



**State of Rhode Island
Department of Administration / Division of Purchases
One Capitol Hill, Providence, Rhode Island 02908-5855
Tel: (401) 574-8100 Fax: (401) 574-8387**

**Solicitation Information
May 5, 2014**

ADDENDUM # 2

RFP # 7548638

**TITLE: CONSTRUCTION SERVICES ASBESTOS ABATEMENT, DEMO OF
STRUCTURES, SITE WORK ROCKY POINT, WARWICK**

SUBMISSION DEADLINE: Monday May 12, 2014 at 11:00 am (Local Time)

Notice to Vendors:

Attached is additional information with questions received and responses. No further questions will be answered.

**Thomas Bovis
Interdepartmental Project Manager**

Interested parties should monitor this website, on a regular basis, for any additional information that may be posted.

NOTICE OF ADDENDUM NUMBER TWO (2)

TO

State of Rhode Island
Bid Number 7548638
Construction Services Asbestos Abatement, Demolition of Structures, Site Work
Rocky Point
Warwick, Rhode Island

DATE of ADDENDUM: **May 2, 2014**

The contract documents are hereby modified to include this document as if fully attached thereto.

- ITEM A)** Responses to questions received and clarifications are attached.
- ITEM B)** DELETE Section 00310 "Bid Form" in its entirety and ADD the attached Section 00310 "Bid Form" (note red text indicates deviation from original form)
- ITEM C)** DELETE Section 01025 "Measurement and Payment" in its entirety and ADD the attached Section 01025 "Measurement and Payment" (note red text indicates deviation from original form)
- ITEM C)** DELETE Section 02300 "Earthwork" in its entirety and ADD the attached Section 02300 "Earthwork" (note red text indicates deviation from original form)
- ITEM D)** ADD Section 02746 "Bituminous Concrete Reclamation"

END OF ADDENDUM NUMBER 2

RFP # 7548638

TITLE: CONSTRUCTION SERVICES ASBESTOS ABATEMENT, DEMO OF STRUCTURES, SITE WORK ROCKY POINT, WARWICK

Questions:

1. Can the existing asphalt be pulverized to be left in place or to be reused as fill on site or does it all need to be hauled and disposed of off-site?

The existing asphalt may be pulverized and blended in place for reuse as fill on site, as a contractor option. A Specification for Bituminous Concrete Reclamation is attached. A revised Bid Form, Earthwork Specification, and Measurement and Payment Specification are attached.

2. Can the steel and wood beams and concrete block located in the Shore Dining Hall be segregated for salvage from the existing asbestos materials?

Non-porous materials may be salvaged, but must be first thoroughly cleaned of all visible suspect asbestos dust and debris. Porous materials (i.e., wood beams) may be salvaged if they can be segregated prior to demolition, and not comingled with identified or suspect asbestos-containing materials. These materials must be completely free of visible suspect debris & visually inspected by an accredited inspector to confirm no visible suspect asbestos debris is present.

3. Could you please confirm the pre-bid meeting that took place first at the DEM Office(235 Promenade Street, Room 300, Providence, RI) and secondly at the site (immediately following) was mandatory for both office and site visit?

People can attend a mandatory meeting at anytime until the purchasing representative indicates that the meeting is adjourned. The representative started the meeting at 235 Promenade Street then continued the same meeting at the site.

4. Can we pulverize all asphalt in place, grade and loom and seed over the top?

See response to question number one.

5. When will the property be open for viewing?

There was a mandatory pre bid meeting on 4/17 and we indicated at the meeting as well as in Addendum #1, dated 4/17, the park was available for viewing on 4/21.

Clarifications:

1. The base quantity listed on the Bid Form for add/deduct unit bid item number twelve (12) does not include removing and disposing Windjammer/Palladium, Shore Dining Hall, Cliff House, or Big House building slabs or foundations. Demolishing these building foundations shall be included within the lump sum base bid price.
2. Contractor must achieve Substantial Completion of work associated with the Base Bid within 75 days from the Contract issue date. Should Alternate 1 be awarded, Contractor must achieve Substantial Completion of work associated with the alternate within 165 days from the Contract issue date.
3. All fill and backfill material on site shall be compacted to 85% of maximum density.

END OF SECTION

Section 00310

Solicitation #: 7548638

Solicitation Title: Rocky Point Demolition Activities, Warwick RI

BID FORM

To: The State of Rhode Island Department of Administration
Division of Purchases, 2nd Floor
One Capitol Hill, Providence, RI 02908-5855

Bidder:

Legal name of entity

Address (street/city/state/zip)

Contact name Contact email

Contact telephone Contact fax

1. BASE BID PRICE

The Bidder submits this bid proposal to perform all of the work (including labor and materials) described in the solicitation for this Base Bid Price (*including the costs for all Allowances, Bonds, and Addenda*):

\$ _____
(base bid price *in figures* printed electronically, typed, or handwritten legibly in ink)

(base bid price *in words* printed electronically, typed, or handwritten legibly in ink)

- **Bonds**

The Base Bid Price ***includes*** the costs for all Bid and Payment and Performance Bonds required by the solicitation.

- **Allowances**

There are no allowances in this solicitation.

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- **Addenda**

The Bidder has examined the entire solicitation (including the following Addenda), and the Base Bid Price **includes** the costs of any modifications required by the Addenda.

All Addenda must be acknowledged.

Addendum No. 1 dated: _____

Addendum No. 2 dated: _____

Addendum No. 3 dated: _____

2. **ALTERNATES** (*Additions/Subtractions* to Base Bid Price)

The Bidder offers to: (i) perform the work described in these Alternates as selected by the State in the order of priority specified below, based on the availability of funds and the best interest of the State; and (ii) increase or reduce the Base Bid Price by the amount set forth below for each Alternate selected.

Check "Add" or "Subtract."

____ Add ____ Subtract Alternate No. 1: **Remove and Dispose Cottages**

\$ _____
(amount *in figures* printed electronically, typed, or handwritten legibly in ink)

(amount *in words* printed electronically, typed, or handwritten legibly in ink)

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3. UNIT PRICES

Unit Bid Item No.	Item Description	Base Quantity in Lump Sum Bid Price	Unit	Unit Price	Extended Cost
1.	Construction Access	55	SY		
2.	Fabric Fence Screen	1,300	LF		
3.	Straw Wattles	2,100	LF		
4.	Baled Hay Erosion Check & Silt Fence	1,700	LF		
5.	Catch Basin Inlet Protection	12	EA		
6.	Tree Protection	850	LF		
7.	Sawcut	1,600	LF		
8.	Remove & Stockpile Chain Link Fence	700	LF		
9.	Remove & Stockpile Chain Link Gate	1	EA		
10.	Remove & Dispose Chain Link Fence	6,000	LF		

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Unit Bid Item No.	Item Description	Base Quantity in Lump Sum Bid Price	Unit	Unit Price	Extended Cost
11.	Remove & Dispose Chain Link Gate	4	EA	_____	_____
12.	Remove & Dispose Concrete	4,550	TN	_____	_____
13.	Remove & Dispose or Reclamation of Bit. Conc. Pavement	50,300	SY	_____	_____
14.	Remove & Dispose Post or Bollard	90	EA	_____	_____
15.	Remove & Dispose Timber Frame and Sign	2	EA	_____	_____
16.	Remove & Dispose Traffic Sign	1	EA	_____	_____
17.	Remove & Dispose Wheel Stops	20	EA	_____	_____
18.	Remove & Dispose Steel Railing	450	LF	_____	_____
19.	Remove & Dispose Bench	22	EA	_____	_____

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Unit Bid Item No.	Item Description	Base Quantity in Lump Sum Bid Price	Unit	Unit Price	Extended Cost
20.	Remove & Dispose Picnic Table	25	EA		
21.	Remove & Dispose Planter	5	EA		
22.	Remove & Dispose Steel Canopy Frames	2	EA		
23.	Remove & Dispose Train Track	1,600	LF		
24.	Remove & Dispose Catch Basin	11	EA		
25.	Remove & Dispose Manhole	25	EA		
26.	Relocate Stockpiled Chain Link Fence	700	LF		
27.	Chain Link Fence	150	LF		
28.	Chain Link Vehicular Gate	1	EA		
29.	Common Borrow	17,000	TN		

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Unit Bid Item No.	Item Description	Base Quantity in Lump Sum Bid Price	Unit	Unit Price	Extended Cost
30.	Topsoil	84,500	SY	_____	_____
31.	Seed	84,500	SY	_____	_____
32.	Contaminated Soil Excavation and Disposal	180	TN	_____	_____
33.	Disposal of Lead-Hazardous Solid Waste	2,500	TN	_____	_____
34.	Disposal of Non-Hazardous Solid Waste	300	TN	_____	_____

The Bidder submits these predetermined Unit Prices as the basis for any change orders approved in advance by the State. These Unit Prices include all costs, including labor, materials, services, regulatory compliance, overhead, and profit.

Units:
 SY – Square Yard
 LF – Linear Foot
 EA – Each
 TN – Ton

4. CONTRACT TIME

The Bidder offers to perform the work in accordance with the timeline specified below:

- Start of construction: _____

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- Base Bid Substantial completion: _____
- Alternate Substantial completion: _____
- Final completion: _____

5. LIQUIDATED DAMAGES

The successful bidder awarded a contract pursuant to this solicitation shall be liable for and pay the State, as liquidated damages and not as a penalty, the following amount for each calendar day of delay beyond the date for substantial completion, as determined in the sole discretion of the State: **eight hundred dollars (\$800.00)**.

This bid proposal is irrevocable for 60 days from the bid proposal submission deadline.

If the Bidder is determined to be the successful bidder pursuant to this solicitation, the Bidder will promptly: (i) comply with each of the requirements of the Tentative Letter of Award; and (ii) commence and diligently pursue the work upon issuance and receipt of the purchase order from the State and authorization from the user agency.

The person signing below certifies that he or she has been duly authorized to execute and submit this bid proposal on behalf of the Bidder.

BIDDER

Date: _____

Name of Bidder

Signature in ink

Printed name and title of person signing on behalf of Bidder

Bidder's Contractor Registration Number

**SECTION 01025
MEASUREMENT AND PAYMENT**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contract Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 through 16 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes measurement and payment paragraphs for
 1. Lump Sum Bid Items
 2. Alternate Lump Sum Bid Items
 3. Add/Deduct Unit Price Bid Items

1.3 DEFINITIONS

- A. Payment Items: The RIDEM's distribution of the Contract Sum through listed work items.
 1. Each item is specified to include a defined scope of services. However, not all materials, labor, equipment, or services of a payment item are guaranteed to be listed or specified.
 2. Include costs associated with items of work required to complete the defined scope of services within the appropriately specified payment item.
 3. Payment items include all necessary material, plus cost for delivery, installation, applicable taxes and fees, administrative over-site, tools, labor, incidentals, overhead, and profit.
 4. Add/deduct unit bid price items shall be paid only as accepted and where approved prior to the completion of the respective work. Such work shall be measured by means acceptable to the Engineer where such quantities differ from the contract base quantities for respective items of work stated on the bid form.
 5. All work described in the Contract Documents shall be included in the payment items described herein.
 6. Alternate lump sum bid items will only be incorporated into the project if selected and authorized in writing by the RIDEM.
- B. Unit Price: An amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the

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Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

- C. Lump Sum: When used as an item of payment, means complete payment for the work prescribed for that portion of the Work under the item, or all work prescribed in the Contract, as the case may be.
- D. Complete In Place: When used in the measurement and payment provisions, means the completion of the contract item, including the furnishing of all materials, equipment, tools, labor, health and safety requirements, and work incidental thereto.

1.4 PROCEDURES

- A. Unit prices and lump sum items include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to the Schedule of Payment Items at the end of this Section for the method of measurement and payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 GENERAL

- A. Measurement: Notify RIDEM or Engineer at least 48 hours prior to the time at which necessary measurements must be taken. Notification must be in advance of obscuring pay item; do not proceed until such measurements have been taken in the presence of the RIDEM or Engineer.
- B. Measurement of Quantities:
 - 1. All work completed under the contract will be measured by the Engineer, or his/her authorized representatives, using United States Customary Units of Measurement or the International System of Units.
 - 2. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.
 - 3. Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave outs) having an area of 9 square feet (0.8

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square meter) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

4. Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
5. Unless otherwise specified, all contract items which are measured by the linear foot, such as fencing and similar items, shall be measured parallel to the base or foundation upon which such items are placed.
6. In computing volumes of excavation the average end area method or other acceptable methods will be used.
7. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois. All materials measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designed by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material be paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.
8. Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.
9. When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard may be weighed, and such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.
10. Scales shall be accurate within one half percent of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one tenth of 1 percent of the nominal rated capacity

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of the scale, but not less than 1 pound (454 grams). The use of spring balances will not be permitted.

11. Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.
12. Scale installations shall have available ten standard 50 pound weights for testing the weighing equipment or suitable weights and devices for other approved equipment.
13. Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.
14. Scales ``overweighing'' (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighting accuracy test will be reduced by the percentage of error in excess of one half of 1 percent.
15. In the event inspection reveals the scales have been ``underweighing'' (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.
16. All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

3.2 LIST OF LUMP SUM BASE BID ITEMS

Work associated with the items listed below forms the project's base bid project scope.

- A. Mobilization, demobilization, staging, erosion controls, and site layout.
- B. Site clearing and grubbing.
- C. Disconnection, cutting, capping, and abandoning site utilities. Contractor shall coordinate with utility service providers.
- D. Asbestos abatement, transportation and disposal of all Regulated Asbestos Containing Materials (RACM) per RIDOH approved methods for the following listed structures.
 1. Shore Dining Hall Building -- Demolition and abatement of unsafe structure with interior and exterior RACM materials. Building is to be

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- demolished and entire structure disposed of as asbestos contaminated waste.
2. Windjammer/Palladium Building – Asbestos removal from building which includes interior and exterior RACM materials.
 3. Big House Structure – Removal and disposal of demolition debris from site of former structure collapsed and fire damaged, including debris within adjacent stone foundation and roof. Building debris is co-mingled debris which includes asbestos and likely lead paint. Removal will include excavation of 6 inches of contaminated soil. Waste shall be presumed hazardous lead waste with asbestos.
 4. Cliff House Structure – Removal and disposal of demolition debris from site of former structure collapsed and fire damaged. Building debris is co-mingled debris which includes asbestos and likely lead paint. Waste shall be presumed hazardous lead waste with asbestos.
- E. Demolition and disposal of the Windjammer/Palladium Building, Shore Dining Hall, Cliff House, and Big House, including slabs and foundations.
- F. Removal and disposal of all existing above- and below-grade site improvements.
- G. Removal and disposal of building and structure footings, foundations, slabs, piers, and walls. Waste shall be presumed to be non-hazardous solid waste.
- H. Removal and disposal of two abandoned steel tanks.
- I. Removal and proper disposal of all solid waste within limit of disturbance.
1. Waste stockpiles and debris resulting from previous demolition of concessions stands, ticket booths and other structures contains lead painted building materials, and shall be presumed hazardous lead waste, as follows:
 - a. Including 2,500 tons of hazardous lead waste.
 - b. Including 300 tons of non-hazardous solid waste.
- J. Removal and disposal of sections of abandoned concrete slabs and structures to allow for drainage.
- K. Earthwork including but not limited to, excavation, backfilling, rough grading, and spreading loam and seed over disturbed areas.

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3.3 LIST OF LUMP SUM ALTERNATE BID ITEMS

- A. Work associated with the items listed below will be added to the Lump Sum Bid Price if selected by RIDEM.
- B. Work that is not specifically called out within an individual payment item but is inherently required to complete the Work shall be considered as a part of that payment item.

Alt. Bid Item 1 - Remove & Dispose Cottages

- 1. Includes work located with Alternate Limit of Disturbance depicted on the Contract Drawings including, but not limited to, the following:
 - a. Delete – Chain Link Fence.
 - b. Delete – Chain Link Vehicular Gate.
 - c. Installing and maintaining temporary chain link fence.
 - d. Remove and Dispose Posts or Bollards.
 - e. Remove and Dispose Manholes.
 - f. Asbestos removal and disposal from 28 cottages with interior or exterior RACM materials.
 - g. Demolition, removal, and disposal of eight (8) unsafe cottages with interior or exterior RACM materials. Entire structure, excluding foundation, disposed of as asbestos contaminated waste.
 - h. Demolition, removal, and disposal of 53 cottages and accessory buildings.
 - i. Demolition, removal, and disposal of 61 cottages and accessory structures' foundations, footings, and slabs.
 - j. Rough grade, loam, and seed disturbed areas.
- 2. Measurement: This item will not be measured.
- 3. Payment: Will be paid for on a lump sum basis, complete demolition, as shown on the Contract Drawings or as directed and approved in the field.

3.4 LIST OF ADD/DEDUCT UNIT BID ITEMS

- A. The add/deduct unit bid items listed below are for add/deduct purposes only in variance from the stated estimated quantities specified in the Contract Documents.
- B. Work associated with the items listed below will be paid for as an add/deduct to Lump Sum Bid Price.

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- C. Work that is not specifically called out within an individual payment item but is inherently required to complete the Work shall be considered as a part of that payment item.

Unit Bid Item 1 - Construction Access

1. Includes, but is not limited to, the following:
 - a. Installing geotextile fabric and crushed stone.
 - b. Maintaining construction access throughout the duration of construction.
2. Measurement: As measured by the RIDEM or Engineer per each construction access installed, complete in place.
3. Payment: Construction Access will be paid per each construction access, as shown on the Contract Drawings or as directed and approved in the field. Contractor will be paid 75% of value upon installation of construction access, and the remaining 25% upon the removal of the construction access.

Unit Bid Item 2 - Fabric Fence Screen

1. Includes, but is not limited to, the following:
 - a. Supplying and installing fabric screen in accordance with manufacturer's instructions.
 - b. Maintaining fabric screen throughout the duration of construction.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of fabric installed, as accepted by RIDEM or Engineer.
3. Payment: Will be paid per linear foot of fabric installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 3 - Straw Wattles

1. Includes, but is not limited to, the following:
 - a. Installing straw wattles.
 - b. Maintaining straw wattles throughout the duration of construction.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of wattles installed, complete in place.
3. Payment: Will be paid each linear foot of wattles installed, as shown on the Contract Drawings or as directed and approved in the field. Contractor will be paid 75% of value upon installation of wattles, and the remaining 25% upon the removal of the wattles.

Unit Bid Item 4 - Baled Hay Erosion Check and Silt Fence

Measurement and Payment - Page 7

Addendum No. 1

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1. Includes, but is not limited to, the following:
 - a. Installing silt fence and baled hay.
 - b. Maintaining silt fence and baled hay throughout the duration of construction.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of baled hay erosion check and silt fence combined installed, complete in place.
3. Payment: Will be paid each linear foot of baled hay erosion check and silt fence combined installed, as shown on the Contract Drawings or as directed and approved in the field. Contractor will be paid 75% of value upon installation of baled hay erosion check and silt fence combined, and the remaining 25% upon the removal of the baled hay erosion check and silt fence combined.

Unit Bid Item 5 - Catch Basin Inlet Protection

1. Includes installing and maintaining inlet protection devices throughout the duration of construction.
2. Measurement: As measured by the RIDEM or Engineer per each inlet protection installed, complete in place.
3. Payment: Inlet Protection will be paid each inlet protection installed, as shown on the Contract Drawings or as directed and approved in the field. Contractor will be paid 75% of value upon installation of inlet protection, and the remaining 25% upon the removal of the inlet protection.

Unit Bid Item 6 - Tree Protection

1. Includes installing and maintaining tree protection throughout the duration of construction as directed by the Engineer.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of fence installed, complete in place.
3. Payment: Will be paid per linear foot of fence installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 7 - Sawcut

1. Includes, but is not limited to, the following:
 - a. Sawcutting bituminous concrete and concrete pavement.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of sawcut.
3. Payment: Will be paid per linear foot of sawcut, as shown on the Contract Drawings or as directed and approved in the field.

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Unit Bid Item 8 - Remove & Stockpile Chain Link Fence

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Stockpiling posts, rails, and fabric.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of fence stockpiled.
3. Payment: Will be paid per linear foot of fence stockpiled, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 9 - Remove & Stockpile Chain Link Fence Gate

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Stockpiling posts, rails, and fabric.
2. Measurement: As measured by the RIDEM or Engineer per gate stockpiled.
3. Payment: Will be paid per gate stockpiled, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 10 - Remove & Dispose Chain Link Fence

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing fence posts, rails, fabric, and concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of fence demolished.
3. Payment: Will be paid per linear foot of fence demolished, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 11 - Remove & Dispose Chain Link Fence Gate

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing fence posts, rails, fabric, and concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
2. Measurement: As measured by the RIDEM or Engineer gate demolished.

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3. Payment: Will be paid per gate demolished, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 12 - Remove & Dispose Concrete

1. Includes, but is not limited to, the following:
 - a. Demolishing, excavating, loading, and disposing footings, foundations, slabs, piers, and walls to two feet below grade.
 - b. Excludes Windjammer/Palladium, Shore Dining Hall, Cliff House, and Big House building slabs and foundations.
2. Measurement: Actual net weight in tons of material delivered to treatment/disposal facilities, as measured by the permanent scales at the respective facilities. Total weight will be summation of weight bills issued by such facilities.
3. Payment: Will be paid per net weight, in tons, of material delivered to disposal facility.

Unit Bid Item 13 - Remove & Dispose or Reclamation of Bit. Conc. Pavement

1. Contractor reserves the right to either remove and dispose bituminous concrete pavement or pulverize bituminous concrete pavement in place and reuse as fill. Includes, but is not limited to, the following:
 - a. Excavating, loading, and disposing bituminous concrete pavement and curb.

OR

- b. Cold reclamation of existing pavement courses and underlying soil material including, but not limited to, the following:
 - 1) Pulverizing and blending existing underlying soil material and bituminous concrete paving material to a depth of 12 inches.
 - 2) Grading and compacting material to subgrade.
 - 3) Disposal of unsatisfactory and surplus material.
2. Measurement: As measured by the RIDEM or Engineer per square yard of bituminous concrete pavement removed and disposed, or pulverized.
3. Payment: Will be paid per square yard of bituminous concrete pavement removed and disposed, or pulverized, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 14 - Remove & Dispose Post or Bollard

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.

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- b. Backfilling and compacting holes with common borrow to subgrade.
- c. Disposing of post or bollard.
- 2. Measurement: As measured by the RIDEM or Engineer per post or bollard disposed.
- 3. Payment: Will be paid per post or bollard disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 15 - Remove & Dispose Timber Frame Sign

- 1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Disposing of sign frame.
- 2. Measurement: As measured by the RIDEM or Engineer per sign disposed.
- 3. Payment: Will be paid per post or bollard disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 16 - Remove & Dispose Traffic Sign

- 1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Disposing of traffic sign.
- 2. Measurement: As measured by the RIDEM or Engineer per sign disposed.
- 3. Payment: Will be paid per sign disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 17 - Remove & Dispose Wheel Stops

- 1. Includes, but is not limited to, the following:
 - a. Removing and disposing wheel stops.
- 2. Measurement: As measured by the RIDEM or Engineer per wheel stop disposed.
- 3. Payment: Will be paid wheel stop disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 18 - Remove & Dispose Steel Railing

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1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete footings.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Disposing of railing.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of railing disposed.
3. Payment: Will be paid per linear foot of railing disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 19 - Remove & Dispose Bench

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete foundation, footing, or slab.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Disposing of bench.
2. Measurement: As measured by the RIDEM or Engineer per bench disposed.
3. Payment: Will be paid per bench disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 20 - Remove & Dispose Picnic Table

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing concrete foundation, footing, or slab.
 - b. Backfilling and compacting holes with common borrow to subgrade.
 - c. Disposing of picnic table.
2. Measurement: As measured by the RIDEM or Engineer per table disposed.
3. Payment: Will be paid per table disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 21 - Remove & Dispose Planter

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing planter.
2. Measurement: As measured by the RIDEM or Engineer per planter disposed.

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3. Payment: Will be paid per planter disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 22 - Remove & Dispose Steel Canopy Frames

1. Includes, but is not limited to, the following:
 - a. Removing and disposing steel canopy frames.
2. Measurement: As measured by the RIDEM or Engineer per canopy disposed.
3. Payment: Will be paid per canopy disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 23 - Remove & Dispose Train Track

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing railroad ties, rails, and ballasts.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of track disposed.
3. Payment: Will be paid per linear foot of track disposed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 24 - Remove & Dispose Catch Basin

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing catch basin to a minimum depth of two feet below grade.
 - b. Filling inlet and outlet pipes with brick, mortar, and concrete.
 - c. Backfilling structure with concrete sand to subgrade.
2. Measurement: As measured by the RIDEM or Engineer per catch basin demolished.
3. Payment: Will be paid per catch basin demolished, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 25 - Remove & Dispose Manhole

1. Includes, but is not limited to, the following:
 - a. Excavating, removing, and disposing manhole to a minimum depth of two feet below grade.
 - b. Filling inlet and outlet pipes with brick, mortar, and concrete.
 - c. Backfilling structure with concrete sand to subgrade.

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2. Measurement: As measured by the RIDEM or Engineer per manhole demolished.
3. Payment: Will be paid per manhole demolished, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 26 - Relocate Stockpiled Chain Link Fence

1. Includes, but is not limited to, the following:
 - a. Installing stockpiled posts, rails, fabric, and fittings.
2. Measurement: As measured by the RIDEM or Engineer per linear foot of fence installed.
3. Payment: Will be paid per linear foot of fence installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 27 - Chain Link Fence

4. Includes, but is not limited to, the following:
 - a. Installing concrete footings in accordance with manufacturer's instructions.
 - b. Supplying and installing posts, rails, fabric, and fittings.
5. Measurement: As measured by the RIDEM or Engineer per linear foot of fence installed.
6. Payment: Will be paid per linear foot of fence installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 28 - Chain Link Vehicular Gate

1. Includes, but is not limited to, the following:
 - a. Installing concrete footings in accordance with manufactures instructions.
 - b. Supplying and installing posts, rails, fabric, and fittings.
2. Measurement: As measured by the RIDEM or Engineer per gate installed.
3. Payment: Will be paid per gate installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 29 - Common Borrow

1. Includes, but is not limited to, the following:
 - a. Importing material to the site.
 - b. Placing and compacting material to subgrade.

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2. Measurement: As measured by the RIDEM or Engineer per ton of compacted common borrow installed, complete in place.
3. Payment: Will be paid per ton of compacted material installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 30 - Topsoil

1. Includes, but is not limited to, the following:
 - a. Importing topsoil to the site.
 - b. Placing and grading four inches of topsoil.
2. Measurement: As measured by the RIDEM or Engineer per square yard of topsoil installed, complete in place.
3. Payment: Will be paid per square yard of material installed, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 31 - Seed

1. Includes, but is not limited to, the following:
 - a. Supplying and sowing seed.
 - b. Establishing vegetative cover.
2. Measurement: As measured by the RIDEM or Engineer per square yard of vegetation established, complete in place.
3. Payment: Will be paid per square yard of vegetation established, as shown on the Contract Drawings or as directed and approved in the field.

Unit Bid Item 32 - Contaminated Soil Excavation and Disposal

1. Includes, but is not limited to, the following:
 - a. Excavation, management, testing, removal, and disposal of soil as asbestos contaminated waste.
2. Measurement: Actual net weight in tons of material delivered to treatment/disposal facilities, as measured by the permanent scales at the respective facilities. Total weight will be summation of weight bills issued by such facilities.
3. Payment: Will be paid per net weight, in tons, of material delivered to disposal facility.

Unit Bid Item 33 - Disposal of Lead-Hazardous Solid Waste

1. Includes, but is not limited to, the following:
 - a. Excavation, management, testing, removal, and disposal of material.

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2. Measurement: Actual net weight in tons of material delivered to treatment/disposal facilities, as measured by the permanent scales at the respective facilities. Total weight will be summation of weight bills issued by such facilities.
3. Payment: Will be paid per net weight, in tons, of material delivered to disposal facility.

Unit Bid Item 34 - Disposal of Non-Hazardous Solid Waste

1. Includes, but is not limited to, the following:
 - a. Excavation, management, testing, removal, and disposal of material.
2. Measurement: Actual net weight in tons of material delivered to treatment/disposal facilities, as measured by the permanent scales at the respective facilities. Total weight will be summation of weight bills issued by such facilities.
3. Payment: Will be paid per net weight, in tons, of material delivered to disposal facility.

END OF SECTION

SECTION 02300 EARTHWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contract Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 through 16 Specification Sections, apply to this Section.
- B. Hazardous Building Materials Inspection Report, March 2014.
- C. Draft Asbestos Abatement Plans, March 2014 by Fuss & O'Neill.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Excavating, backfilling, compacting, and grading the site to the elevations shown on the Drawings, before site disturbance, as directed by the Engineer, as specified herein, and as needed to meet the requirements of the construction shown in the Contract Documents.

1.3 DEFINITIONS

- A. ASTM: American Society for Testing and Materials
- B. Backfill: Soil materials used to fill trench and structure excavations.
- C. Borrow: Satisfactory soil imported from off site for use as fill or backfill.
- D. Excavation: Removal of material encountered above subgrade elevations.
 - 1. Additional Excavation: Excavation below subgrade elevations or indicated dimensions as directed by Engineer.
 - 2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work direct by Engineer, shall be without additional compensation.
- E. Fill: Soil materials used to raise existing grades.
- F. OSHA: Occupational Safety and Health Administration
- G. RIDOT: Rhode Island Department of Transportation
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding one cubic yard.

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- I. Structures: Buildings, footings, foundations, retaining walls, slabs, curbs, catch basins, manholes, appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below bedding, gravel borrow course, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables.

1.3 SUBMITTALS

- A. Product Data for the following:
 - 1. Fill/Backfill: Sources of material must be identified prior to delivery on-site for approval by the Engineer.
- B. Material Test Reports: For each on-site and borrow soil material proposed for backfill provide the following:
 - 1. Classification according to ASTM D 2487.
 - 2. Sieve analysis according to ASTM D 5519, and ASTM D 6913.
 - 3. Laboratory compaction curve according to ASTM D 1557.
 - 4. Laboratory reports demonstrating fill materials are Clean as defined in the Products section.

1.4 QUALITY ASSURANCE

- A. Where "Standard Specifications" is used, it shall mean "State of Rhode Island Department of Transportation Standard Specifications for Roads and Bridge Construction, Revision of 2010" and issued supplements.
- B. Use adequate numbers of workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- C. Use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.
- D. In addition to complying with requirements of governmental agencies having jurisdiction, comply with the directions of the Engineer.

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1.5 PROJECT CONDITIONS

A. Product handling:

1. Comply with manufacturer's recommendations.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide clean borrow soil materials when sufficient satisfactory native soil materials are not available from excavations. All materials are subject to approval by the Engineer. Clean shall be defined as soil that has not been impacted, contaminated, adversely affected, or subject to a Release of Hazardous Materials, State or federally defined Hazardous Waste, petroleum, asbestos, PCB's, radioactive materials, or solid waste. Soil meeting:
1. The RIDEM's Method 1 – Residential Direct Exposure Criteria (Table 1).
 2. The TPH direct exposure and leachability criteria of 500 ppm.
 3. Meeting all other State and federal requirements specific to petroleum, asbestos, radioactive material, PCB's, solid waste, and other criteria as determined by RIDEM.
- B. Satisfactory Soils: Free of debris, waste, frozen materials, vegetation, clay and other deleterious matter; adequately graded for satisfactory compaction.
1. On-Site Material: Native soil additionally free of organic matter, roots, and stones larger than 3 inches in any dimension.
 2. Borrow: Free of rock or gravel larger than 3 inches in any dimension; and meeting Standard Specification Section M.01.01.
- C. Borrow: Shall meet the requirements for Satisfactory Soils and the definition of Sandy Loam or Loamy Sand based on Unified Soil Classification System.
- D. Concrete Sand: Course, well-draining sand in accordance with AASHTO M6, or ASTM C-33.
- E. Topsoil: Soil material in accordance with Section 02490 Loam and Seed.
- F. Reclaimed and Processed Material: Borrow may be produced by reclamation of selected materials available within project limits, which are suitably proportioned and processed to produce a mixture of granular particles meeting the gradation requirements specified herein. Suitable materials may include: natural granular soils, boulders, or rock; unpainted concrete pavement; and other unpainted concrete, stone, or cinder block, recovered from existing foundations and buildings.

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Materials not allowed for reclamation shall include but are not limited to: rubber, plastic, glass, wood, reinforcing steel or other metallic materials; building materials which may be sources of lead or asbestos; components of septic, leaching bed, and sanitary sewer systems including soils, pipes, and structural concrete; soils or other materials contaminated by synthetic organic or inorganic compounds, metals, or petroleum hydrocarbon products.

Processing shall crush or pulverize and break down concrete conglomerations to produce a processed mixture complying with the gradation requirements specified in Column Ib, Table I in Subsection M.01.09.

2.3 OTHER MATERIAL

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways in accordance with Section 02220 Erosion and Sedimentation Control.

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 PROCEDURES

- A. Contact Dig Safe at 888-344-7233 at least 72 hours (exclusive of weekends and holidays) prior to commencing work as well as other utilities that do not participate in the Dig Safe program.
- B. Utilities:
 - 1. Unless shown to be removed, protect active utility lines shown on the Drawings or otherwise made known to the Contractor prior to excavating. If damaged, repair or replace at no additional cost to the Owner.
 - 2. If active utility lines are encountered, and are not shown on the Drawings or otherwise made known to the Contractor, notify the Engineer and secure his

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instructions.

3. If service is interrupted as a result of work under this Section, immediately restore service by repairing the damaged utility at no additional cost to the Owner.
4. If existing utilities are found to interfere with work under this Section, immediately notify the Engineer and secure his instructions.

C. Protection of persons and property:

1. Protect structures, utilities, sidewalks, pavements, and other facilities not to be removed from damage caused by settlement, lateral movement, washout, and other hazards created by operations under this Section.

D. Dewatering:

1. Remove all water, including rain water, encountered during trench and sub-structure work to an approved location by pumps, drains, or other approved methods.
2. Keep excavations and site construction area free from water.

E. Use means necessary to prevent dust from becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site, in accordance with Section 02200 Erosion and Sedimentation Control.

F. Maintain access to adjacent areas at all times.

3.3 EXCAVATION

A. Perform excavating of every type of material encountered within the limits of the Work to the lines, grades, and elevations indicated and specified herein. Provide all labor equipment, materials, and other items to complete all excavations whether open earth or trench.

B. Remove and dispose pavement in accordance with Division 2 Section "Site Clearing."

C. Remove and dispose structures in accordance with Division 2 Section "Site Clearing."

D. Strip debris piles and decayed vegetable mater from the project area.

E. Satisfactory excavated materials:

1. Transport to, and place in, fill or embankment areas within the limits of the Work.

F. Unsatisfactory excavated materials:

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1. Excavate to a distance below grade as directed by the Engineer, and replace with satisfactory materials.
 2. Include excavation of unsatisfactory materials, and replacement by satisfactory materials, as part of the work of this Section.
- G. Surplus materials:
1. Dispose of unsatisfactory excavated materials, and surplus satisfactory excavated material, away from the site to a disposal area arranged and paid for by the Contractor.
- H. Excavation of rock:
1. Where rocks, boulders, granite, or similar material is encountered, and where such material cannot be removed or excavated by conventional earth moving or ripping equipment, take required steps to proceed with the general grading operations of the Work, and remove or excavate such materials by means which will neither cause additional cost to the Owner nor endanger buildings or structures whether on or off the site.
 2. **Do not** use explosives without written permission from the Engineer.
 3. No rock shall be excavated or removed from within Natural Heritage Areas without written permission from the Engineer.
- I. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.
- J. Borrow:
1. Obtain material required for fill or embankment in excess of that produced within the grading limits of the Work from borrow areas selected and paid for by the Contractor and approved by the Engineer.
- K. Unauthorized excavation:
1. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific instruction from the Engineer.
- L. Stability of excavations:
1. Shore and maintain excavations in accordance with Division 2 Section "Excavation Support and Protection."
- M. Cold weather protection:
1. Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.

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3.4 FILLING AND BACKFILLING

A. General:

1. For each classification listed below, place acceptable soil material in layers to required subgrade elevations.
2. In excavations:
 - a. Use satisfactory excavated or borrow material.

B. Backfill excavations as promptly as progress of the Work permits, but not until completion of the following.

1. Removal of debris and trash.
2. Acceptance of debris removal by engineer.
3. Removing shoring and bracing.
4. Backfilling of voids with satisfactory material.

C. Ground surface preparation:

1. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from the ground surface prior to placement of fills.
2. Plow, strip, or break up surfaces steeper than one vertical to four horizontal, so that fill material will bond with existing surface.
3. When existing ground surface has a density less than specified under "compacting" for the particular area, break up the ground surface, pulverize, moisture-condition to the optimum moisture content, and compact to required depth and percentage of maximum density.

D. Placing:

1. Do not place backfill or fill material on surfaces that are muddy, frozen, or containing frost or ice.
2. Place topsoil, loam and muck using means and methods consistent with the final use and intent of the Drawings.

3.5 GRADING

A. General:

1. Uniformly grade the areas within limits of grading under this Section, including adjacent transition areas.
2. Smooth the finished surfaces within specified tolerance.
3. Compact with uniform levels or slopes between points where elevations are shown on the Drawings, or between such points and existing grades.

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4. Where a change of slope is indicated on the Drawings, construct a rolled transition section having a minimum radius of approximately 8'-0", unless adjacent construction will not permit such a transition, or if such a transition defeats positive control of drainage.
- B. Fine grade areas on a continuous basis until all elevations are established and areas are blended to adjacent existing contours and work.

3.6 COMPACTING

- A. Place backfill and fill soil materials in layers not more than 12 inches in loose depth for material compacted by heavy compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil material at optimum moisture content for the actual density of each layer of soil material in place, and as approved by the Engineer, according to the minimum percentage of density ASTM D1557.
- ~~1. Compact the top 8" of subgrade and each layer of fill material or backfill material at 90% of maximum density.~~
 - ~~2. Compact the upper 12" of filled areas, or natural soils exposed by excavating, at 85% of maximum density.~~
 1. Compact each layer of fill material or backfill material at 85% of maximum density.
- D. Moisture control:
1. Where subgrade or layer of soil material must be moisture-conditioned before compacting, uniformly apply water to surface of subgrade or layer of soil material to prevent free water appearing on surface during or subsequent to compacting operations.
 2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compacting to the specified density.
 3. Soil material that has been removed because it is too wet to permit compacting may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value as determined by moisture-density relation tests approved by the Engineer.

3.7 FINISH ELEVATIONS AND LINES

- A. All disturbed areas must be restored in accordance with Contract Drawings, to

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existing elevations, prior to land disturbance, or as directed by the Engineer.

3.8 MAINTENANCE

A. Protection of newly graded areas:

1. Protect newly graded areas from traffic and erosion, and keep free from trash and weeds;
2. Repair and reestablish grades in settled, eroded, and rutted areas to the specified tolerances.
3. Maintain erosion and sediment controls in accordance with Section 02200 Erosion and Sedimentation Control.

B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape, and compact to the required density prior to further construction.

END OF SECTION

**SECTION 02746
BITUMINOUS CONCRETE RECLAMATION**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contract Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 through 16 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Cold reclamation of existing pavement courses and underlying aggregate subbase course.
 - 2. Compaction.
 - 3. Grading.
 - 4. Disposal.

1.3 SUBMITTALS

- A. Material Test Reports: Certified by an independent testing laboratory that the following meets specified requirements.
 - 1. Reclaimed paving material redistributed on the Site.

PART 2 - PRODUCTS

2.1 MIXES

- A. Cold-Reclaimed Bituminous Concrete Pavement: Blended, homogeneous mix of pulverized underlying soil material and bituminous concrete paving material, meeting the following gradation.

- 1. Reclaimed Material Gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
2"	100
3/4"	50-85
No. 200	2-15

- 2. The maximum dimension of any stone, rock or cobble shall be not more than 2 inches.

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BITUMINOUS CONCRETE RECLAMATION

3. The maximum dimension of any piece of asphalt-bound material shall be not more than 1-1/2 inches.
4. Should additional material be required to meet gradation requirements, the Contractor shall add fill material from an outside source which shall be thoroughly worked and mixed in with the pulverized asphalt pavement and existing gravel base.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Remove and dispose utility structures, fences, site furnishings, concrete foundations and all other obstructions to be demolished or removed prior to pulverization to minimize interference with reclamation process.

3.2 COLD RECLAMATION

- A. Reclaimer. Reclamation will be by means of a traveling rotary reclaimer or equivalent machine capable of cutting through existing asphalt and gravel at depths up to 12 inches with one pass and which can effectively pulverize, crush, mix and blend the recyclable materials so as to form a homogeneous mixture of processed material. The machine shall be self-propelled and equipped with an adjustable grading blade so as to leave its path generally smooth.
 1. Utilize only equipment specifically designed for this function.
 - a. Equipment such as road planers or cold milling machines designed to mill or shred the existing bituminous concrete, rather than crush or fracture it, will not be permitted.
- B. Pulverization/Asphalt Reclamation: Asphalt pavement shall be pulverized and mixed in situ with the uppermost portion of the underlying soil material. The depth of reclamation, including the pavement and portion of the underlying soil material, to be incorporated in the rehabilitation process will be 12 inches below existing surface grade.
- C. Blending: The pulverization shall blend the asphalt and underlying soil material into a homogeneous mixture. After the first pulverization and rough grading, the aggregate mass shall be pulverized again to ensure proper asphalt and soil material blending to the desired depth.
 1. The reclaimed material shall be fine graded in accordance with the lines and grades shown on the Drawings.

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BITUMINOUS CONCRETE RECLAMATION**

2. Add additional borrow material as required to alter the gradation of the reclaimed material or as required to raise grades.
 - a. Add borrow during the pulverization process to achieve a thorough mix and blend of material.

3.3 COMPACTION

- A. Compact material in accordance with Division 2 Section "Earthwork".

3.4 GRADING

- A. Grade and prepare material as topsoil subgrade in accordance with Division 2 Sections "Earthwork" and "Loam and Seed".

3.5 DISPOSAL

- A. Dispose of unsatisfactory excavated material and surplus reclaimed asphalt away from the site to a disposal area arranged and paid for by the Contractor.

END OF SECTION