources. Within the Numerical Modeling Report are data from the in situ measurements collected during the study and includes a summary of ADCP and turbidity data along with sediment grain size information based on sediment samples collected within the project area.

4. Please provide a drawing showing the areas of all impacts, permanent, temporary, and/or secondary, for all proposed activities (this should match the table provided in question #1 of this request) and should be labeled as either a permanent, temporary, and/or secondary effect; including but not limited to the marina, the docking structures, the navigation channel, the mooring buoy area, the removal of vessels, the installation of piles, any proposed dredge or fill activities, any potential effects from mitigation efforts, wave attenuator, storm water management activities, shading in mooring slips, etc. Please also include drawings showing the exact locations of all benthic aquatic resources (please provide a legend with the species type and quantity on the drawings).

Response:

[Exhibit 9 Potential Project Impacts Graphic](#)

Please see the [Impact Graphics](#) which detail the potential impacts of this project during operation and construction. The impacts shown in this graphic are also included in the RAI Table that addresses the RAI item #1.

5. In the December 13, 2019 submittal, a comprehensive benthic aquatic resource survey was not provided.
 - Please provide a benthic aquatic resource survey, which has been completed within one year of the date of this request. Please conduct a survey to identify the essential features of designated critical habitat for elkhorn and staghorn corals (i.e., substrate of suitable quality and availability [i.e., consolidated hardbottom or dead coral skeletons free from fleshy macroalgae or turf algae

and sediment cover]; such substrate supports successful larval settlement, recruitment, and reattachment and recruitment of asexual fragments). Please also quantify the amount (in square feet or acres) of designated critical habitat (where the essential feature is present) in and around the action area.

Response:

Exhibit 10 Benthic Habitat Map

Exhibit 10-A 2014-2018 Benthic Aquatic Resource Comparison

Exhibit 11 Critical Habitat

The proposed project has no direct or indirect impacts to ESA listed corals. The footprint of the marina docks, slips, and maneuvering area avoids impacts to all corals.

Please see attached Exhibit 10 Benthic Habitat Map to review the comprehensive benthic aquatic resource survey that was completed in 2017 and again in 2018.

Benthic surveys were conducted by Bioimpact, Inc., a USVI based marine biology company, in 2014, 2015, 2016, May and June 2017, and 2018. Despite the passage of two Category 5 hurricanes in 2017, there were only slight changes in the benthic environment. The notable changes were due to recovery of areas that were impacted, both by the storm and previous anchoring and an increase of *Halophila stipulacea*, thus no deterioration of marine resources were observed.

The results from each benthic survey indicated no net change in the amount of possible impacts from the proposed project. A conference call was held in April 2020 with the then assigned Corps reviewer Kelly Egan, Applicant and consultants to discuss the items in this RAI.

Applicant expressed a concern regarding the significant amount of benthic studies that have been required by the Corps all having no net change to impacts, even after two of the most severe storms in history impacting the project site.

Discussions were held in consideration of not requiring another benthic survey to be conducted at this time to meet the requirement for a benthic survey within 12 months of the permit decision since all of the previous studies resulted in the same net impact and showed that the harbor resources were relatively stable. The consistency of the previous benthic surveys support accepting the data that has been generated rather than requiring yet another benthic study at the expense of Applicant without any reasonable expectation that conditions are changing.

The discussion on this topic resulted with the Corps reviewer requesting Applicant to supply the existing benthic information for review and formally requesting relief

from this requirement.

Reference:

Exhibit 9 Potential Project Impacts Graphic

Exhibit 12 Action Area

Exhibit 11 Critical Habitat

All benthic results indicate that there is no presence within the project footprint or project action area of essential features of designated critical habitat for elkhorn and staghorn corals (i.e., substrate of suitable quality and availability [i.e., consolidated hardbottom or dead coral skeletons free from fleshy macroalgae or turf algae and sediment cover]; such substrate supports successful larval settlement, recruitment, and reattachment and recruitment of asexual fragments).

- The survey at a minimum shall include a detailed methodology developed in concert with NMFS in order to ensure it is capable of detecting and identifying any ESA-listed coral species that may be present and essential features of designated critical habitat, any other species of corals not listed that may be present and coral hardbottom, any native and non- native seagrasses that may be present, any sponges or octocorals, etc.

Response:

Exhibit 10 Benthic Habitat Map

Exhibit 13 2020 Compensatory Mitigation Plan

Exhibit 11 Critical Habitat

Bioimpact, Inc. has completed surveys with input received from NMFS during interagency meetings which began for this applicant in 2009. Benthic studies that have been completed have received input from the Corps and NMFS.

Amy Dempsey, President of Bioimpact, dove the Harbor Point area where the ESA-listed species are located with a representative from NMFS to locate and identify critical habitat and essential features. A record of those resources should be on file with NMFS.

- Please note that the request is for all areas that may be impacted directly or indirectly by the proposed project. This includes at a minimum the proposed navigation channel, both Pen Point and Harbor Point known coral areas, the proposed marina and all mooring areas, any proposed mooring buoy areas, any area where stormwater activities are to take place, etc.

Response:

Exhibit 7 Channel Bathymetry

Exhibit 14 SS-1R Sonar

Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433
Exhibit 8 St. John Marina Numerical Modeling Analysis
Exhibit 15 Harbor Management Vessel Docking and Mooring Plan

Applicant has provided benthic surveys for all areas having potential impacts, either directly or indirectly, resulting from the proposed project. In 2019, Applicant provided the St. John Marina Numerical Modeling Analysis – a detailed circulation study providing data and analysis that show that the proposed project will not adversely impact, directly or indirectly, resources on Penn Point or Harbor Point Reefs.

Please find additional sonar data provided as Exhibit 14 SS-1R Sonar which provides definitive and clear data that results in no impacts to resources at Penn Point.

Hydrodynamic modeling results specifically concluded that a turbidity plume generated at the marina could travel as far as Penn Reef but only 8% of the time based on specific model input conditions. However, the results indicate that even if the plume reached the area of Penn Point Reef, suspended sediments would be constrained to water depths deeper than the 3-meter contour beyond the location of coral resources causing no impact. Reference attached Exhibit SS-1R. Regarding Harbor Point Reef, results of the study indicate these coral resources are far beyond the projected travel distance of a turbidity plume generated at the marina.

Exhibit 8 St. John Marina Numerical Modeling Analysis provides a comprehensive analysis of modeling efforts requested by NMFS. The analysis ran multiple possibilities and conditions with 100% of the results determining no impacts to resources at Penn Point.

The model indicated a very small possibility (8%) under specific circumstances that sediment could be carried from the marina to the Penn Point area, however 100% of the time the sediment carried was far deeper than the resources. The modeling results indicate that there are no impacts to resources at Penn Point 100% of the time.

Further, Applicant has expanded on the protection of resources at the above noted reef locations by providing the Harbor Management Vessel Docking and Mooring plan which provides operational protections by directing the ingress and egress of all marina related vessels accessing or leaving Coral Harbor.

Additionally, Applicant has gone beyond the analysis, and has also gone above and beyond the necessary permitting requirements as mandated by law and has funded additional benthic surveys outside of the project impact areas along with extensive scientific surveys undertaking complete coverage of both Penn Point Reef and Harbor Point Reef using both side-scan sonar and multi-beam sonar technology. This is the most comprehensive, up to date scientific data on these reefs exceeding the data information of any agency, department or group.

Applicant proposes to use this data in an ongoing effort to monitor and survey those reef areas and the federally protected resources at those areas as part of the long-term mitigation proposal that is further detailed in the 2020 Compensatory Mitigation Plan. Applicant has funded surveys, at the request of the Corps and NMFS, to show that these areas are outside the range of impacts of the proposed project. Based on the information previously provided, it is unreasonable for the Corps to require or request any such additional survey work by the applicant on areas that have been definitively shown to be outside the range of the project's impacts.

6. In the December 13, 2019 submittal response, the applicant does not address impacts to Essential Fish Habitat. The permanent, temporary, and/or secondary impacts to seagrass from the proposed marina remain unclear.
 - Please provide the areas of seagrass impact including, but not limited to, direct and indirect impacts from the installation of pilings, installation of moorings, spudding of vessels, shading from dock structures, shading from vessels, shading from shadow extensions, prop wash, bottom scour, and any additional impacts due to proposed marina construction and operations.

Response:

Exhibit 13 2020 Compensatory Mitigation Plan
Exhibit 9 Potential Project Impacts Graphic
Exhibit 10 Benthic Map
Exhibit 1 RAI Table

Please see the Compensatory Mitigation Plan for the detailed benthic survey which includes the potential project impacts.

The project impacts are further illustrated in the Exhibit 9 Potential Project Impacts Graphic. Potential project impacts are also specified in Exhibit 1 RAI Table

7. In the December 13, 2019, submittal response #2 regarding Essential Fish Habitat and the circulation study, the applicant states that the "overall analysis provides reasonable assurances that the proposed marina will not adversely impact the ESA-listed corals located at the west and east mouth of the harbor, due to both the depth of those resources and the distance from the marina"; however since a comprehensive benthic aquatic resource survey was not conducted, how does the applicant know the depth of the resources or what resources are present?

Response:

Exhibit 11 Critical Habitat
Exhibit 14 SS-1R Sonar
Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433

Exhibit 8 St. John Marina Numerical Modeling Analysis
Exhibit 7 Channel Bathymetry

Applicant initiated a benthic aquatic resource survey in 2014 and 2018. ESA-listed corals and critical habitat were located during both of those studies. Please see Exhibit 11 Critical Habitat. The results of these benthic surveys support the results provided by the comprehensive circulation study and modeling analysis detailed in the St. John Marina Numerical Modeling Analysis.

Additionally, as requested by NMFS, the applicant has provided the detailed St. John Marina Numerical Modeling Analysis which provides detailed analysis supporting Applicant's science-based conclusion that neither Harbor Point nor Penn Point reefs would be affected by potential sediments carried from the marina.

As part of the modeling analysis, Applicant has provided complete coverage of both reef areas using sonar technology, both side-scan sonar and multi-beam sonar. The sonar technology defines the parameters of the reef areas.

Exhibit 14 SS-1R Sonar clearly details that critical habitat and boulders in the Penn Point area are not present shallower than 2 meters. Further, the data proves a 104' – 137' buffer between resources and possible impacts should by the small 8% possible chance of a turbidity plum ever travel near this area. To be clear, modeling results determine that 100% of the time, there was no impact to resources at Penn Point reef.

The Summary of the St. John Marina Numerical Modeling Analysis definitively states:

“The results show that Harbor Point reef would not be affected”

Please see Exhibit 14SS-1R Sonar and Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433 which states:

“...the results indicate that even if the plume reached the area of Penn Point Reef, suspended sediments would be constrained to water depths deeper than the 3-meter contour beyond the location of coral resources causing no impact.”

“...the circulation study indicates coral resources at Penn Point Reef would not be impacted by suspended sediments because data collected from the side scan sonar and multi-beam surveys indicated these resources are in water depths shallower than two (2) meters and beyond the limits of a traveling turbidity plume.”

“Side scan sonar provided accurate horizontal location of reef features with the multi-beam bathymetric survey providing vertical data of each reef. It is noted that diver verification was conducted to confirm the results of the side scan

sonar investigation.”

While Applicant has authorized, funded and undertaken additional and extensive surveys at Penn Point and Harbor Point reefs, and provided the resulting data and analysis, it is unreasonable for the Corps to require Applicant to provide additional information on resources that will not be impacted by the proposed project. The St. John Marina Numerical Modeling Analysis, SS-1R Sonar, Sea Diversified Letter to Response RAI SER-2018-19433, and the Critical Habitat map all indicate that the proposed project will not impact resources at Penn Point or Harbor Point.

The SS-1R sonar definitively details that resources at Penn Point Reef will not be adversely affected by sediments carried from the marina or vessels within the conveyance channel. There is only an 8% possibility of sediments carried from the marina reaching Penn Point area with no possibility for the sediment to impact resources at this location due to the depth of the resources.

Any possible sediment carried from the marina would be below 3m depth and Applicant has shown through its surveys that there are no resources present. Natural resources are located above 2-meter depth.

Applicant funded surveys that undertook complete coverage of Penn Point reef area and Harbor Point reef area using both side-scan sonar and multi-beam sonar technology. The use of the side-scan and multi-beam sonar technology provides comprehensive data and coverage of the reefs including verifying the depth of the reefs and resources.

This technology provides definitive and accurate data regarding the depth of the reef. This is the most comprehensive, updated scientific data on these reefs exceeding the data information of any agency, department or group.

Please provide the following information.

- The applicants' statement does not include the potential effects of placing a navigation channel and the distance vessels would need to remain away from existing resources in order to not impact those resources with turbidity and sedimentation of use of the channel. Please include the navigation channel in the analysis.

Response:

Exhibit 7 Channel Bathymetry

Applicant has provided an alignment of a navigation channel on the bathymetric survey; it is not creating a channel. As detailed in Exhibit 5, Coral Harbor is presently accessed via an existing natural channel that is naturally deep and wide. The access to Coral Harbor is a naturally occurring channel of substantial depth and width which has been used for centuries by boats. Applicant has provided detailed

bathymetry of this historical channel and demonstrated that a buffer of more than 500' exists on either side of the navigation channel delineated for access which is well within the existing natural channel as shown on Exhibit 5. Due to the natural topography and scale of Coral Harbor and the width and depth of the existing channel, resources at both Penn Point and Harbor Point reefs have a significant buffer area more than 500' in distance from the designated navigation channel with which to protect against impacts to resources as detailed in Exhibits 10 and 11.

- The applicants' statement also does not take into account that the sediment deposition from the marina itself was determined to have a deposition effect on at the very least Penn Point corals at a rate of 8% occurrence, which is still considered an impact. Please address this accordingly.

Response:

Exhibit 14 SS-1R Sonar

Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433

Exhibit 8 St. John Marina Numerical Modeling Analysis

Exhibit 15 Harbor Management Vessel Docking and Mooring Plan

This statement above "...marina itself was determined to have a deposition effect on at the very least Penn Point corals..." is not a correct statement, and Applicant disagrees with staff's assertion and would welcome the opportunity to review the scientific data on which their assertion is based. .

The St. John Marina Numerical Modeling Analysis, SS-1R Sonar and the Sea Diversified Letter to Response RAI SER-2018-19433 definitively detail that **resources at Penn Point reef would not be affected by sediments carried from the marina. Modeling results showed 100% of the time there were no impacts to resources at Penn Point and there is only an 8% possibility** of sediments carried from the marina reaching Penn Point reef area, however if this were to occur results indicate that the sediment would not impact the resources. Any possible sediment carried from the marina would be below 3m depth where there are no resources present. Natural resources are located above 2-meter depth. Applicant funded surveys that undertook complete coverage of Penn Point Reef and Harbor Point Reefs using both side-scan sonar and multi-beam sonar technology. The use of the side-scan and multi-beam sonar technology provides comprehensive scientific data and coverage of the reefs including verifying the depth of the reefs and resources.

- Please evaluate impacts to corals not listed under ESA as well in the response.

Response:

[Exhibit 13 2020 Compensatory Mitigation Plan](#)

Please see the Compensatory Mitigation Plan. There are a few large non listed corals near shore of the proposed marina. There were six relatively large coral heads, *Solenastrea bournoni*, found offshore of a gnut discharge point, all of which were found to be healthy as of 2017, however only 4 were found remaining in 2018.

The marina was pulled away from shore to avoid impacts to these corals and the densest seagrass. Additionally, the piles for the main walk were adjusted to avoid impacts to these corals. There are no impacts on non-listed corals.

- Please evaluate impacts to seagrass in the response.

Response:

[Exhibit 13 2020 Compensatory Mitigation Plan](#)
[Exhibit 10 Benthic Habitat Map](#)

- Please provide the reasonable assurances Applicant states are present.

Response:

[Exhibit 13 Compensatory Mitigation Plan](#)
[Exhibit 10 Benthic Habitat Map](#)
[Exhibit 14 SS-1R Sonar](#)
[Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433](#)
[Exhibit 8 St. John Marina Numerical Modeling Analysis](#)
[Exhibit 15 Harbor Management Vessel Docking and Mooring Plan in addition to the narrative set forth above.](#)

8. Applicant states that side sonar and multibeam sonar were conducted on both Harbor Point and Pen Point reefs, and indicates no coral or area of concern below 2 meters depth. Please provide this information as it appears Pen Point reef is the only Figure submitted. Also, please note that the comprehensive benthic aquatic survey of both reef areas will confirm the sonar information.

Response:

[Exhibit 11 Critical Habitat](#)
[Exhibit 14 SS-1R Sonar](#)
[Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433](#)
[Exhibit 8 St. John Marina Numerical Modeling Analysis](#)
[Exhibit 7 Channel Bathymetry](#)

Please see Exhibit 11 Critical Habitat which details the benthic survey of both reef areas that supports the sonar and modeling results.

The use of the side-scan and multi-beam sonar technology provides comprehensive data and coverage of the reefs including verification of the depth of the reefs and resources. This technology provides significantly more accurate and definitive data regarding the depth of the reef than a benthic survey would provide. This is the most comprehensive, updated scientific data on these reefs exceeding the data information of any agency, department or group. It is unreasonable for staff to require or request any such additional survey work by Applicant on these areas outside of the project impacts when Applicant has provided data and analysis showing that these areas are unlikely to be impacted by the proposed project. Further, providing an updated benthic aquatic survey of both reef areas would not provide more accurate information related to the reef depth and size than the sonar surveys that have already been undertaken by Applicant.

9. Thank you for the provided Geophysical Investigation and Bathymetric Survey conducted on July 16, 2019, however it appears that the survey is incomplete as there is a portion of the proposed works area that was not surveyed; a portion of the main access walkway, and the first (B) and second (C) piers off of the access walkway were not included due to obstructions; these areas could potentially contain bedrock due to the existing depths in this area, as shown on the submitted benthic contours.
 - Please provide a complete geophysical survey that encompasses all areas of proposed works, otherwise the Corps will assume these areas to contain bedrock and the proposed project will need to be redesigned to avoid these areas. In response number #5 of the December submittal, the applicant states that no hard substrate is present within the proposed project; however this is an inaccurate statement as not all areas have been investigated.

Response:

Exhibit 6 Sea Diversified Letter to Response RAI SER-2018-19433

Bathymetric data collected from a smaller survey launch, as needed for the analysis and processing of the seismic data, covered the entire footprint of the marina with the exception of a portion of marina access pier.

Although, there are areas of the proposed marina that could not be safely accessed for geophysical data collection, the data collected adjacent to these areas and throughout the remainder of the marina footprint indicate apparent bedrock is deeper than fifty (50) feet below the seafloor.

Sea Diversified provided comprehensive and thorough geophysical analysis more than what is acceptable for similar marina project stating in their letter response

that

"The geophysical investigation conducted for this project provides extensive data, far more than what is typically required during the permitting phase of other similar marina projects."

Sea Diversified concludes their response to this RAI item as follows:

"In response specifically to the RAI, it is not warranted to redesign the project based on the assumption there is rock in the areas not covered by the seismic profiling activities because there is no data to indicate there should be rock in these areas. If bedrock is encountered in this area of the marina or in other areas of the marina during construction, there should simply be a condition of the permit that covers this issue such as limiting the number of piles that can be installed per day to minimize noise impacts. This is a typical condition imposed on many projects where there are concerns of noise impacts."

"Therefore, it is our opinion that if any assumption is made, it is appropriate to assume these areas do not contain bedrock within the limits of pile driving as data collected throughout the majority of the project footprint do not indicate anything different."

10. With regards to the provided Summer's End Harbor Management Docking and Mooring Plan (HDMP):

- Since the management of the marina will include the installation of the channel markers, these need to be considered in the proposed project action area.

Response:

The proposal for Applicant to provide channel markers was contemplated as a mitigation effort to assure boats using the harbor, but not the marina, have a defined access point. If the department feels the inclusion of channel markers will have additional impacts, then Applicant will eliminate this proposed work from the mitigation plan and will not install the channel markers. Applicant will provide GIS/GPS locations for the channel to vessels approaching and leaving the marina. Additionally, the marina will employ VHS radio to provide ingress and egress instruction and have an escort vessel in the water and on demand to accompany vessels during ingress and egress into and out of Coral Harbor. To clarify, the proposed markers were to provide guidance to boats not using the marina.

- Please describe how Applicant determined the vessels shall remain eighteen inches from the submerged bottom at low tide. Please indicate if Applicant is stating that the vessels shall remain eighteen inches above all existing resources in addition to the submerged bottom, as any existing resources, including seagrasses, may be impacted through prop wash with

this minimal distance.

Response:

When the facility is completed, a post-construction bathymetric study will be conducted to establish the depths in each specific slip within the marina. In the marina management software these depths will be placed in the specifics for each slip, designating a maximum draft allowed for any boat assigned to that slip. Example: If, upon completion of the marina, Slip E -1 has a minimum depth of 15' or 180 inches at low tide, then the parameters for that slip will be set at 13'4". When a reservation is taken for this specific slip the specifications of the vessel, which includes the draft of the vessel will be entered into the marina management program. The program will not allow a slip to be assigned to a vessel which has a draft that is deeper than the parameter set for that slip. As to the question concerning the prop wash it should be pointed out that on the larger yachts the props are normally higher than the lowest point. While sea grass maybe found in some areas of the marina, the operation of the boats within the marina will be closely monitored and the maneuvering of the vessels will be assisted by shallow draft tenders that will assist in the dockage of the vessel (especially the larger vessels with larger diameter propellers), thus mitigating the need for the vessel docking using excessive power and or creating excessive prop wash.

- The HDMP states that 75 public moorings will be installed, please include these locations (shown in a table format and on a drawing noting latitude and longitudes) and any proposed impacts.

Response:

Exhibit 13 2020 Compensatory Mitigation Plan

The St. John Committee of the Virgin Islands Coastal Zone Management Committee (STJ-CZM) has approved up to 75 moorings as part of this project. These moorings will be located by DPNR and DPNR will instruct Applicant of the location of these permitted moorings. Applicant will purchase and install the compliant helix moorings as located by DPNR. These moorings will be located by VI DPNR based on demand. Impacts associated with the installation of these moorings is anticipated to be negligible as the areas will be assessed before installation and resources will be avoided. There are no additional impacts for these moorings anticipated after installation. Of importance, the reorganized moorings and oversight of the harbor is expected to provide protection to 16 acres of SAV and allow the restoration of at least 1 acre of SAV that are currently being damaged by the non-compliant boating activities in Coral Harbor.

- The HDMP states that condemned moorings shall be professionally removed with no impacts. Please address how this is to occur, include

information pertaining to the removal and methodologies. How will the contractor know there will be no impacts to existing resources? Has a survey been conducted in these areas, if not, one needs to be provided.

Response:

Vessels currently moored in Coral Harbor by vast majority are non-compliant vessels some of which have installed non-compliant moorings or other equipment. Many vessels have multiple lines out causing extensive damage to seagrass and other resources. Existing mooring equipment will be evaluated at the time of the relocation of the vessel onto a compliant mooring. Divers will access and carefully remove the abandoned moorings of the non-compliant vessels thereby avoiding impact to resources as much as possible. Divers will use lift bags to remove equipment as necessary. It is not anticipated to have coral resources in these areas. Vessels remaining in Coral Harbor will be relocated to a compliant mooring that have been approved, permitted, and located by USVI DPNR.

- The proposed twelve moorings directly associated with the marina will need to be shown on the proposed drawings with locations denoted via latitude and longitudes. Ensure that the proposed number of vessels is included in the overall total vessel count.

Response:

Exhibit 16 Dock Drawings Final Set - Techno Marine

As requested by the Corps, the 12 operational moorings associated with the proposed marina have been detailed on the updated dock drawings. Vessels on those moorings have been included in the total vessel count.

- The HDMP states that non-compliant vessels in the harbor are expected to vacate Coral Harbor to places unknown. Please state other locations locally these individuals can relocate to. Also, provide who is to identify them as non-compliant and who will be in charge of removing them.

Response:

USVI DPNR is the permitting authority and enforcement division for moorings and non-compliant vessels outside of the National Park. VI DPNR is also responsible undertaking the effort to coordinate with vessels in Coral Harbor to move those vessels to compliant moorings and for processing the permit

applications for those vessels that wish to remain in Coral Harbor once the marina is completed. VI DPNR will relocate the individual permitted moorings on an as needed basis as they process the applications and Summer's End will supply the funding for the mooring installation of a relocated mooring or mooring whose tackle has been upgraded into compliance as permitted and located by VI DPNR and the careful removal of abandoned, non-compliant mooring thereafter with negligible impacts.

- Please discuss the measures that will ensure during hurricane or other severe weather events that the proposed marina will have in place to ensure all vessels will be removed as stated. Please also indicate where these vessels will be placed.

Response:

Vessels using marina docks and associated moorings will be required to enter into a dockage contract for the use of the marina facilities. The dockage contract stipulates that all vessels must be removed by the owner in the event of a hurricane and that failure to do so would allow the marina to remove the vessel from the dock at the owner's expense. The dockage contract will further require the vessel owner to provide a hurricane plan for that vessel. It is assumed that most smaller vessels that can readily be hauled out will be hauled out in either the BVI and or St Thomas at one of the yards there. Larger yachts will flee the area to avoid being in the path of the hurricane. It is important to note that most insurance policies for large yachts will not allow the owner to leave the boat in the path of a hurricane without negating the vessel's insurance coverage, which mandates that the vessel be relocated prior to a storm event.

- Will the vessels utilizing the proposed 75 moorings also be limited to depth requirements?

Response:

USVI DPNR will permit up to 75 moorings. These moorings will follow the same management procedures as the marina and operational moorings and adhere to the limited depth requirements as well.

- Please provide the drafts of all vessels that shall utilize the proposed marina and any proposed moorings in a table format and on a drawing, ensuring that the proposed vessels shall not impact the bottom contours or any existing resources.

Response:

When the facility is completed, a second post-construction bathymetric study will be conducted to establish the depths in each specific slip within the marina and mooring. In the marina management software these draft limitations will be placed in the specifics for each slip, thus designating a maximum draft allowed for any boat assigned to that in the slip. Example: If, upon completion of the marina, Slip E -1 has a minimum depth of 15' or 180 inches at low tide, then the parameters for that slip will be set at 13'4" When a reservation is taken for this specific slip the specifications of the vessel, which includes the draft of the vessel will be considered and entered into the marina management program. The program will not allow a vessel into the slip that does not meet that slips parameter and thus that slip cannot be assigned to a vessel which has a draft that is deeper than the parameter set for that slip. As to the question concerning the prop wash it should be pointed out that in the larger yachts the props are normally higher than the lowest point.

With all of that said while the presence of sea grass may be found in some areas of the marina, the operation of the boats within the marina will be closely monitored and the maneuvering of the vessels at slow speed will also be assisted by shallow draft tenders that will assist in the dockage of the vessel (especially the larger vessels with larger diameter propellers), thus mitigating the need for the vessel that is docking to use excessive power and or create excessive prop wash.

- Please indicate how the increased ingress and egress of the Harbor will not impact existing resources within the harbor itself and the adjacent resources and provide the measures the HDMP will stipulate to ensure this.

Response:

Exhibit 7 Channel Bathymetry

Exhibit 15 Harbor Management Vessel Docking and Mooring Plan

As detailed in the Channel Bathymetry illustration, the natural deep harbor ranges from 20' – 28' of depth and has more than a 500' buffer on each side of the 150' wide channel to both reefs on either side. As specified the marina will be a tender operated facility meaning that all vessels using the marina must call in (using VHF) and request clearance into the facility. Once the call has been received, a tender will be dispatched as needed to ensure that the entry into the harbor and facility will be done slowly and absent wake and or disruption. The same process will be used to control departures from the facility

11. Avoidance and minimization efforts:

- Please indicate why the proposed docks are to be located only a minimum of 4-feet above mean high water line and not 5-feet which is industry standard to allow maximum light penetration in addition to the grated decking.

Response:

This is a function of the range of vessels that will use the marina. Specifically, higher freeboard yachts tend to be larger and smaller boats have less freeboard. The higher docks could pose difficulties for those using smaller boats getting on and off the vessel and pose a significant safety and liability hazard when the dock height is too much for their freeboard. Additionally, initial discussions that Applicant had with Corps and agencies during inter agency meetings in Puerto Rico resulted in the reviewing engineer for the Corps stating that the docks would need to be fixed, rather than floating, and constructed to be a minimum of 4' above mhw which he stated was standard. As a result of these discussions, Applicant adjusted the original marina design concept from floating docks to a fixed dock marina facility with docks located at the North Club at a minimum of 4' and docks located at the South Club at a minimum of 5' MWH. This design criteria was accepted by the reviewing engineer for the Corps during the initial application and review.

- Thank you for stating that there will be proposed boat lifts to dock A. Please address if with the addition of the lifts there are to be additional piles that were not included in the 960 count.

Response:

The piles associated with the lifts are included in the total pile count of 960.

- Please indicate how Applicant is proposing to limit the vessel access to shallow water areas (depths below minus 7 feet).

Response:

See Excerpt from earlier question above Example: When a reservation is taken for this specific slip the specifications of the vessel, which includes the draft of the vessel will be considered and entered into the marina management program. The program will not allow a slip to be assigned to a vessel which has a draft that is deeper than the parameter set for that slip.

Additionally, any boater attempting to access waters in which their draft may threaten either marine habitat or endanger public safety will first be hailed via VHF and notified of their threatening activity, further if necessary a marina vessel will be dispatched to intercept the vessel and notify the vessel operator that they are to cease and desist immediately and return to deeper water. If

the vessel operator persists a call will be made immediately to DPNR requesting enforcement interdiction.

- Has a grant been funded? If not what funds are available and what are the allocation timelines for a full time DPNR enforcement officer?

Response:

The grant will not be funded until such time as this permit is issued and the marina is constructed. The grant is proposed as part of compensatory mitigation for this project. The DPNR enforcement officer will be funded concurrent with marina construction and operations.

- It is unclear if Exhibit 4, attachment A is from the applicant or suggestions from an agency. Please clarify. Is the applicant stating that an informational center to educate the public is going to be part of this proposal? If so this needs to be included as part of the project and additional questions may be asked. The same goes for the proposed mobile application, additional questions may be asked if it is part of this proposal.

Response:

As part of the compensatory mitigation Applicant will provide signs at the marina educating boaters of shallow reef and seagrass areas as well as information on safe boating practices and protection for turtle and mammals. Additionally, other agency or non-profit informational environmental or species pamphlets would be distributed to increase boater awareness.

- Applicant states that a detailed mitigation plan will be provided. Please provide an updated detailed mitigation proposal for review; taking into account all proposed permanent, temporary, and/or secondary effects from the proposed project activities.

Response:

Exhibit 13 2020 Compensatory Mitigation Plan

- Please indicate if the use of single pilings were considered in place of finger piers. Please provide a justification as to why the use of single pilings was not adapted in an effort to minimize impacts to Essential Fish Habitat.

Response:

As part of the previous review comments, the project was required to use a grated dock surface to allow sunlight to penetrate and avoid additional shading impacts. In doing so, the dock design had to change to provide the same structural integrity for the aluminum top section now proposed that would have existed for the initially proposed concrete dock section. This structural integrity is provided by the double pile system proposed, which is to assure the structural stability of the dock structure.

12. Alternatives Analysis:

- As stated under 40 C.F.R Section 230.10(a)(2) property that Applicant cannot reasonably obtain, utilize or manage to fulfill the project purpose is not a practicable alternative. It appears from the submitted alternatives analysis that several of the proposed areas are located within the National Park boundaries and as such shall not be considered in the alternatives analysis.

Response:

Applicant objects to the removal of several proposed locations from its alternatives analysis. Many facilities within National Park boundaries are operated by concessionaires in accordance with the 1998 Concessions Management Improvement Act. Title VII of the 2016 National Park Service Centennial Act establishes the Visitor Experience Improvements Authority (VEIA), a new authority that authorizes the National Park Service to solicit, award, and administer contracts for the operation and expansion of commercial visitor facilities and visitor programs. The VEIA is separate from and supplements the existing authority of the National Park Service to enter into concessions contracts. Given that there are several processes under which access could be obtained to sites within the National Park, it is unreasonable to exclude alternatives within the National Park as unobtainable. There are processes by which a private company can obtain the rights to develop and operate facilities within National Parks. Excluding locations is based upon the concept that such properties are unavailable is inconsistent with the adopted laws. Early discussions with the Corps staff indicated that the Applicant would be required to include properties within the National Park as part of its alternatives analysis, a requirement which is supported by federal law.

- The submitted alternatives analysis (Exhibit 5 Attachment A) states that there are proposed impacts to the uplands per a previous submittal. Please discuss if the proposal is also to include upland works. If so please provide information pertaining to this and updated drawings reflective of this.

Response:

The project as proposed originally included 2 culverts to facilitate crossing the ghut

separating two upland parcels within the proposed project. This parcel originally proposed for inclusion in the project has been eliminated from the project which also removed the need the crossing construction and therefore also removing the need for fill and riprap.

As set forth in the 2015 Public Notice:

"The proposed upland redevelopment would require impacts to a 265 linear foot section of an existing ephemeral tributary for the installation of two culverts for a driveway crossing, and re-contouring to create a storm water retention or treatment areas. The impacts to the tributary would include the discharge of 17 cubic yards of riprap to protect the culverts, seven cubic yards of gravel at the base of the culverts, and seven cubic yards of additional clean fill material around the culverts." This work has been removed from the project.

Exhibit 2: Upland Proposed Works and Ownership

Exhibit 3: Upland Proposed Works by Parcel

Exhibit 4: Final Civil Drawings

- It appears from the submitted analysis that Enighed Pond would have the least amount of environmental impacts, it has been previously dredged, is accessible via an existing road, navigation is deep enough due to the ferry terminal created and is in an area of compatible use, it also is available for purchase, and is within an storm safe area. Please provide a detailed analysis of this area including various configurations showing how this area is inadequate for the project purpose (as stated in the Corps July 9, 2015 Public Notice: Construct a private commercial offshore marina with ancillary and commercial facilities in adjacent uplands in St. John, USVI).

Response:

Concluding that Enighed Pond is an appropriate site for this proposed project with the least amount of environmental impacts while also being capable of supporting the project purpose is an incorrect conclusion and ignores the data previously submitted for this project. While there is an available uplands site on Enighed Pond and it has been dredged for the commercial use, the entire area within Enighed Pond is about 8 acres in size, less than a tenth of the size of Coral Harbor, and the area that could be utilized for a marina is a small fraction of that size. There are commercial docks over one third of the shoreline in use and owned by third parties and almost half the shoreline of Enighed Pond has been restored to mangrove as mitigation for the dredging permit that allowed more intensive commercial use of the location. This site is far too small to accommodate the marina that has been under application to the Corps for more than five years based on the documentation submitted. This site will not physically accommodate the proposed project spatially even without the existing commercial use of Enighed Pond already occupies the majority of the area within the harbor. The project as designed requires more considerably more space for dockage and mooring than is presently available within

Enighed Pond. The proposed project has previously submitted information showing the project cannot be substantially reduced and still meet its project purpose and be economically viable.

- Please provide onsite alternatives for the proposed project. At a minimum this must include varying configurations, varying slip counts, proposed impacts with alternative configurations, etc.

Response:

These questions have been asked and answered in previous submittals when Applicant was requested to provide economic justification for the size of the marina which is designed to provide much needed dockage for a broad range of boat sizes. The configuration that is presently under consideration for permit has been based on years of discussion and negotiation with staff for the Corps and the consulting agencies incorporating USACE's Engineering with Nature® concepts. The plan submitted for review is based on Applicant's determination to design and operate a marina that could accommodate a variety of boat sizes while also utilizing the facilities for larger boats in a way that protects smaller boats from wave action without the need for additional infrastructure. This analysis has likewise been previously submitted to the Corps in response to previous requests for additional information.

- Please provide a no action alternative; please note that simply stating that the no action alternative does not meet purpose and need is not sufficient. The no action alternative should be discussed in two ways: 1) can the project be constructed without the need for a permit, and 2) in terms of what will transpire should the facility not be constructed.

Response:

No Action Alternative: It is anticipated that the project as contemplated cannot be constructed without a Section 10 of the Rivers and Harbors Act permit. In the absence of a permit to provide legally constructed dockage and moorings within Coral Harbor together with the proposed amenities, the harbor will continue to be used for mooring without regard for the number of boats moored, impacts to seagrasses and corals, the use of compliant moorings, pump-out facilities, or a meaningful regulatory presence to address these concerns, all of which the proposed project commits to address. Further, in the absence of a permit to construct the marina, the proposed mitigation activities to restore and maintain existing stormwater management facilities will not occur. Continued use of the harbor, without compliant moorings and appropriate regulation, together with the unabated and unregulated dumping of wastes into Coral Harbor and the discharge of stormwater from unmaintained facilities will result in the continuing degradation of the marine environment and water quality in Coral Harbor. This alternative

would not address the project's purposes and needs.

- Please provide an updated alternatives analysis with a conceptual site plan for each alternative.

Response:

Applicant objects to this request as unnecessarily burdensome and duplicative given the extensive documentation previously provided to the Corps for review and which Applicant had been informed was accepted as complete by the reviewer prior to initiation of consultation with the consulting agencies. To be clear, Applicant revised the alternatives analysis several times to address concerns raised by staff and Applicant was told that an acceptable alternatives analysis was required prior to initiation of consultation with the consulting agencies. Consultation was initiated more than a year ago.

13. Thank you for the provided letters from Mr. Goodrich, P.E. and Mr. Boyd, stating that there are other alternatives other than a wave attenuation infrastructure. Could you please elaborate on these alternatives, the alternative marina management measures, and how the proposed project shall employ these methods to ensure the vessels are to remain safe when conditions exceed tranquil criteria. Are the alternative measures going to be included within the HDMP, if so please provide an updated copy showing this.

Response:

Exhibit 15 Harbor Vessel Mooring Management Plan

The positioning of the dock was done to accept the fetch that can be found in this specific area. Additional cleats and mooring attachments were built into the design to assure that a vessel that was receiving a fetch and or adverse wave action was able to sustain its position by use of additional mooring lines and cross ties that might not normally be required. The yacht itself is not in any danger in these conditions and the only concern is that of the attachment to the docking facility and thus when properly and abundantly secured to the dock with cross ties and additional spring lines you mitigate the effects of the wind wave action.

14. Pile installation:

- Thank you for providing the letter from Mr. Bigler. Please update it as needed per the findings of the additional geophysical investigation which encompasses all areas of the proposed works.

Response:

Additional discussion related to the geophysical investigation result in no change from the letter noted above from Bigler.

- Please provide the number of strikes per pile and the number of seconds of vibration per pile.

Response:

For the required embedment it is anticipated that the vibratory method for installation is planned to be 30 mins or 1800 seconds per pile. When using the vibratory method, there are no strikes, just position and vibrating in. Based on the information generated by Sea Diversified's work, we do not anticipate that an impact hammer will be necessary for pile installation, but if it were, it is anticipated to be at 40-50 strikes per pile.

15. Upland Permitting:

- Please discuss if this is part of this proposed project.

Response:

Exhibit 17 Approval Summary – CZM Permit
Exhibit 18 2019 12 18 Consolidated Permits – Summer's End
Exhibit 19 2019 12 18 Modification to Consolidated Permit

The upland permitting is part of this project. All the upland parcels are properly zoned for the proposed development and have been reviewed and approved by USVI DPNR and St. John Coastal Zone Management as part of the territorial permit. Zoning per parcel is as follows:
Consolidated 10-17&10-18, 10-19, 13 Rem area all zoned W1
10-41 Rem is zoned B-3

Major Coastal Zone Land and Water Permits were recommended for approval by USVI DPNR and approved by the St. John Coastal Zone Management Committee and further approved by Governor John P. deJongh in 2014. The Major Land and Water Permits were affirmed and consolidated into one permit by the Board of Land Use Appeals in 2016. The Consolidated Permit was issued and modified by Governor Albert Bryan Jr. in 2019. The submerged lands lease is currently pending approval before the 33rd Legislature. Please see the attached Approval Summary for further detail.

- Please explain what measures will be taken to prevent stormwater runoff and discharges into the Harbor and Bay.

Response:

Exhibit 20 C500 & C501 Erosion & Sediment Control Plan

Applicant will apply for and comply with the requirements for a Territorial Pollution Discharge Elimination System Stormwater General Permit (Permit No. VIGSA0000) prior to construction.

- Please identify the stormwater mitigation efforts in the proposed mitigation plan.

Response:

Exhibit 21 C400 Stormwater Management
Exhibit 13 Compensatory Mitigation Plan

16. Please provide a valid Section 401 Water Quality Certification and Coastal Zone Management permit from the Department of Planning and Natural Resources.

Response:

Exhibit 18 2019 12 18 Consolidated Permits – Summer's End
Exhibit 19 2019 12 18 Modification to Consolidated Permit
Exhibit 22 Water Quality Permit

NOTES:

1. Also provided by Applicant in response to multiple requests above is the inclusion of *The Truth About Coral Bay* video. Featured in the video are generational St. Johnians, native Virgin Islanders and others that include former employees of the U.S. National Park, USVI DPNR Enforcement, DPNR Planning and others who address many of the concerns expressed in this RAI and paint a clear picture of the historical and current conditions of Coral Harbor and their commitment to the environmental and social benefits that the proposed St. John Marina provides.
2. Additionally, please find submitted images in response to this RAI in document: *Current Conditions in Coral Harbor & Coral Bay Community*.
Please see:
Exhibit 24 Current Conditions Coral Harbor

Appendices

- Exhibit 1: RAI Response Table
- Exhibit 2: Upland Proposed Works and Ownership
- Exhibit 3: Upland Proposed Works by Parcel
- Exhibit 4: Final Civil Drawings
- Exhibit 5: Model Study-Calibration Validation
- Exhibit 6: Sea Diversified Letter to Response RAI SER 2018-19433
- Exhibit 7: Channel Bathymetry
- Exhibit 8: STJ Marina Numerical Modeling Analysis
- Exhibit 9: Potential Project Impacts Graphic
- Exhibit 10: Benthic Habitat Map
- Exhibit 10-A: 2014-2018 Benthic Aquatic Survey Comparison
- Exhibit 11: Critical Habitat
- Exhibit 12: Action Area
- Exhibit 13: 2020 Compensatory Mitigation Plan
- Exhibit 14: SS-1R Sonar
- Exhibit 15: Harbor MGT Vessel Docking and Mooring Plan
- Exhibit 16: Dock Drawings Final Set - Techno Marine
- Exhibit 17: Approval Summary - CZM Permit
- Exhibit 18: 2019 12 18 Consolidated Permits – Summer's End
- Exhibit 19: 2019 12 18 Modification to Consolidated Permit
- Exhibit 20: C500 & C501 EROSION & SEDIMENT CONTROL PLAN
- Exhibit 21: C400 Stormwater Management Plan
- Exhibit 22: Water Quality Permit
- Exhibit 23: 2020 Watershed Management Plan Proposed Mitigation
- Exhibit 24: Current Conditions in Coral Harbor
- Exhibit 25: Department Letter to USFWS August 10, 2018
- Exhibit 26: USFWS Letter to Department August 23, 2018