To: All Interested Bidders

Re: Addendum #1
HIGBEE BEACH RESTORATION PROJECT
NJDEP OFFICE OF COASTAL ENGINEERING (OCE)
PROJECT NUMBER 4299-20

This addendum is being issued to the contract for the advertisement of the Higbee Beach Restoration Project, Township of Lower, New Jersey as advertised on May 13, 2022.

The primary purpose of this addendum, amongst other revisions, is to answer and resolve all official questions that were submitted via email to the Office prior to the question deadline on June 9, 2022. Attached are the related Contractor Questions & Answers. All other revisions have been documented in the Register of Specifications Changes and attached herein.

Please note that security protocols have changed at 1510 Hooper Avenue, Toms River, NJ 08753. All bidders must enter through the main entrance located in the front of the building and check in at the security desk. An OCE staff member will be stationed at the security desk to receive all official submissions.

The Bid Date for this project was extended to **Tuesday, June 28, 2022 at 10:00AM (prevailing time)**. Except as amended in Addendum No. 1, all other terms and conditions of the Project Plans and Specifications remain the same.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum shall supersede the Specifications and Project Plans and are an essential part of the contract. Please note that a signed copy of the “Acknowledgement of Receipt of Changes to Bid Document Form” is attached and must accompany your bid submission to be deemed complete, indicating receipt of this addendum issued for this solicitation. **Failure to include this form in your bid package shall show cause for dismissal of said bid.**
This addendum is being distributed to all current plan-holders via email only. If you fail to receive the seventeen (17) pages (2-page Cover Letter, Contractor Questions and Answers, Acknowledgement Form, Register of Specification Changes, and the modified Specification pages) of this Addendum #1, please contact Sarah Bates at sarah.bates@dep.nj.gov. This addendum includes the following:

1. Official Contractor Questions and Answers – (10 pages)
2. Addendum 1 Specifications Attachment  
   a. Acknowledgement of Receipt Form – (1 page)  
   b. Register of Specifications Changes – (1 page)  
   c. Revisions to Section 11 Specifications – (3 pages)

Sincerely,

Erick Doyle

Erick Doyle, Bureau Chief  
Bureau of Construction & Engineering  
Office of Coastal Engineering
Please note duplicate questions were combined and thus are only addressed once.

Questions Received During the Pre-bid Meeting on June 2nd, 2022

1. **As a courtesy/reminder, please consider the following:**
   a. Please take into consideration the power lines and other overhead utility lines that cross the main haul route of Sunset Boulevard.
   b. This scope of work encompasses, but is not limited to, the construction of a berm, stormwater control structures, enhancement of dunes, removing impediments to restore tidal flow, habitat restoration, installation of public recreational features and removal of the water tower. Areas outside of the LOD (limit of disturbance) are off limits to any usage for construction and/or access.

2. Q: *Are there any additional timing restriction requirements?*

   A: Yes. Revised timing restriction requirements are summarized on Drawing 22 – Special Regulated Requirements – Timing Restrictions. Additionally, the Engineer shall implement biological monitoring throughout the duration of the Project. The Office and its designated representatives including, but not limited to, the biological monitors shall have the ability to temporarily stop work in the event a federally listed endangered or threatened species is distressed or threatened in compliance with all applicable Permits.

3. Q: *Are there as-builts for the water tower?*

   A: There are no known as-builts for the existing water tower.

4. Q: *What materials will need to be taken offsite/stay onsite?*

   A: Unless otherwise specified or directed by the Engineer or authorized representative, concrete may be pulverized and re-used on site as indicated on the Project Drawings. Metals encountered during demolition and other site work shall be recycled at an appropriate off-site facility. Metal reinforcement in concrete structures shall be segregated from pulverized concrete and recycled at an appropriate off-site facility. Miscellaneous debris encountered during demolition and other site work shall be disposed off-site. All work associated with onsite re-use and off-site disposal shall be factored into the Bid Item for Miscellaneous Demolition. Please refer to Specification Section 11:07 for additional information.

5. Q: *Is there any directive for using composite mats versus wood mats?*

   A: No, this falls under means and methods determined by Contractor unless otherwise specified.
6. Q: Are there any areas within the site/LOD that will be open to the public?

   A: No, all areas within an active construction zone will not be open to the public. We will try to maintain accessibility to the public for areas not encompassed within an active construction zone assuming said areas can be accessed in a safe manner. This will require coordination and may need to be adjusted throughout the project. Contractor shall bear the responsibility for maintaining closures and reporting violations.

7. Q: If signs are to be intervisible, is there a quantity associated with the number of signs required?

   A: The number of signs required and placed falls under means and methods as determined by Contractor unless otherwise specified.

   Further clarification was obtained regarding the required Fish and Wildlife signs. Intervisible signs shall be displayed not fewer than ten to a mile along all exterior boundaries, roads, trails and right of ways within or directly adjacent to active construction zones.
Official Solicitation Questions Received Through June 9th, 2022.

1) Does the Q&A from the previous bid apply?
   a. All materials related to the cancelled solicitation advertised in 2021 are not applicable to this solicitation and should not be utilized in relation to this solicitation.

2) Clarification #1 dated 7/1/2022 (aside, it was from 2021) from original bid states, “The attached clarification statement is to modify Section 3:03 – Qualification of Bidders of the Project Specifications. All additional qualifications beyond those of dual pre-qualification are being remove from the Project Specifications.” Will Section 3:03 – Qualification of Bidders and Sec. 108 Berm Construction, Wetland Restoration and Planting, and Dewatering Contractor/Subcontractor Experience and Qualifications of the project specifications be omitted for this bid?
   a. All materials related to the cancelled solicitation advertised in 2021 are not applicable to this current solicitation. Furthermore, sections 1:08 and 3:03 have been modified in the current solicitation and potential bidders are advised to review both sections in the current 2022 bid documentation prior to finalizing a bid package.

3) How will the contractor get compensated for escalation costs such as fuel, steel, concrete, wood, etc.?
   a. Contractors are advised to plan accordingly for the escalation costs of materials within their bids. Escalation costs shall be factored into the Contractor’s base bid in each respective bid item. Contractor shall not be compensated separately for escalation costs.

4) Can the contractor submit an alternate soil compaction method after the bid?
   a. For basis of bid analysis, price and bid the scope of work as detailed on the project drawings and bid documents. No value engineering proposals will be accepted or entertained prior to bid and award. All risks/assumptions in approval of value engineering proposals prior to award of the contract is owned by the bidder and may ultimately not be approved by the Office

5) Is it necessary for the tubular top chord of the pedestrian bridge to be 12”x12” as shown on the section view? This large of a member is not required per design and will drive up the price.
   a. Yes. Bid as designed and detailed on the project drawings.

6) Will it be acceptable for enclosed vertical truss members (i.e. verticals and diagonals) of the pedestrian bridge to be comprised of structural steel shapes instead of tubular members?
   a. For basis of bid analysis, price and bid the scope of work as detailed on the project drawings and bid documents. No value engineering proposals will be accepted or entertained prior to bid and award. All risks/assumptions in
approval of value engineering proposals prior to award of the contract is owned by the bidder and may ultimately not be approved by the Office.

7) Please confirm the L/1000 deflection requirement for the main trusses in the vertical direction due to service pedestrian live load for the pedestrian bridge. The AASHTO LRFD Guide Specification for Design of Pedestrian Bridges only requires L/360, so the L/1000 requirement will result in a more robust and costly structure.
   a. A: Vertical deflection of main trusses due to service pedestrian live load shall not exceed 1/1000 of the span. Refer to Specification Section 11 Item No. 15 – Pedestrian Bridge for specific loading and deflection criteria required for the bridge design of this project.

8) Can the bid date be extended?
   a. The bid date is extended to June 28, 2022 by 10AM in person or by mail at this time. No bids will be accepted after 10AM. The Office will proceed with the Bid Opening at the aforementioned time in person as well as providing a virtual option through the use of Microsoft Teams. The link to the teams meeting will be posted on our website at https://www.nj.gov/dep/shoreprotection/index.html. The Office will only state which Bidders submitted a bid package on time, we will not be reading the line items or total bid prices at this time.

9) Will the bidding Contractors be notified of all Bid results?
   a. Bidders may be notified of ranked results once the bids have been fully reviewed and evaluated by the committee, which is anticipated to take a minimum of five weeks.

10) Please provide release form required for AutoCAD drawings.
   a. Current planholders were provided with a release form to be reviewed, signed, dated, and returned to sarah.bates@dep.nj.gov prior to obtaining AutoCAD files. If you have not submitted said release and need a new copy of the form please email Sarah asking for the form. Once the form is signed, dated, and returned then an electronic copy of the plans will be provided for information purposes only.

11) Is the Contractor responsible for any NJFW costs?
   a. The Contractor will be responsible for any additional permits not included within the bid specifications. The contractor will also be responsible for purchasing, obtaining, installing, and maintaining the signage and site security required by New Jersey Fish and Wildlife.
   b. The Department will be responsible for the public notification process required to close the Wildlife Management Area prior to start of construction.
12) Can you provide a detailed list of all off-site disposal required? Including contaminated off-site disposal.
   a. Disposal requirements for miscellaneous demolition are included in Specification Section 11:07. Pursuant to Specification Section 11:09, the water tower is known to contain lead-based paint and shall be disposed of at the appropriate facility and in compliance with federal, state and local regulations. All site soils are intended to be re-used on site in accordance to the specifications and are not anticipated to require off-site disposal.

13) Can you specify as to the work items for the DPMC C-119 Site Remediation classification please?
   a. The site remediation qualification is applicable to Bid Item 11.4 - Wet Excavation Regulated Landfill Material.

14) What permits are required of the Contractor?
   a. Depending on the Contractors means and methods, a water allocation permit or water use registration may be required. The Contractor will be required to obtain said permit for their means of operations and consider this within their bid price for Item No. 10 - Dewatering. Other local permits may be required based on means of operations and delivery to the site. Contractors will be liable for obtaining any additional permits beyond what was obtained for the project and from what is currently contained within the bid package. Additional permits required based on means and methods should be considered incidental to Item No. 1 - General Work.
   If any of the provided permits are set to expire within the construction timeframe, WSP & DEP will seek extensions as needed.

15) Will contract time extensions be granted due to supply chain issues?
   a. It is DEP’s sole discretion in granting any extensions. A contractor would need to provide substantial evidence that any delay has been incurred strictly due to supply chain issues outside of the contractor’s control. The contractor shall plan their work, provided submittals, and order materials with long lead times well ahead of the planned schedule to increase float within a given work path on their project schedule. Failure to adequately anticipate such issues SHALL NOT be cause for an extension of contract time. The contractor shall plan their work sequence in such manner as to minimize any potential for supply chain delivery issues.

16) Are there any work hour restrictions or noise restrictions in place?
   a. The following information related to work restrictions is provided by the Local Ordinance for Lower Township:
      i. All work shall be performed between the hours of 7:30 a.m. and 4:00 p.m. In emergency situations, with a determination of an emergency being in the sole discretion of the Township Director of Public Works,
this requirement may be waived under those terms and conditions to be set by the Township Director of Public Works.

ii. Weekend Work is not allowed unless approved in advance by the Office.

b. There are no current noise restrictions given the work is performed within the timeframe stated above and all construction vehicles are equipped with functioning mufflers.

17) Are any special safety trainings required (i.e. OSHA-40 HAZWOPER) for employees working onsite as part of the site is located on a formerly unregulated landfill?

a. Per Note 10 of Section 11:01 of the contract specifications: “40-hour HAZWOPER training in accordance with the standard contained in United States Department of Labor HAZWOPER Standard 29 1910.120 is anticipated to only be needed for staff involved in work considered as regulated related to the landfill, water tower demolition and production well abandonment.”

18) Is union labor required to be utilized on this project?

a. All efforts and communications must be made as described per Section 6:04 (B) of these contract specifications.

19) Does the Contractor or Subcontractors need to meet certain labor force percentage goals in regard to Affirmative Action (i.e. labor force must be comprised of 15% female)?

a. All Affirmative Action requirements for employment goals are as described per Section 6:04 (A) and 6:04 (B).

20) In the project specifications, there are no measurement and payment sections under Sec. 11:29 for the following technical specifications: 11:24 Contractor Staging Area and Access, 11:25 Onsite Reuse of Materials, 11:26 Project Schedule. Please advise.

a. There is no measurement and payment for descriptiveness of Section 11:24, Section 11:25, and Section 11:26. These sections are for informational use only. The measurement and payment for Onsite Reuse of Materials is as described within bid items such as, but not limited to, Item No. 6 – Clearing and Grubbing, Item No. 7 – Miscellaneous Demolition, Item No. – 11 – Excavation, and Item No. 12 – Fill Material,

21) For the sake of saving paper, are Appendices B,C,D,E required to be included with bid submission?

a. Appendices B, C, D, and E not required to be included within the bid submission. We advise potential bidders to review the Bid Check List (included as an attachment in the solicitation package) as well as Section 1:08 prior to submitting a bid.
22) NJDEP and USACE projects of this type typically have a requirement that plant materials are purchased with a certain distance of the project location to maintain a local provenance. Does such a requirement exist on this Contract?
   a. This requirement does not exist, however there are limitations on the hours of transit time that is allowable for delivery. Pursuant to General Note 1 on Project Drawing L201, Contractor is required to submit plant material supplier for approval. Please refer to Specification Section 11:21 and Drawing L201.

23) Section 11:21, Paragraph F states “Plants that can be removed from the tray by holding the stem growth and gently pulling on the tray are to be rejected.” Could the Department please clarify this requirement as this is how most wetland plugs are removed from their trays.
   a. The intent of this requirement is that plants removed in this manner that results in the roots pulling out of the soil in which the plant was grown indicates the plant has poor root development, is of poor quality, and therefore shall be rejected.

24) Section 11:21, Paragraph L states “Freshwater from the upper watershed of the work area moved during the dewatering operation may be retained for use in watering under this item.” Is there a specification for this or is this up to the Contractor’s discretion?
   a. Acceptable ranges of salinity and pH are identified in the specifications. Ultimately, it is the Contractor’s responsibility to source water that meets the Specifications and is acceptable to provide adequate water to plantings. Use of any water source that results in damage or mortality to plantings shall be the Contractor’s responsibility to replace the damaged plant material in accordance with the Plant Warranty and 2 Year Plant Guarantee.

25) Section 11:21, Paragraph K(2) calls for the tree and shrub fertilizer to be 4-7-4 dry granular with eco & endo mycorrhizal fungi. However, page T-196, under the construction section, states a 20-gram fertilizer tablet or two 10-gram tablets shall be utilized for all pint, quart or gallon container stock. Please advise which specification is correct and to be followed.
   a. 20-gram and two 10-gram fertilizer tablets shall be used for herbaceous tubelings and plug plantings. 4-7-4 dry granular with eco & endo mycorrhizal fungi shall be utilized for all other tree and shrub plantings.

26) Section 11:21, Paragraph L requires watering of the various areas and plants. This specification was required in the previous bid but had its own specific pay item. Will a watering pay item be added to this bid or are these costs to be carried in the planting items?
a. No. All watering shall be incidental to the Bid Item for that respective planting.

27) Page T-201 & 202, Paragraph C – Replanting, states “Replacement plants shall be guaranteed for an additional 6 months from the date of replanting.” If the replacement plants do not survive at the end of this 6-month period is the Contractor required to replace these plants and guarantee them for an additional 6 months?

a. Contractor shall be responsible to adhering to the conditions outlined in the planting warranty and two-year plant guarantee. Plantings replaced at the end of the two-year plant guarantee shall be warrantied for an additional 6 months. At the end of the additional 6-month period, plantings shall meet the requirements of 90% survivability. Plantings that do not meet this requirement shall be replanted and warrantied an additional six months until the 90% survivability is achieved.

28) Do the watering requirements in Section 11:21, Paragraph L for watering apply to the replacement plants if an additional 6-month guarantee is required?

a. Contractor is responsible for all watering required during all phases of planting. This includes, but is not limited to, the watering necessary during staging, planting, the warranty period up until the Completion of Construction, and the two-year plant guarantee after Completion of Construction.

29) Section 11:21, Paragraph M, would shredded hardwood mulch be acceptable substitute for the required pine straw mulch? Pine straw mulch is harvested from out of state forest plantations and a recycled local mulch is usually preferred from an ecological perspective.

a. For bidding purposes, assume mulch substitutions will not be accepted and that pine straw mulch will be required.

30) Page T-190, Paragraph (5) – Finished Grade, requires that the Contractor provide 24 hours notification prior to commencement of planting operations that all debris, including Phragmites wrack, has been removed from the planting areas. If this wrack comes back into the planting area after notification has been made and prior to planting or after planting has been completed, is the Contractor required to remove the wrack? If required to remove, should a separate pay item be added for this work since it is not a quantifiable scope?

a. Pursuant to the Specification paragraph titled “Warranty and Maintenance During Construction” on page T-200, planting areas shall be maintained free of Phragmites wrack, litter and debris until the Completion of Construction. This work, along with any other work required for preparation and maintenance of planting soils including, but not limited to, soil testing, soil
amendments, vegetation removal and soil preparation, shall be considered incidental to the bid item for that respective planting.

31) Page T-190, Paragraph C(2) Soil Tests, states “samples taken to a depth of eight inches for each planting habitat zone” and shall be tested for soluble salts and pH. What are the specific testing requirements for each planting habitat zone or do they follow the topsoil specifications?
   a. Testing requirements for each habitat zone will be evaluated based on the recommendations provided by the Rutgers Soil Testing Laboratory. Contractor shall be responsible for amending soil to meet topsoil requirements unless otherwise directed by the Engineer.

32) Page T-194, Paragraph (1) Planting Substrates, states “contractor shall complete a soils test to determine the pH, organic matter, soluble salt, and nutrient contents as well as soil texture.” Is there a Specification for acceptable ranges for these properties in each of the planting habitat zones?
   a. Testing requirements for each habitat zone will be evaluated based on the recommendations provided by the Rutgers Soil Testing Laboratory. Contractor shall be responsible for amending soil to meet topsoil requirements unless otherwise directed by the Engineer.

33) Sub-Item 4.11 – Erosion Control Matting- If and Where Directed is shown on the proposal form as 41,000 Units. However on page D-10 the description for this item states it will be executed on a price per square yard basis. Please indicate which is correct.
   a. The correct unit for Sub-Item 4.11 – Erosion Control Matting – If and Where Directed is 41,000 square yards (SY).

34) Several of the payment terms for various pay items indicate that a portion of payment for the full item will be withheld until completion of that item. For example, the payment for the planting items and soil erosion items will be paid at 70% after initial installation with the remaining 30% being paid at completion or after the item is removed and adjacent area restored. This seems to be onerous on the Contractor as the Department will still be withholding retainage on the Contract for these items as well. Could the Department please consider paying the Contractor for the Work as it is completed per the specifications if retainage is also being withheld.
   a. These items will not be adjusted. Refer to Section 11:29 for payment terms.

35) When is the post-dynamic compaction survey of the berm required to be completed?
   a. The post-dynamic compaction survey of the berm shall be completed immediately following dynamic compaction operations and shall be used as the baseline to quantify Bid Item 12.9B. Material losses that result from
utilizing the berm footprint for material hauling, accessibility or any other reason shall be the responsibility of the Contractor to replace.

36) Are there dewatering requirements for the wet excavation material prior to placement as subgrade fill?
   a. Contractor shall be responsible for grading the subgrade as indicated on the Project Drawings. Contractor should anticipate that wet excavated material may require additional handing, mixing and/or dewatering prior to placement as subgrade fill.

General Notes: Refer to the attached revised specification package and drawings indicating revisions made as discussed above. Items that have changed are indicated via track changes in the specification package and revision bubbles on the drawings, if applicable.
ACKNOWLEDGMENT OF RECEIPT OF CHANGES TO BID DOCUMENT FORM

(Name of Local Contracting Unit)

(Name of Construction/Public Works Project)  (Project or Bid Number)

Pursuant to Section 3:08 – Addenda and Clarifications, the undersigned bidder hereby acknowledges receipt of the following notices, revisons, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the local unit’s record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number Or Title of Addendum/Revision How Received (mail, fax, Pick-up, etc.) Date Received

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

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__________________________________________________________________________

☐ NO ADDENDA OR CLARIFICATION WAS RECEIVED

Acknowledgement by Bidder:

Name of Bidder: ____________________________________________________________

By Authorized Representative: ______________________________________________

Signature: ________________________________________________________________

Printed Name and Title: ____________________________________________________

Date: __________________________
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(5) **Finished Grade:** Finished grade shall not be considered for tidal planting areas until a minimum of 5-calendar days after the tide has been restored to the planting area. At least 24 hours prior to the commencement of the planting operation, the Contractor shall submit verification that finished grades are as indicated on the Project Plans and that all debris, including *Phragmites* wrack, has been removed from the planting areas. The Engineer shall review and, if satisfactory, approve this submittal and grade verification prior to commencement of planting operations. If the Engineer determines that some elements are not satisfactory, the Contractor will be directed by the Engineer to complete corrective actions prior to commencement of planting operations. Survey work required for this are to be included for and paid under Item No. 3 – Construction Layout, Interim and As-Built Surveys.

**(C) Test Reports:**

(1) **Equipment Calibration:** Within 1 week of testing, submit a certification of calibration tests conducted on the equipment used during the planting operations.

(2) **Soils Test:** Eight composite samples developed from eight grab samples taken to a depth of eight inches for each planting habitat zone. Final locations of grab samples shall be approved by the Engineer. Composite samples shall be submitted to a State agricultural laboratory (such as Rutgers Soil Testing Laboratory [http://www.rcre.rutgers.edu/soiltestinglab/](http://www.rcre.rutgers.edu/soiltestinglab/)) or commercial laboratory for pH, organic matter, soluble salt, and nutrient contents, as well as soil texture, of the planting substrates. Submit certified reports of laboratory tests, prepared by an independent soil testing laboratory, including analysis and interpretation of test results. Each report shall be properly identified by the Contractor. Test methods used and compliance with recognized test standards are to be described.

**(D) Certificates:**

(1) **Two-Year Plant Guarantee:** Submit a signed two-year plant guarantee within 15 calendar days prior to Completion of Construction. The two-year plant guarantee shall meet the standards as detailed herein.

**(E) Closeout Submittals:**

(1) **As-Planted Plan:** The Contractor shall submit two copies of an as-planted plan to the Engineer within two weeks following completion of final planting operations and prior to the submission of the Notice of Completion to the Department. Unless directed differently by the Engineer, these drawings shall be drawn to a scale of 1 inch = 50 feet and show the as-built habitat zoned planting locations based on final grade. Habitat zones shall be broken down by season (spring/fall) and year installed and mimic the presentation of habitat zones shown on the Project Plans. Each
TECHNICAL SPECIFICATIONS:

materials, equipment, and incidentals necessary to complete any replanting work shall be at no additional cost to the Department.

TWO-YEAR PLANT GUARANTEE

(A) The Contractor shall submit to the Engineer, a written and signed two-year plant guarantee, which is conditional of 90% survival of the planted Contract quantity as detailed on the Project Plans. During the two-year plant guarantee, Planting areas, or portions thereof, for which 90% survival is not reached at the end of two each full growing season, shall be replanted during the appropriate planting season for the planting area, to achieve a minimum of 90% survival of the planted Contract quantity for each planting area. Mortality shall be considered for any plant deemed to be more than 25% dead or in an unhealthy condition, as solely determined by the Engineer. The two-year plant guarantee period shall commence on the date of Completion of Construction and shall end 730 calendar days later.

Following are the terms and conditions of the two-year plant guarantee:

(1) Plants shall meet the requirements listed in paragraph “Materials”.

(2) Planting operations shall be carried out as stipulated herein.

Under the terms and conditions of the two-year plant guarantee, the Contractor is solely responsible for plant survival. Losses attributed to herbivores, disease, eutrophication, inappropriate hydrological regimes, drought, wind, wave energies or ice scouring shall not lower the minimum survival or coverage requirements.

At the end of each full growing season during the two-year plant guarantee and at the end of the two-year plant guarantee, the Engineer shall make a determination as to whether the plants planted in the planting areas meet the conditions of the guarantee. Any planting areas or portions thereof not meeting the requirements of the guarantee shall be replanted in accordance with paragraph “Re-planting”.

(B) Execution: Any vegetation within preserved areas damaged by the work under this section, as determined by the Engineer, shall be replaced immediately after the completion of the work at no additional cost to the Department.

(C) Re-Planting: After installation is completed, remaining plants shall become the responsibility of the Contractor to maintain and use as replacements, as directed by the Engineer.

At the end of each full growing season during the two-year plant guarantee and at the end of the two-year plant guarantee, the Engineer shall make a determination as to whether the plants planted in the planting areas meet the conditions of the guarantee. For non-surviving plants, the Engineer
shall select the species and locations to be replanted. The new plantings shall comply with the original Contract quantities as shown on the Project Plans, as solely determined by the Engineer. Materials and installation shall be in accordance with the materials specifications and the paragraph “Plant Installation”, respectively. Replacement plants shall be planted in the subsequent appropriate planting season. Replacement plants that occur at the end of the two-year plant guarantee shall be guaranteed for an additional 6 months starting from date of replanting.

The planting substrates of areas replanted with shrubs shall be re-tested to determine the shrub species to be used.

All labor, materials, equipment, and incidentals necessary to complete any replanting work associated with the two-year plant guarantee shall be at no additional cost to the Department.

11:22 **ITEM NO. 22 – INVASIVE TREATMENT - SPRAYING:**

This item shall consist of the work of treating invasive vegetation and includes all labor, equipment, materials, permits and accessories required for spraying a herbicide application on *Phragmites* in select locations, in accordance with these Specifications and at the direction of the Engineer.

Select locations dominated by *Phragmites* within the Limit of Disturbance and above the normal tide range will be targeted with an herbicide treatment during construction to help with the reduction of invasive vegetation. The Engineer shall provide a map for target areas to the Contractor during construction. The Contractor should assume treatment may occur anywhere within the Limit of Disturbance and up to 15-feet outside of the Limit of Disturbance.

**MATERIALS**

NJDEP label-approved herbicide shall be used. Surfactants added to increase the effectiveness of the herbicide may be used, in accordance with manufacturers’ labels. Tracer dye shall be used in herbicide mixes to aid in identifying application coverage. Herbicide application is approved under the Project NJDEP Land Use permit; however, licensed applicator permits will still be required by the Contractor in accordance with State regulations.

**SUBMITTALS**

The Contractor shall submit the following prior to each application:

1. At least 3 weeks prior to the start of work, submit a work plan describing intended operations, start date, scheduling, chemical treatments and personnel for work within designated wetland areas.

2. The product intended for use and the associated Material Safety Data Sheets (MSDS).