City of Pawtucket, RI

***** Addendum #3 *****

RFP # 26-013

Design/Build: Engineering Design, Fabrication and Installation Services for Radio Tower

April 7, 2026

The attention of bidders submitting proposals for the above-referenced project is called to the following Addendum to the Request for Proposals indicated above. The items set forth herein, whether of omission, addition, substitution or other change, are all to be included in, and form a part of the proposed Contract Documents for the work.

Inclusion of this Addendum must be acknowledged in the spaces provided in the document entitled "Request for Proposals RFP #26-013 – Design/Build: Engineering Design, Fabrication and Installation Services for Radio Tower." Failure to acknowledge any and all addenda in the above specified bid form may be cause for rejection of the bids by the Owner on the grounds that it is not responsive.

ADDENDUM ITEMS

This Addendum consists of (Five (5) pages plus one Attachment)

1. **QUESTIONS & ANSWERS –**

Q1: **Is the bid acceptance time supposed to be 12:00PM instead of AM?**
A1: Yes. See Addendum #1

Q2: **Is the grounding design to be in accordance with the National electric code, or per Motorola R-56 grounding standards? If to R-56, a design is required and materials and labor will cost more.**

A2: R56 since it is a public safety communications tower

Q3: **Will building permit fees be waived?**

A3: Yes, all permits will be waived with exception to the Rhode Island State ADA permit fee or any state environmental fees.

Q4: **For bidding purposes because borings were not previously performed and we have no Geotech information, should we figure normal soil conditions for excavation, backfill and tower design? Water, ledge, bad soils, etc., can greatly affect the cost of the foundation and excavation.**

A4: Please review attached soil management plan of the existing site/soil conditions.

Q5: **Can you supply the bidders with all antenna and dish specifications, and heights? This info is required by tower manufacturers for quote and design.**

A5: It is a single 2-foot parabolic microwave dish (about 25 lbs.) and a single omni-directional stick antenna (approx. 3 lbs.) and the associated wiring from dish and stick to the communications cabinet. Stick height 97FT AGL, 162FT MSL.

Q6: **Because there is a 6-gang meter bank going in It is assumed that the tower is going to have other tenants on the tower. If this is correct, the bidders will need future loading info and an additional percent for future loading. As an example; 1ea. 4' MW. dish elev. 80-90', 3ea. cellular carriers elev. 110- 140'+-, and additional 20% loading for future. This is needed to get a tower quote from the manufacturer**.

A6: The City wishes to have the capability for future tenants on the tower. It is currently unknown as to which potential customers will lease the tower surface so that cannot be answered at this time. The deliverable is to provide tower well equipped to support industry standard communications equipment, at minimum.

Q7: **Is the General contractor expected to attend planning/ zoning board meetings, or just apply for the building and electrical permits?**

A7: The contractor is required to attend to any planning/board meetings, unless directed otherwise.

Q8: **Who is responsible for moving the T-Mobile antenna from the existing smoke stack?**

A8: T-Mobile is contracted and required to move their equipment from the existing smoke stack. This will take place on an unknown date sometime this year.

Q9: **Where is the location of the proposed tower?**

A9: The proposed tower location is directly west bound at the property line of the facility. Please reference the generic plan view of the location's approximate vicinity below.

Q10: The site is controlled by an ELUR or other environmental restrictions. Is the current soil management plan noted in the RFP or available to share if not noted?

A10: Please review attached soil management plan of the existing site/soil conditions.

Q11: Can any contaminated soils that are generated by the excavation of the tower be disposed of on-site? If yes, will testing be required prior to moving?

A11: Yes, dumping of soil material onsite is acceptable. There will not be additional testing required.

Q12: Provide final tower location within the project site, including surveyed coordinates or defined layout.

A12: The proposed tower location is directly west bound at the property line of the facility. Please reference the generic plan view of the location's approximate vicinity below.

Q13: Confirm whether a survey with control points will be provided, or if contractor is responsible for full site survey and layout.

A13: Contractor is responsible for full survey and layout.

Q14: Confirm baseline geotechnical conditions and whether differing site conditions will be treated as a change order.

A14: The City has provided a soil management plan with this addendum. If there are any differing site conditions outside the contractor's proposed scope, a change order will be considered.

Q15: Confirm basis of foundation design for bidding purposes (standard drilled pier, spread footing, or conservative design assumption).

A15: The city is reliant on the contractor to provide these details.

Q16: Confirm whether stormwater management or drainage design is required as part of this scope.

A16: Stormwater management or drainage design shall be considered as part of this scope of work.

Q17: Clarify limits of grading and site restoration beyond the defined compound area.

A17: The limits will be dependent upon the contractors suggested engineered submittals.

Q18: Confirm availability of existing underground utility information or if contractor assumes full responsibility for investigation.

A18: The city will provide any records of existing underground utility records. Subsequently, the contractor assumes full responsibility of existing underground utilities

Q19: Confirm whether any known environmental or contaminated soil conditions exist at the project site.

A19: A soil management plan is included with this addendum.

Q20: Clarify responsibility for utility coordination, including engagement with power company and associated costs.

A20: Coordination for utilities will be the responsibility of the contractor. However, the city's project manager will assist with coordination and locations as needed.

Q21: Confirm that existing utility infrastructure has sufficient capacity for proposed electrical service, or if upgrades are anticipated.

A21: It is anticipated that the facility has sufficient capacity for utility services.

Q22: Confirm that all owner-furnished equipment (generator, ATS, radio cabinet, antennas) is functional and suitable for reuse.

A22: The city confirms that all referenced items are functioning and are suitable for reuse.

Q23: Confirm governing design criteria including wind loading, ice loading, seismic requirements, and applicable code edition.

A23: The city confirms that all the above referenced requirements must be considered and submitted which shall be included in the engineering plan details.

Q24: Clarify full permitting scope, including zoning approvals, variances (if required), and environmental permitting responsibilities.

A24: The contractor will provide to the city all permitting scopes for this project. All city permitting requirement fees will be waived. All state and environmental fees will be the responsibility of the awarded contractor.

Q25: Confirm available laydown, staging, and construction access areas within the site.

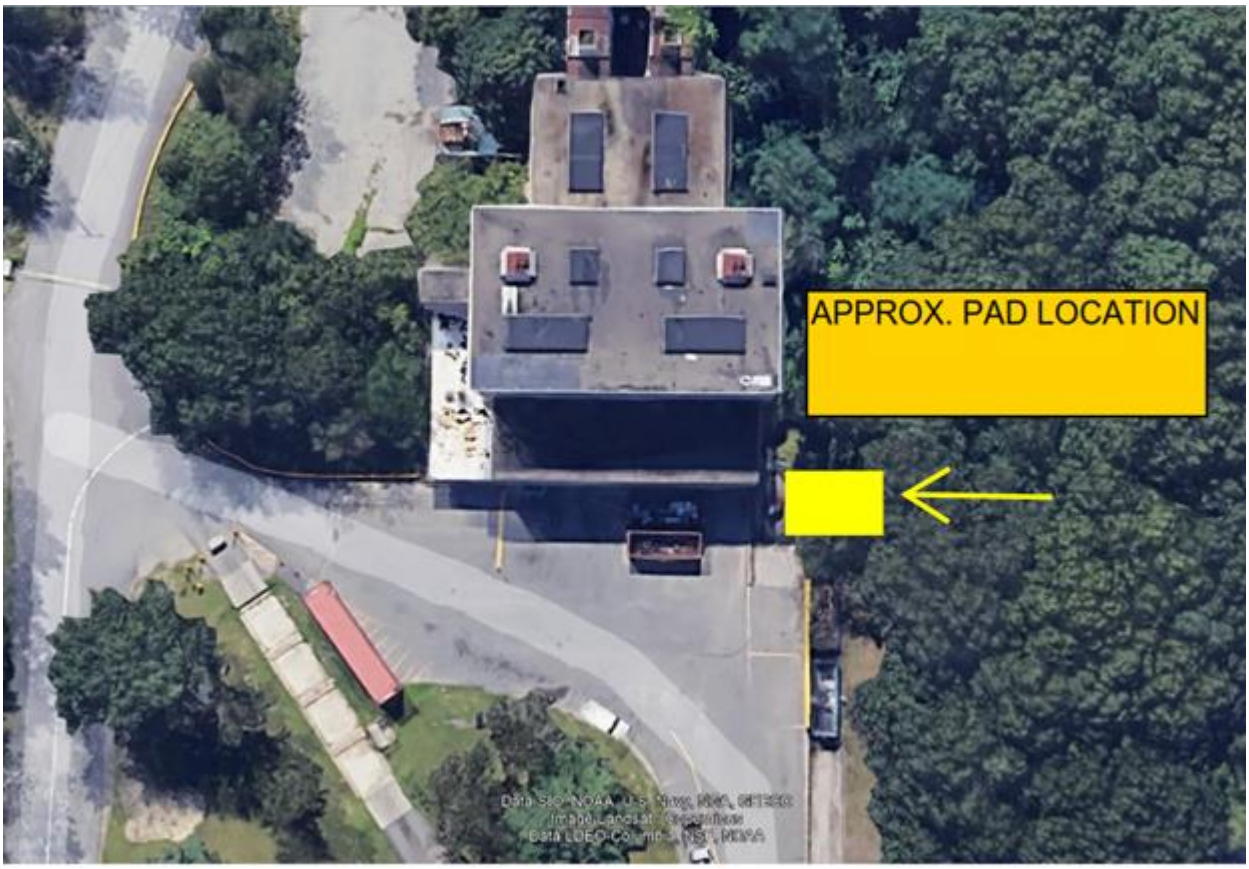
A25: Laydown, staging, and construction access will be available. The precise location will be located on the same parcel where the tower will be erected.

Q26: Confirm whether conceptual design submitted with proposal establishes the basis of design, or if further design development is expected post-award.

A26: It is expected that the conceptual design submitted with the proposal establishes the basis of design, and in turn the pricing that is submitted with the proposal.

Q27: Clarify intended use and administration of the $25,000 allowance included in the bid form.

A27: The intended use for the $25,000 allowance is to be utilized in the event of unforeseen and unpredicted scenarios throughout the project's timeframe.



Joe Morais

Senior Project Leader

PAWTUCKET GROTTO AVENUE LANDFILL CLOSURE PROJECT

SOLID WASTE BENEFICIAL USE DETERMINATION

FORMER PAWTUCKET INCINERATOR LANDFILL SITE

240 GROTTO AVENUE

PAWTUCKET, RI

Prepared for:

City of Pawtucket
137 Roosevelt Avenue
Pawtucket, RI 02860

Prepared by:

Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02865

Charter RI Landfill Services, LLC
500 Harrison Avenue, Suite 4R
Boston, MA 02118

OCTOBER 2023

PARE CORPORATION

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APPENDICES

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Section 1 – Introduction

This Beneficial Use Determination (BUD) application has been prepared by Pare Corporation and Charter RI Landfill Services, LLC on behalf of the City of Pawtucket, Rhode Island to request a variance from the Solid Waste Regulations to beneficially use unconsolidated, granular earth materials such as urban fill, street sweepings, and brick and concrete, as well as other granular earth materials as part of the Pawtucket Grotto Avenue Landfill Closure Plan. The earth materials would be used as shaping and grading materials to obtain the desired grading and drainage features proposed for the Pawtucket Grotto Avenue Landfill. The overall program is designed to improve conditions at the Grotto Avenue Landfill site by creating an engineered closure system (i.e., cap) that will prevent direct exposure to incinerator ash, impacted soils, and partially buried solid waste, as well as promote positive drainage at the Site and improve the water quality of the nearby Moshassuck River.

The City of Pawtucket owns an inactive former municipal landfill located on Grotto Avenue in Pawtucket (refer to Appendix A – Site Locus and Appendix B – Conceptual Site Plan). Disposal activities ceased at the Site in the 1980s. However, the landfill was never properly closed in accordance with applicable RIDEM regulations. Specifically, RIDEM never issued a certification of closure for the landfill. Consequently, the landfill is currently listed on the United States Environmental Protection Agency (US EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and is subject to regulatory enforcement of the USEPA and RIDEM.

For Rhode Island cities and towns to officially close their inactive landfills and archive their status with respect to the CERCLIS list, RIDEM initiated a voluntary Landfill Closure Program (LCP) as detailed in RIDEM's March 2001 Closure Policy for Inactive or Abandoned Solid Waste Landfills. The City of Pawtucket elected to conduct an investigation of the landfill through RIDEM rather than through the US EPA and has notified RIDEM accordingly. The investigation of the landfill was performed in 2002 by Fuss & O'Neill and submitted to RIDEM in January 2003. A Remedial Action Work Plan (RAWP) and Landfill /Closure Plan were submitted to RIDEM in 2008. RIDEM approved the RAWP in June 2009. A copy of the Remedial Approval Letter (RAL) issued by RIDEM is provided in Appendix C. The Remedial Action was never implemented due to lack of funds. Approval of this BUD will create a revenue stream that will generate the necessary funds to implement the Remedial Action Work Plan and Closure Plan and may also fund the demolition of the existing incinerator facility. The Closure of the landfill and demolition of the

abandoned incinerator facility would not be possible without the revenue stream created by the BUD material.

A revised RAWP and Closure Plan reflecting the intent to use the approved BUD materials will be filed subsequent to the submission of this BUD to the RIDEM.

This BUD application covers the following categories of materials that, if not used for the purpose of shaping or grading at a closed landfill, would likely otherwise be disposed at a solid waste landfill:

- Urban fill;
- Incinerator ash;
- Street sweepings;
- Catch basin cleanings;
- Dredge spoils; and
- Construction and demolition screenings.

These materials will be collectively referred to as "BUD material" for the purpose of this application. In total, this project is seeking approval for approximately 400,000 to 525,000 cubic yards of BUD material for use in the landfill closure project.

Section 2 – Required Information/Data

This BUD application addresses the necessary information to beneficially reuse/recycle a variety of unconsolidated granular earth materials that would otherwise be considered a solid waste and disposed of as such at the Central Landfill in Johnston, Rhode Island or other solid waste facilities in New England. The application is for reusing unconsolidated, granular earth materials that meet specific acceptance criteria, as detailed herein, as shaping and grading materials in support of the Landfill Closure Plan. The following information required by RIDEM as detailed in RIDEM Policy Document WM-SW-2007-01 is included in this BUD Application. Each factor/consideration to be addressed by the BUD applicant is presented below in italicized text followed by a response.

2.1 Minimize or Eliminate Environmental Hazards

How will any environmental hazards associated with the proposed recycling of solid waste be minimized or eliminated?

The potential hazards associated with re-using BUD material for this project primarily include direct exposure to soils that have contaminant concentrations above the RIDEM Residential Direct Exposure Criteria (R-DEC) and in some cases above the RIDEM Industrial/Commercial Direct Exposure Criteria (I/C-DEC). Direct exposure could be created through direct handling of the material without proper PPE, unmitigated dust, or uncontrolled erosion of loose material onto neighboring properties. A potential hazard also includes migration of contaminated soils into environmentally sensitive areas such as nearby wetlands or the Moshassuck River. These environmental hazards will be controlled through a number of industry-standard practices such as pre-characterization of the soils, dust control, sediment control systems (silt fences, haybales, and berms), stormwater management, and materials handling and staging practices. These practices are described in detail in Section 2.6 of this BUD.

Generally, the types of materials to be reused/recycled at the Site are expected to be below RIDEM I/C-DEC with the exception of lead, arsenic, and polyaromatic hydrocarbons (PAHs). These contaminants are already present at the landfill at elevated concentrations and importing materials at similar concentrations along with strict environmental controls will not increase the hazard to the surrounding population or significantly degrade the surrounding environment. The landfill will be capped with soil below R-DEC eliminating any current or future exposures.

2.2 Recycled Solid Waste Material

To what degree will the recycled solid waste material be analogous to commonly used raw materials and how will the use of this material result in a viable and beneficial substitution of a discarded material for a commercial product or raw material?

The proposed BUD material is expected to have a distribution of grain sizes similar to naturally occurring soil and/or commercially produced common fill and, as such, will make a suitable shaping and grading material for landfill closure. By using BUD material for shaping and grading, this project is expected to eliminate the need for a substantial volume of clean natural fill necessary to shape and grade the former landfill. By reducing the volume of clean natural fill required at this Site, this project will, to a degree, protect the natural resource of clean fill materials by reducing the demand for clean natural fill as a raw material in the state. As such, the use of the materials sought as part of the BUD application is the reuse of what would otherwise be a discarded material as a beneficial substitution of clean natural soils; hence both reducing the amount of waste soils to be disposed and reducing the demand on natural resources.

2.3 Protection of Natural Resources and Public Health

How will the proposed recycling and reuse of the solid waste in question protect the natural resources of the state? In addition to discussing how and to what extent the reuse of the solid waste in question will conserve the limited and finite capacity of the state's solid waste landfills, your response must also address why the proposed use of the recycled solid waste will not present a threat to public health or the state's groundwater, surface water, air, or other environmental resources.

The protection of natural resources associated with this BUD application will take three forms:

1) By re-using BUD material there will be a reduced demand for clean natural soils, which will reduce earth moving activities on sites where natural materials would be removed (i.e., mined or quarried), and will, therefore, preserve natural resources at and around those source sites and reduce, to some degree, the statewide demand for clean soil which is a natural resource. By reducing the demand for natural materials, there will also be a corresponding reduction in greenhouse gas emissions from mining and transportation equipment.

2) Much of the proposed BUD material will be sourced from impacted sand and contaminated sites around the area which will contribute to the remediation of the environment (both the natural environment and built environment) which will preserve and, in some cases, restore natural resources at those contaminated sites.
3) This project will employ environmental controls to mitigate the migration of contaminated soils to the surrounding environment, thereby protecting nearby surface waterbodies. Dust control measures shall be utilized to minimize impacts to the air. Pre-characterization of soil will eliminate highly leachable contaminated soil from being accepted at the Site, and the Site will be capped at the completion of this project further reducing the risk of contaminants leaching into groundwater. Erosion and sediment controls will improve stormwater runoff quality into the Moshassuck and capping activities will prevent direct exposure to the underlying soils.

In addition, recycling and reusing BUD material will prevent these materials from needlessly contributing to the waste volume going to the state's sole remaining landfill. This project is seeking approval for approximately 400,000 to 525,000 cubic yards of BUD material to be used over an estimated period of three years. Much, if not all, of this material will be sourced from sites in Rhode Island inclusive of local Rhode Island municipalities. This project could potentially divert 400,000 to 525,000 cubic yards of material away from the state's landfill over a three-year period.

2.4 Guaranteed End Market

To what extent is there a guaranteed end market for the recycled solid waste material to be produced?

This BUD application is not seeking to produce material that would be sold or traded on the open market. Rather this BUD application is seeking to create a market for material that already exists but is disposed at central landfill. Approximately 400,000 to 525,000 cubic yards of shaping and grading material are needed to close the landfill and as such this project represents a guaranteed end market for these materials.

2.5 Recycled Materials will not be Detrimental to the Environment

Why will the proposed recycling and reuse of solid waste not degrade the environment?

The re-use of the BUD material will not degrade the environment, but rather its re-use will benefit the environment. Generally, the materials sought in this application exist in the environment at various contaminated sites across the area, in many cases in an uncontrolled state. This project seeks to consolidate these materials onto one site and cap them beneath an engineered control. This project will contribute to the remediation of numerous sites in the state and surrounding area as well as provide a cost-effective and productive use of street sweepings and catch basin cleanings. In addition, the final disposition of this Site will be a capped landfill with institutional controls that will improve the environment at and around the Grotto Avenue landfill site. Strict environmental controls will be utilized during the acceptance and placement of BUD material to ensure that the BUD material does not degrade the environmental during the interim period between the start of the project and the final capping of the landfill.

2.6 Operational Controls

Identify and discuss the controls (e.g., environmental, engineering, institutional, etc.) that will be used to properly and safely recycle and reuse the solid waste.

a. The total quantity of BUD materials sought in this application is expected to be approximately 400,000 to 525,000 cubic yards.

b. The maximum quantity of BUD material to be stored at the Site at any one time is expected to be approximately 2,000 cubic yards. "Stored at the Site" is understood to mean received and stockpiled prior to being placed upon the landfill in its final location. In general, incoming loads will be received, weighed, and tipped in the area where the BUD material will remain in perpetuity. However, at times where the volume of incoming material exceeds the capacity of the operators of the Site to grade and compact BUD material, incoming loads may be tipped in temporary stockpiles and later moved to their final location. In addition, some BUD material that is generally low in contaminant concentrations, free of odorous material, and has generally good workability will remain stockpiled and available to be either blended into incoming materials to improve the overall physical characteristics of the material and/or as cover for any incoming loads that may be particularly odorous or pose a higher-than-normal dust risk. The operator of the site reserves the right to increase the amount of stored material if they anticipate a significant amount wet, odorous, or otherwise difficult manage material is coming to the site.

c. The source of the BUD material will be from various sites around Rhode Island and the surrounding area. Every load of BUD material that is accepted will have documentation on the generator, which will include but will not be limited to the name, address, phone number, and contact information and correlated with the chemical and physical properties of the incoming material.

d. The source of the BUD material is expected to be a number of sites across Rhode Island and the surrounding area. The process by which this material will be produced will vary depending on the type of BUD material. In most cases, the BUD material will be generated through the development or redevelopment of impacted urban sites. Catch basin cleanings and street sweepings will be produced primarily through municipal and state roadway maintenance and stormwater management activities. Dredge spoils will be produced through marine and freshwater dredging projects, which may be public or private projects. CD screenings will be produced as part of a construction and demolition debris processing operation.

e. The BUD material will be unconsolidated, granular, earth materials suitable for shaping and grading. Generally, the material shall be free of particles larger than 4 inches and free of solid waste, stumps, wood, metal, smoldering material, free liquid, or other prohibited wastes. The material shall meet the acceptance criteria specified in **Appendix D**.

f. The nature of this application, i.e., to use BUD material to shape and grade an abandoned landfill, is not expected to generate any significant volumes of waste material. It is expected that each and every load of incoming material will be used for its intended purpose; however, some foreign debris, and cobbles/boulder larger than 4-inch diameter are inevitably going to be present in urban fill and catch basin cleanings. Unacceptable materials will be screened out through physical and mechanical means and segregated for off-site disposal at an appropriate facility.

g. Incoming BUD material will be subject to inspection upon arrival at the facility and compared to the material profile fact sheet for soil characteristics, grain size, color, odor, and physical characteristics. Material not meeting the material profile sheet will be rejected as non-conforming.

h. Incoming loads will be tipped on the landfill in an area at or near the BUD material's final location. Some incoming loads will be stored and processed in a designated area until ready for use as shaping and grading materials. To minimize losses that could occur though erosion, dust migration, and off-site tracking, strict environmental controls will be implemented. These controls will include

erosion controls around the perimeter of the Site and temporary erosion controls near the working area of the Site and any stockpiles, dust control, tracking pads, and tire/wheel washing stations.

i. Solid waste materials such as glass, paper, and plastic wastes inherent in the incoming material will be separated from the BUD material and placed in roll-off dumpsters for off-site disposal at the Central Landfill. Some small amounts of inert solid waste materials are expected to remain which will be negligible to the handling process and will be placed beneath the final landfill cover/cap. If other waste is suspected or identified in any incoming load that may be unsuitable for acceptance at the Central Landfill, that material will be containerized, characterized, and transported off-site for disposal at an appropriate facility.

j. Environmental controls shall include the following, which will be depicted in detail in the upcoming RAWP and RI Pollution Discharge Eliminated System (RIPDES) applications, which are both under development currently.

    i. Dust will be controlled through wetting of active areas of the operational face of the landfill, as well as along access roads. A sweeper will be available on-site for periods when water application is unsafe or ineffective such as during winter months (due to icy and freezing conditions). Side slopes or areas that are not expected to receive incoming loads for a significant period of time will be covered with erosion control blankets, mulch, wood chips, or temporarily vegetated. Temporary vegetation will be achieved through hydroseeding, which is expected to be performed in the spring and fall. At the conclusion of this project, the former landfill will be capped with an engineered control that will adequately control dust from the underlying BUD material.

    ii. Sediment migration will be controlled through the use of perimeter sediment barriers (e.g., compost filter socks) and temporary sediment traps. Sediment barriers and sediment traps will also be located in areas near the working face of the landfill. Tracking pads will be installed on-site to prevent sediment tracking off-site. In addition a truck washing station and/or a sweeper will be utilized if tire tracking is inadequately controlled with tracking pads. At the end of this project, the former landfill will be capped with an engineered control that will adequately control sediment migration.

    iii. Stormwater runoff will be managed through a series of temporary stormwater controls that will be installed during the three-year period when BUD material is being accepted. As part of the closure of the landfill, permanent stormwater management controls will be installed

that meet the requirements of the RI Design and Installation Standards Manual. Both the temporary and permanent stormwater management systems will be included in the project's RIPDES permit application which is under development currently.

iv. Erosion control measures will include sediment barriers and temporary sediment traps. In addition, side slopes and areas that are not expected to receive BUD material for three months or more will be covered or temporarily vegetated to prevent erosion.

2.7 Method of Disposal

Explain why the proposed recycling of solid waste is not simply an alternate method of disposal. The Director may require information regarding the estimated value of the solid waste material both before and after it is recycled.

The proposed use of BUD material is not another method of disposal because the BUD material is displacing commercially available clean natural material that would be used for this same purpose. In addition, the proposed BUD material will serve an important function, which is to provide a uniform stable surface that promotes proper drainage from the landfill surface. If the project did not have access to BUD material, this function would be met with commercially available clean natural material from either a quarry or fill processing facility. Also, if this project were not to use BUD material, much of the BUD material proposed would be disposed of in area landfills as solid waste. As such the use of BUD material is not a form of disposal and reduces solid waste disposal through diversion of this material to a beneficial use.

2.8 Processing

What degree of processing has the solid waste material undergone and degree of further processing is required, if any? The applicant must demonstrate that any mixing of different types of material improves the usefulness of the recycled solid waste material.

Any accepted BUD material is expected to require minimal processing prior to its use as fill for grading/shaping purposes. It is anticipated that some materials (such as catch basin cleanouts) may have higher organic content or fines that may need to be mixed with coarser-grained materials (such as brick and concrete or street sweepings) to achieve the proper grain-size distribution for use as a shaping and grading material. Adequate storage exists onsite for the processing of different types of materials to achieve this goal.

2.9 Compliance with Applicable Standards

Where the project in question includes the reuse of any soil impacted by known or suspected contamination, or the use of any recycled solid waste as a "manufactured soil product" (i.e., solid waste that is or has been altered or rendered into a material with soil type properties), the applicant must demonstrate the use of these materials at the location in question:

a. *Is compliant with the Residential Direct Exposure Criteria for soils listed in Rule 8.02 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases;*
b. *Is compliant with the Compost Quality and Distribution Standards listed in Rule 8.8.00 (Compost Product Requirements and Distribution) of the Solid Waste Regulations.; and*
c. *Will not result in degradation of the environment.*

The goal of this BUD application is to beneficially use unconsolidated, granular earth materials such as urban fill, street sweepings, and brick and concrete, as well as other granular earth materials as part of the Pawtucket Grotto Avenue Landfill Closure Plan. The earth materials would be used as shaping and grading materials to obtain the desired grading and drainage features proposed for the Pawtucket Grotto Avenue Landfill. The overall program is designed to improve conditions at the Grotto Avenue Landfill site by creating an engineered closure system (i.e., cap) that will prevent direct exposure to incinerator ash and impacted soils as well as promote positive drainage at the site and improve the water quality of the nearby Moshassuck River. Operational controls, such as pre-characterization of incoming materials, active dust control measures, erosion controls, stormwater controls, site security, waste handling procedures, grading measures and final capping are all expected to reduce current exposures and improve site conditions.

The final capping material will be compliant with the Residential Direct Exposure Criteria for soils listed in Rule 8.02 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*, the Compost Quality and Distribution Standards listed in Rule 8.8.00 (Compost Product Requirements and Distribution) of the Solid Waste Regulations and will not degrade the environment.

Imported materials for shaping and grading will be tested for pollutants listed in **Table 1** Direct Exposure Criteria of the Remediation Regulations set forth in 250 RICR 140-30-1 and must meet the acceptance criteria indicated in **Appendix D**. Imported materials will contain unconsolidated, granular earth materials consistent

with common fill suitable for reuse as shaping and grading materials. As the material is expected to sometimes exceed the RIDEM DEC Residential Direct Exposure Criteria concentrations, the material will be encapsulated within an engineered cap and an institutional control (e.g., Environmental Land Use Restriction (ELUR) will be placed on the Site to bring it into compliance with the *Remediation Regulations*;

2.10 Land Application and Controls

Whenever the proposed end use for a recycled product involves a land application, the applicant shall address the need for applicable engineering standards and controls in accordance with the Solid Waste Regulations (e.g., final cover systems, leachate collection and removal systems, and gas control and recovery systems) to provide for the safe land application end use of BUD materials. End uses involving land application shall be presumed to be low utility uses subject to heightened scrutiny as to whether the use constitutes beneficial reuse or is simply an alternative means of disposal.

Authorization to beneficially reuse the earth materials as proposed would preserve finite, limited capacity at the State's sole landfill facility in Johnston, Rhode Island while also providing the City of Pawtucket significant financial relief from the ever-rising costs of importing clean common fill and also provide the revenue stream necessary to make the landfill closure program financially possible.

Fundamentally, this project is a landfill closure project and, therefore, will comply with all the requirements of the Solid Waste Regulations. Engineering standards relative to dust control, sedimentation and erosion control, odor controls and materials handling, final capping systems, leachate collection and gas ventilation will be employed in accordance with the Solid Waste Regulations and Best Management Practices. Furthermore, imported materials used for shaping and grading will be placed beneath a final engineered cap with institutional controls in place to prevent future direct exposure to landfill materials. The design of the future engineered cap will be presented in the RAWP which is under development currently.

2.11 Characterization Plan

Provide a characterization plan that includes protocols for sample collection and analyses designed to provide a representative characterization of the waste material.

a. Sample methodology (i.e., locations, times, frequency per volume etc.). The BUD material will be

subject to an application process where the applicant must demonstrate that the materials would be suitable for reuse as shaping and grading materials and meets the acceptance criteria shown in **Appendix D**. Representative samples of the materials must be collected and submitted for analysis of pollutants listed in the *Remediation Regulations*, *Table 1 Direct Exposure Criteria* for soil. Analytical results will be compared to the Acceptance Criteria shown in **Appendix D**. This data will form the basis of a material profile sheet used to compare against incoming materials. Materials that do not appear consistent with the initial description of the material either in physical or chemical characteristics will be rejected as non-conforming.

b. Composite samples (minimum five-point composites) of BUD material will be collected at a frequency of one sample per 500 CY, with generally no fewer than two samples per source (unless it can be demonstrated that the applicant material is homogenous and of small volume). Conversely, more aggressive sampling frequency maybe requested for particular sources of materials with significant variability or range of contaminants of concern, at the discretion of the facility manager. Similarly, the sampling frequency for a full chemical profile may be relaxed to one sample every 1000 CY at the operator's discretion, if the incoming material is shown to be homogenous in nature with little variability in contaminant concentrations.

c. The following analytical methods must be used to establish the chemical profile of incoming materials and identify potential contaminants of concern (COCs):

Volatile Organic Compounds	EPA Method 8260B
Semi-volatile Organic Compounds	8270D
Polychlorinated Biphenyls	EPA Method 8082A
CERCLA 13 Priority Pollutant Metals And barium	EPA Methods 6010D
Total Mercury	EPA Method 7471A
Total Petroleum Hydrocarbons	EPA Method 8100

Additional parameters may be needed depending upon the site-specific origin of the materials being considered. C&D fines will need to be tested for asbestos fibers using Polarized Light Microscopy in addition to any site-specific contaminants of concern (including sulfates) at the discretion of the operator. Soil containing TCLP constituents

above the toxicity characteristic threshold will need to be treated in-situ at the point of origin and subject to increased sampling frequency (1 sample for every 100 tons of treated soil) and subject to site-specific quality control measures acceptable to the facility. The QEP and the generator will both need to sign certifications that the material has been adequately treated and tested to remove the toxicity characteristic associated with the materials. Any soil containing underlying hazardous constituents (i.e. listed hazardous constituents) will need to be accompanied by a QEP opinion addressing such contaminants and their relationship to the EPA "Contained -in" policy as applicable. The owner, operator and the consultant reserve the right to refuse any such materials.

d. Physical/chemical analyses (i.e., grain size, density, percent solids, liquid content, pH, toxicity TCLP test, if needed). Incoming materials must meet the acceptance criteria established in Appendix D inclusive of the physical properties indicated above.

e. Pathogens tests are not necessary for applications such as fill for grading/shaping. In the event that any material or load is suspected of having an elevated risk of pathogens, such material will be rejected.

f. BUD material will originate from several different processes including municipal infrastructure projects within public rights of way, street sweepings, catch basin cleanings, brick and concrete, and demolition projects, but all are expected to have geotechnical properties amenable to use as a shaping and grading material with little to no processing. Some material blending is expected to improve fine-grained materials but otherwise, the materials are anticipated to replace commercially available common fill.

g. In general, composite samples (minimum five-point composites) will be collected at a frequency of one sample per 500 CY of BUD material, with no less than two samples per source unless specifically waived. This standard may be increased at the facility manager's discretion or relaxed. Sampling frequency may be altered if the incoming material is variable in nature or approaches the acceptance criteria, conversely, sampling frequency may be relaxed if the material is shown to be uniformly low in impact and homogenous in nature with little variability in contaminant concentrations.

h. Whereas the materials proposed for reuse will be generally consistent with RIDEM Industrial/Commercial standards, except for those compounds (lead, arsenic and PAHs) for which a site specific approval criteria has been sought, there is no expected increase in risks to human health and ecological risks and whereas the final capping material will be compliant with the Residential Direct Exposure Criteria for soils listed in Rule 8.02 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*, conditions are expected to improve.

i. Verification sampling and analysis plan will include a comprehensive written report identifying the concentration/distribution of contaminants of concern (COCs) in the Fill Application Package. Each application package will remain on record and available for review. The Sampling and Analysis Plan used to collect the unconsolidated, granular, earth materials samples is included in **Appendix E**.

2.12 Financial Assurance

Any person involved in the storage, handling, processing, or use of solid waste for beneficial reuse shall be required to provide financial assurance that:

a. The project approved in the BUD will be completed; and/or

b. Any unused solid waste/beneficial reuse material will be properly removed and disposed of upon completion of the project or if project operations cease for any reason.

Charter RI Landfill Services, LLC will secure a bond sufficient to meet the conditions stated above.

2.13 Additional Information Requested by RIDEM

Additional information will be provided if requested by RIDEM. Please contact the City, Charter, or Pare Corporation at the numbers listed below if additional information is required.

City of Pawtucket
Chris Crawley
Maintenance Manager
Department of Public Works
250 Armistice Blvd
Pawtucket RI 02860
401-728-0500 ext 272

Charter RI Landfill Services, LLC
Alasdair Cunningham
Project Manager
500 Harrison Avenue, Suite 4R
Boston, MA 02118
617-448-1420

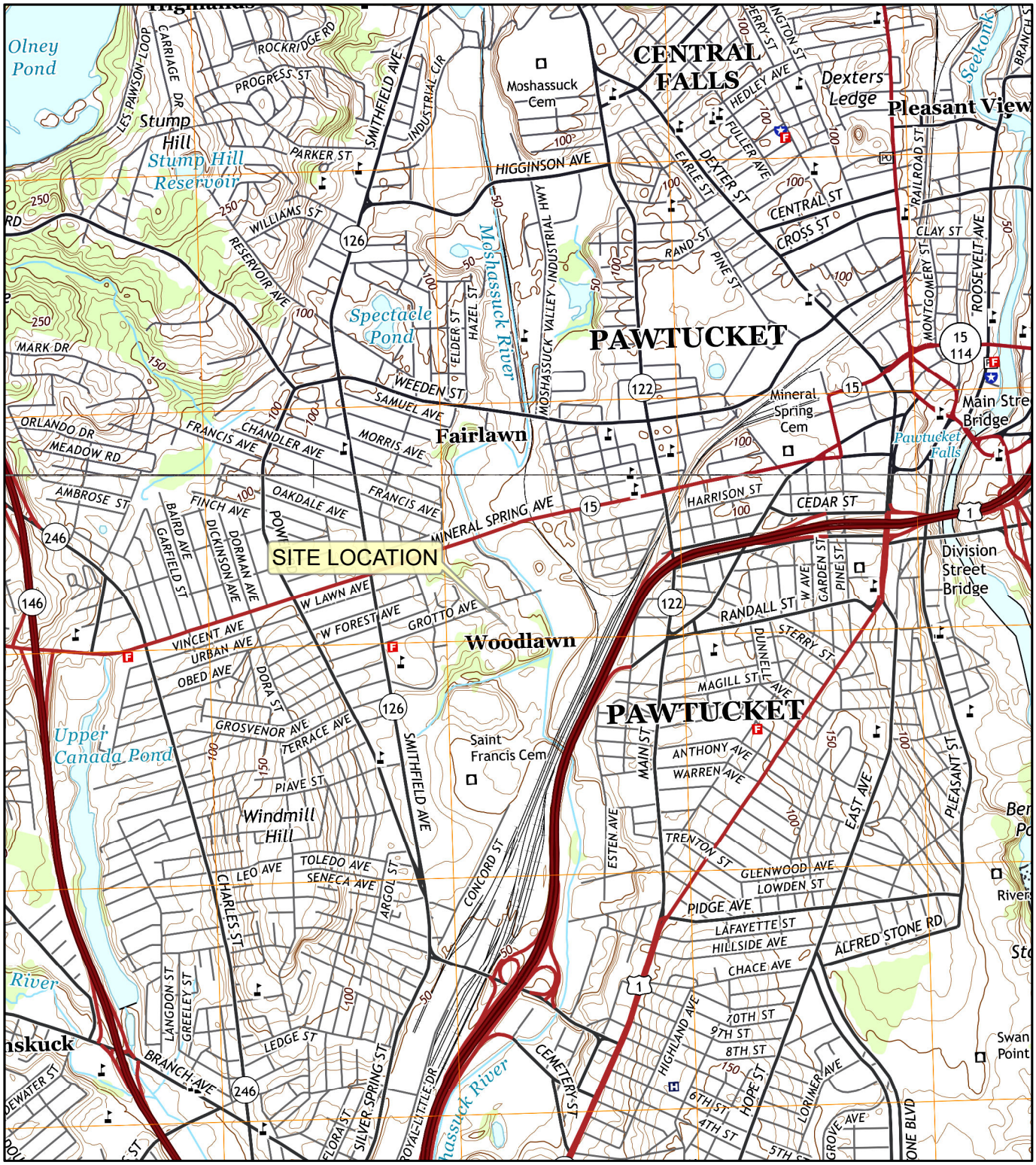
Pare Corporation
Timothy P. Thies, P.E.
Senior Vice President
8 Blackstone Valley Place
Lincoln, RI 02865
401-334-4100

2.14 Applicant Certification

The City of Pawtucket, Charter RI Landfill Services, LLC, and Pare Corporation each certify as indicated below, that BUD material proposed as part of this application will be used in conjunction with a RIDEM approved remedy at the Grotto Avenue landfill site.

CERTIFICATIONS

Name of City Representative	Signature of City Representative	Date
Name of Pare Representative	Signature of Pare Representative	Date
Name of Charter Representative	Signature of Charter Representative	Date



RIGIS

SITE LOCATION MAP

SCALE:1"=2,000'

N
W E
S

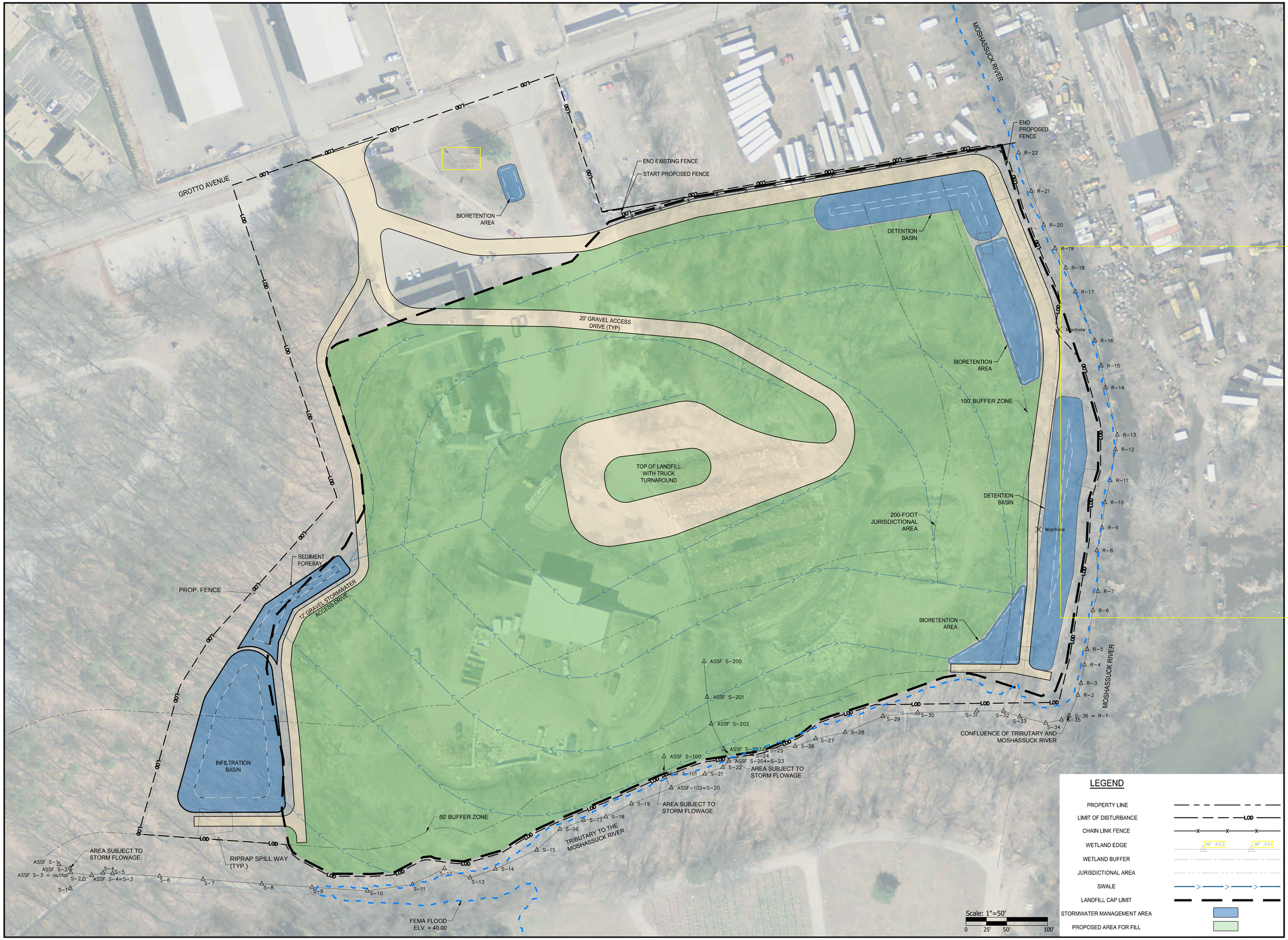
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 23140.00 OCTOBER 2023

FIGURE 1

GROTTO AVE LANDFILL
PAWTUCKET, RI



LEGEND

- PROPERTY LINE
- LIMIT OF DISTURBANCE — LOD
- CHAIN LINK FENCE
- WETLAND EDGE — WF A52 / WF A51
- WETLAND BUFFER
- JURISDICTIONAL AREA
- SWALE
- LANDFILL CAP LIMIT
- STORMWATER MANAGEMENT AREA
- PROPOSED AREA FOR FILL

PARE

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-1755

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

PAWTUCKET LANDFILL CLOSURE

Pawtucket ri

REVISIONS:

PROJECT NO.:	23140.00
DATE:	AUGUST 10, 2023
SCALE:	1" = 50'
DESIGNED BY:	DJLS
CHECKED BY:	MBA
DRAWN BY:	SETB
APPROVED BY:	MBA

DRAWING TITLE:

CONCEPTUAL LANDFILL LAYOUT

DRAWING NO.:

CP-1

SHEET NO. 1 OF 1

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

June 16, 2009

REMEDIAL APPROVAL LETTER

Mr. John E. Carney
Director Department of Public Works
250 Armistice Boulevard
Pawtucket, RI 02860

RE: The Pawtucket Incinerator Landfill, Grotto Avenue, Pawtucket, RI.

Dear Mr. Carney:

In April 2001 the Rhode Island Department of Environmental Management created the Landfill Closure Program (LCP) to investigate and remediate inactive or abandoned solid waste landfills throughout Rhode Island. The purpose of the LCP is to integrate the investigation and remediation/closure requirements in the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations) and the Rules and Regulations for Composting Facilities and Solid Waste Management Facilities (Solid Waste Regulations) in order to eliminate and/or control threats to human health and the environment in a timely and cost effective manner. A ***Remedial Approval Letter*** is a document used by the Department to approve remedial actions at contaminated sites that do not involve the use of complex engineered systems or techniques (e.g., groundwater pump and treat systems or soil vapor extraction systems).

In the matter of the above referenced site, the Department has on file the following documents submitted on behalf of the City of Pawtucket which fulfill the Remedial Action / Landfill Closure requirements of the Landfill Closure Program, and are consistent with the Solid Waste Regulations and Sections 8 and 9 of the Remediation Regulations:

1. Site Investigation Report, City of Pawtucket, Grotto Avenue, Pawtucket, RI, Submitted by Fuss & O'Neill, Inc., dated January 31, 2003;

2. Response to Comments concerning the Pawtucket Incinerator Site Investigation Report Former Pawtucket Incinerator Landfill – Grotto Avenue, Pawtucket, Rhode Island, Submitted by Fuss & O'Neill, Inc., dated September 13, 2004.

3. Combined Remedial Action Work Plan and Closure Plan, Grotto Avenue Landfill, Grotto Avenue, Pawtucket, Rhode Island, Submitted by Fuss & O'Neill, Inc., dated March 7, 2008.

4. Response to Comments Combined Remedial Action Work Plan and Closure Plan, Former Pawtucket Incinerator Landfill – Grotto Avenue, Pawtucket, Rhode Island, Submitted by Fuss & O'Neill, dated May 6, 2009.

The Department approves the RAWP, provided that all activities and procedures detailed in the RAWP are strictly followed. It is the Department's understanding that the remedial action / landfill closure will include the following:

1. Increase the thickness of the soil cap so that all areas of the Site that contain ash residue, refuse, contaminated soil, and municipal solid wastes are provided with a soil cap thickness of not less than 2-feet. The soil cover should include a final layer of organic soil (loam) to support vegetative growth and control erosion and direct exposure risks. The source of the cover material will be evaluated to demonstrate that it does not contain contaminants at concentrations above the Method 1 Residential Criteria.

2. Portions of the Site will be re-graded to ensure that a minimum slope of 5% (to promote drainage) and a maximum slope of 33% (to control erosion) is maintained so as to meet the requirements of Section 2.2.12 of the Solid Waste Regulations.

3. Development of a post-closure groundwater monitoring program incorporating monitoring wells installed as part of the SIR.

4. The design, permitting and construction of stormwater management systems to control erosion, reduce flooding and ponding and manage stormwater sheet flow and drainage per Section 2.2.12 of the Solid Waste Regulations.

5. An Institutional Control in the form of an Environmental Land Usage Restriction (ELUR) will be recorded in the City of Pawtucket Land Evidence Records at the time of this project's completion and will specify all of the site conditions, restrictions and emergency provisions in order to meet the appropriate Remedial Objectives as defined in the Remediation Regulations and Solid Waste Regulations. Be advised that, because the ELUR is part of the remedy, the Department will require (as will be stated in the ELUR) that the property owner submit an annual inspection report by a qualified environmental professional. This report will be subject to review by the Department. A recorded copy of the Department approved ELUR must be forwarded back to the Office of Waste Management (OWM) prior to the issuance of the Interim Letter of Compliance.

At this time, the Office offers its concurrence with the proposed remedial action for the property. The Department approves the SMP and RAWP provided that all activities and procedures detailed in the RAWP are strictly followed. Please be advised that any significant revisions to the RAWP must be submitted in writing to the Department for review, and must be approved by the Department prior to implementation. Any problems associated with the remediation must be

reported to the Department by telephone within one (1) working day and in writing within five (5) working days.

No later than thirty (30) days following the completion of the Remedial Action, a Closure Report detailing the remedial actions and the current status of the property shall be submitted to the Department for review and approval. Upon approval of the Closure Report, and receipt of a copy of the stamped and recorded Department-approved ELUR for the property, the Department will issue an Interim Letter of Compliance for the property.

This Remedial Approval Letter does not remove your obligations to obtain any other necessary permits from other local, state, or federal agencies. **Please notify the Department at least forty-eight (48) hours in advance of any remedial work.**

If you have any questions or are in need of any clarification regarding this document, please contact me by telephone at (401) 222-2797 ext. 7421 or by e-mail at james.wilusz@dem.ri.gov

Sincerely,

James M. Wilusz, P.E., Engineer
Office of Waste Management
Department of Environmental Management

Authorized by,

Laurie Grandchamp, Supervising Engineer
Office of Waste Management
Department of Environmental Management

cc: Nils Wiberg P.E., Fuss & O'Neill

APPENDIX B:
BUD Acceptance Criteria

Parameter		Maximum Acceptance Concentration		
		Testing Standard	Shaping and Grading[6] I/C DEC[8] (mg/Kg)	TCLP Limit (mg/L)
Total Priority Pollutant 13 Metals and Barium	Antimony	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	820	
	Arsenic[8]	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	20	< 5
	Barium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 100
	Beryllium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	1.5	
	Cadmium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	1,000	< 1
	Chromium (Total)[4]	EPA 6010B/6020 TCLP-EPA 13116010B/6020	10,000	< 5
	Chromium (Hexavalent)	EPA 6010B/6020 TCLP-EPA 13116010B/6020	10,000	< 5
	Copper	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
	Lead[8]	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	2,000	< 5
	Mercury	EPA 6010B/6020/7471A TCLP-EPA 1311/6010B/6020/7470	610	< 0.2
	Nickel	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
	Selenium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 1
	Silver	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 5
	Thallium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	140	
	Zinc	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
Total Petroleum Hydrocarbons (TPH)		EPA Method 8100M	2,500	N/A
Total Polychlorinated Biphenyl (PCBs)[5]		EPA Method 8082	10	NA
Total Semi-Volatile Organic Compounds (SVOCs)		EPA Method 8270	RIDEM Industrial/ Commercial DEC ; Benzo(a)pyrene and Dibenzo (a,h) anthracene ≤ 4	Compound specific
Total Volatile Organic Compounds (VOCs)		EPA Method 8260	RIDEM Industrial/ Commercial DEC	Compound specific

Additional Required Information from the Generator-appointed Qualified Environmental Professional (QEP)

1. Provide a site history and description of the facility processing operations or basis of soil impacts.
2. Disclose the presence or likelihood of any other oil and/or hazardous materials including, but not limited to solvents, metals, PCB's, SVOCs, VOCs and the potential for the site to contain listed hazardous waste or to be a characteristic hazardous waste.
3. Provide visual/olfactory observations, field screening, analytical data, and /or in situ pre-characterization data as appropriate to fully characterize the material for chemical and physical characteristics. Soils must meet physical characteristics as described in the Materials Application Package
4. Total chromium values above 390 mg/Kg must be speciated for hexavalent chromium content.
5. Materials with greater than 1 mg/kg PCB must be accompanied by a QEP Opinion and Generator Statement that the materials are not subject to the Toxic Substance Control Act (TSCA). Non-soil materials (i.e. C&D Fines) > 1 mg/Kg are subject to RIDEM
6. C&D Fines are subject to Asbestos Testing by Polarized Light Microscopy and must contain <1% by volume asbestos.
7. Testing frequencies may be modified at the discretion of the landfill's operator and/or consultant.
8. Arsenic and Lead values for shaping and grading materials are site specific proposed values

Pawtucket Grotto Avenue Landfill BUD Program
Materials Approval Application Package

BUD Contractor:	Charter RI Landfill Services, LLC
Address:	500 Harrison Avenue, Suite 4R Boston, MA 02118
Contact:	Alasdair Cunningham, Project Manager Office: 857-246-6800 Mobile: 617 448-1420 Email: acunningham@charter.us
Consulting Engineer:	Pare Corporation
Address:	8 Blackstone Valley Place Lincoln, Rhode Island 02865
Contact:	Michael Flynn, CHMM, LSP Office: 401-334-4100 Mobile: 774 275-7799 Email: mflynn@parecorp.com

Soil Submittal Package Contents

- Pawtucket Grotto Avenue Landfill BUD Material Evaluation and Acceptance Protocol Sheet
- Material Approval Application Form
- Submittal Checklist Included as Section F of the Material Approval Application
- Site Locus and Site Sketch (Attachment 1)
- Photos of Material Submitted for Acceptance (Attachment 2)
- Summary Table(s) Comparing Analytical Data to Maximum Acceptable Levels (Attachment 3)
- Analytical Testing Results/Lab Reports as listed in Table 1 (Attachment 4)
- Environmental Professional Certification, Attachment (Attachment 5)
- Material Shipping Record & Log (Attachment 6)

Soil Submittal Package Procedure

- Complete and submit the Material Approval Application Form, including all items identified above, to Charter RI Landfill Services, LLC and Pare Corporation. Attach a written certification of completeness for administrative review and statement determination that all requirements have been met.
- Receive, sign and submit the Contract for Soil Tipping to the Landfill Operator.
- Complete and submit the Material Shipping Record & Log prior to arriving at the Pawtucket Grotto Avenue Landfill (Attachment 6).
- Documentation to accompany each load: Approval Letter and Material Shipping Record & Log

[1] The Environmental Professional must meet the definition of 'Environmental Professional' provided in ASTM E1527- 21.

Pawtucket Grotto Avenue Landfill BUD Material Evaluation and Acceptance Protocol

A. The following documents are to be submitted by the BUD Material Generator to the BUD Contractor, Charter RI Landfill Services, LLC (Charter):

1. **Material Approval Application Form** (including Attachments 1-4; specifically 1) Site Figures, Site Locus and Site Plan; 2) Photographs of Material; 3) Summary Lab Data Tables 4) Laboratory Results from a certified laboratory and field notes, (prepared and signed by the BUD Material Generator).

2. **Environmental Professional Certification —** submitted and signed by BUD Generator's Environmental Professional [1](Attachment 5).

B. Charter completes an administrative review. If the submittal package is complete and appears to meet acceptability criteria, Charter notifies Pare (the Consulting Engineer), who then reviews the application.

C. Upon receipt of the above documentation, Pare Corporation reviews the sample and approves or rejects and notifies Charter.

D. If approved, Charter and BUD Material Generator then enter a **Contract for Soil Tipping** with the tipping price established therein.

E. BUD Material Generator prepares and submits to Charter a **Material Shipping Record & Log** (Attachment 6) and ships materials to site.

[1] The Environmental Professional must meet the definition of 'Environmental Professional' provided in ASTM E1527- 21.

PAWTUCKET GROTTO AVENUE LANDFILL – 240 GROTTO AVENUE, PAWTUCKET, RHODE ISLAND

MATERIAL APPROVAL APPLICATION FORM

Instructions: Complete this form with required attachments and submit via email to Alasdair Cunningham acunningham@charter.us and Michael Flynn mflynn@parecorp.com and submit a hard copy to the address below. At least three (3) business days will be required to review a Material Approval Application Form once received. Questions should be directed to Alasdair Cunningham, the point of contact. One form shall

Point of Contact:

Michael Flynn
Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02865
Office: 401-334-4100
Mobile: 774 275-7799
mflynn@parecorp.com

SECTION A: GENERAL MATERIAL INFORMATION

Project Name: Click here to enter text.	**SITE ID (leave blank):** Click here to enter text.	
Site Location/Address: Click here to enter text.	**Site or Sub-Area Identifier (if applicable):** Click here to enter text.	
Site Owner's Name/Address: Click here to enter text.	**Company Name:** Click here to enter text.	
	Contact Person: Click here to enter text.	
	Company Address: Click here to enter text.	
Contact Person for Material Approval/Disposal: Click here to enter text.		
Contact Person Telephone: Click here to enter text.	**Contact Person Email:** Click here to enter text.	
Contact Person Fax: Click here to enter text.	**Contact Person Alt.:** Click here to enter text.	
Estimated Quantity of Material for Approval:	Click to enter value. *Cubic Yards*	Click to enter value. *Tons*
Anticipated Transportation Duration:	***Start Date:*** Click to enter a date.	***End Date:*** Click to enter a date.
Current and Former Site Usage: Click here to enter text.		

Has the Generator used Due Diligence in Characterizing the Material (check one): YES ☐ NO ☐

Is this material classified as hazardous or toxic material under RCRA or TSCA (check one): YES ☐ NO ☐

Classify Material Type for Approval

Material	Check Box	Description	Sampling Procedures
Impacted Soils	☐	Urban Fill/Impacted soils	Table 1 plus any site specific contaminants of concern
	☐	Street Sweepings	Table 1
	☐	Catch Basin Cleanings (no free liquids)	Table 1
	☐	Dredge Spoils (no free liquids)	Table 1
C&D Screenings/Fines	☐	Granular Earth materials such as brick and concrete.	Table 1 plus Asbestos by Polarized Light Microscopy
Other	☐	Describe: Click here to enter text.	Subject to RIDEM approval

SECTION A: GENERAL MATERIAL INFORMATION (Continued)

Does this material conform to the following required specifications? YES ☐ NO ☐

1. All material must be less than 12 inches in size.
2. Must contain no more than 10%, by weight, material that exceeds 6 inches in size.
3. Must be workable and easy to spread and compact.
4. Must not contain free draining liquids.
5. Must not be a hazardous or toxic material under RCRA or TSCA.
6. Must be composed of little to no organic matter, based on generator description and visual confirmation by Grotto Avenue site operator.
7. Must be free of rubbish, ice, frozen soil, tree stumps, and other deleterious material.
8. Must conform to the applicable sampling procedures and analytical requirements defined in Appendix 1, 2, or 3

Material Consistency (check one)

LOOSE ☐ FRIABLE ☐ FIRM ☐ EXTREMELY FIRM ☐

SECTION B

Sampler Information: The sampler information is as follows:

Company Name:	Click here to enter text.
Company Location:	Click here to enter text.
Sampling Date:	Click here to enter text.
Printed Samplers Name:	Click here to enter text.

Note: Testing results must be accompanied by relevant field notes, photographs or observations. Results must be summarized in a table comparing analytical data to maximum acceptable levels and the Environmental Professional Certification, included in Appendix 4, must be completed and signed.

SECTION C

Transporter Information: The transporter information is as follows:

Operator/Company Name:	Click here to enter text.
Contact Person:	Click here to enter text.
Street:	Click here to enter text.
City/Town:	Click here to enter text.
State:	Click here to enter text.
Zip:	Click here to enter text.
Phone:	Click here to enter text.
Fax:	Click here to enter text.
Site ID Number: (Leave Blank)	

SECTION D

Receiving Facility Information: The receiving facility information for use on any shipping documents is as follows:

Operator/Facility Name:	Former Pawtucket Grotto Avenue Landfill
Contact Person:	Mr. Michael Flynn
Street:	240 Grotto Avenue
City/Town:	Pawtucket
State:	Rhode Island
Zip:	02860
Phone:	401-334-4100 (office); mobile: 774 275-7799
RIDEM Site Remediation ID Number:	SR-26-1078

SECTION E	
Required Information Checklist:	
☐	Have you reviewed the Grotto Avenue Landfill BUD Material Evaluation and Acceptance Protocol sheet?
☐	Is there a signed Material Approval Application Form and are all fields completed?
☐	Are a site sketch (Attachment 1), description and photos (Attachment 2) of the material included? Are material source location(s) and sample location(s) identified?
☐	Is there a summary table(s) comparing the laboratory analytical data to the maximum acceptable levels listed in the appropriate material sampling requirements (Attachment 3) of the Material Approval Application Form?
☐	Are complete copies of the laboratory data, chain(s) of custody, and the QA/QC package for the analysis performed included? (Attachment 4)
☐	Are all of the Minimum Analytical Data Analyses performed as identified in the Material Approval Application Form?
☐	Are the detection limits for all analytical parameters lower than the applicable maximum acceptable levels listed in the Material Approval Application Form? If not, is there a statement in the QEP opinion letter explaining why this is not the case?
☐	Is there a signed Certification of the Qualified Environmental Professional (QEP) (Attachment 5)?
☐	Is there a copy of the Material Shipping Record and Log (MSRL)? (Attachment 6)
☐	Is the correct quantity requested for disposal identified on the Material Approval Application Form?
☐	Is there data for any sample(s) included with the submitted laboratory reports that is not part of the material review package and should be disregarded during our review? Are these samples crossed-out in the submittal and is there a statement in the QEP opinion letter explaining why the data should not be considered in the review?
☐	Was TCLP testing performed for metals or organic compounds when the total concentrations in the material are above the theoretical (20:1) levels?

SECTION F
Site Sketch (Attachment 1): A site diagram is required indicating any major structures or roads, excavation areas, and stockpile locations. All sampling locations must be noted.
(Attach separate sheet(s) if necessary-indicate below).

SECTION G

Photos of Material (Attachment 2): Provide photographs of excavation areas and/or stockpiles as appropriate. Provide captions noting sample locations.

(Attach separate sheet(s) if necessary-indicate below).

SECTION H

Additional Information / Comments

Click or tap here to enter text.

SECTION I

Generators Signature: The Generator or duly authorized representative of the Generator shall sign and date this Material Approval Application Form

"To the best of my knowledge, I certify the information contained herein is a true and accurate description of the waste material requested for disposal at the Former Coventry Landfill. I further certify that by submitting this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver any material which is classified as toxic waste, hazardous waste, infectious waste, or any other material this facility is prohibited from accepting by law. I further certify that the company has not altered this form or its content in any way."

Printed Name Click here to enter text.

Signature Click here to enter text.	Date Click to enter a date.

TABLE 1-(Attachment 3)

APPLICANT MATERIALS /BUD MATERIALS - MINIMUM ANALYTICAL DATA

SAMPLING AND ANALYTICAL PROCEDURE
Samples shall be collected at a minimum frequency of 1 sample for each **500 cubic yards** of materials for which approval is being sought per source. Attach a legible copy (not a faxed copy) of laboratory analytical data, including all results and QA/QC information for the following parameters in Table 1 below. In addition, data shall be presented in summary data table format compared to the Acceptance Criteria listed in Table 1.
Standard Parameters: One 5-point composite Sample per 500 cy TCLP Metals: As needed (20xrule)
The maximum acceptable levels for these parameters are shown in Table 1 along with the applicable EPA analytical testing standard.

PROVIDE THE FOLLOWING ATTACHMENTS

ATTACHMENT 1: **SITE LOCUS AND SITE SKETCH SHOWING SAMPLE LOCATIONS AND RELEVANT SITE FEATURES**

ATTACHMENT 2: **PHOTOGRAPHS OF APPLICANT MATERIAL(S). MINIMUM ONE REPRESENTATIVE PHOTO PER MATERIAL; MORE IF NECESSARY OR IF MATERIALS VARY IN COLOR, SHAPE OR TEXTURE**

ATTACHMENT 3: **SUMMARY DATA TABLE(S). DATA MUST BE COMPARED TO TABLE 1 ACCEPTANCE CRITERIA**

ATTACHMENT 4: **COMPLETE LABORATORY DATA WITH ALL SAMPLES COLLECTED, QA/QC RESULTS AND ANY RELEVANT FIELD NOTES RELATED TO SAMPLE COLLECTION (FIELD OBSERVATIONS, ODORS STAINING, SAMPLE LOCATION ETC)**

ATTACHMENT 5: **QEP CERTIFICATION STATEMENT (EXAMPLE PROVIDED)**

ATTACHMENT 6: **COMPLETED MATERIAL SHIPPING RECORD WITH TRANSPORTER AND GENERATOR INFORMATION PROVIDED (Blank provided)**

ATTACHMENT 5 – QUALIFIED ENVIRONMENTAL PROFESSIONAL CERTIFICATION

I declare that, to the best of my professional knowledge and belief, that I meet the definition of a Qualified Environmental Professional as defined in 40 CFR § 312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. Furthermore, I have developed and performed "all appropriate inquiries" in conformance with the standards and practices set forth in 40 CFR § 312.

Print Name of Qualified Environmental Professional (QEP) **Signature**

Date

ATTACHMENT 6: Material Shipping and Record Log

For the Shipment of Approved Pawtucket Landfill BUD Materials such as, Urban Fill, Street Sweepings, Catch Basin Cleanings, Dredge Spoils, Construction and Demolition Screenings, and Approved Non-BUD Materials.

_____
Facility Approval Number

A. Waste Generation Location Information

_____
Release Name (optional)

_____ _____
Street Location Aid

_____ _____ _____
City/Town State Zip Code

B. Transporter/Common Carrier Information

_____
Name of Organization

_____ _____
Contact Name Title

_____ _____
Street Address City/Town

_____ _____ _____
State Zip Code Telephone Number (including extension)

C. Load Information

1. _____ _____ _____
Name of Transporter Date Received Time Received

_____ _____ _____
Truck Identification Load Size (tons) Landfill Signature

2. _____ _____ _____
Name of Transporter Date Received Time Received

_____ _____ _____
Truck Identification Load Size (tons) Landfill Signature

3. _____ _____ _____
Name of Transporter Date Received Time Received

_____ _____ _____
Truck Identification Load Size (tons) Landfill Signature

4. _____ _____ _____
Name of Transporter Date Received Time Received

_____ _____ _____
Truck Identification Load Size (tons) Landfill Signature

D. Log Sheet Volume Information

Total Volume This Page (cubic yards/tons): _____

Total Volume Carried Forward (cubic yards/tons): _____

Total volume Carried Forward and This Page (cubic yards/tons): _____

Page _____ of _____

TABLE 1:
BUD Acceptance Criteria

Parameter		Maximum Acceptance Concentration		
		Testing Standard	Shaping and Grading[6] I/C DEC[8] (mg/Kg)	TCLP Limit (mg/L)
Total Priority Pollutant 13 Metals and Barium	Antimony	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	820	
	Arsenic[8]	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	20	< 5
	Barium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 100
	Beryllium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	1.5	
	Cadmium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	1,000	< 1
	Chromium (Total)[4]	EPA 6010B/6020 TCLP-EPA 13116010B/6020	10,000	< 5
	Chromium (Hexavalent)	EPA 6010B/6020 TCLP-EPA 13116010B/6020	10,000	< 5
	Copper	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
	Lead[8]	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	2,000	< 5
	Mercury	EPA 6010B/6020/7471A TCLP-EPA 1311/6010B/6020/7470	610	< 0.2
	Nickel	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
	Selenium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 1
	Silver	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	< 5
	Thallium	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	140	
	Zinc	EPA 6010B/6020 TCLP-EPA 1311/6010B/6020	10,000	
Total Petroleum Hydrocarbons (TPH)		EPA Method 8100M	2,500	N/A
Total Polychlorinated Biphenyl (PCBs)[5]		EPA Method 8082	10	NA
Total Semi-Volatile Organic Compounds (SVOCs)		EPA Method 8270	RIDEM Industrial/ Commercial DEC ; Benzo(a)pyrene and Dibenzo (a,h) anthracene ≤ 4	Compound specific
Total Volatile Organic Compounds (VOCs)		EPA Method 8260	RIDEM Industrial/ Commercial DEC	Compound specific

Additional Required Information from the Generator-appointed Qualified Environmental Professional (QEP)

1. Provide a site history and description of the facility processing operations or basis of soil impacts.
2. Disclose the presence or likelihood of any other oil and/or hazardous materials including, but not limited to solvents, metals, PCB's, SVOCs, VOCs and the potential for the site to contain listed hazardous waste or to be a characteristic hazardous waste.
3. Provide visual/olfactory observations, field screening, analytical data, and /or in situ pre-characterization data as appropriate to fully characterize the material for chemical and physical characteristics. Soils must meet physical characteristics as described in the Materials Application Package
4. Total chromium values above 390 mg/Kg must be speciated for hexavalent chromium content.
5. Materials with greater than 1 mg/kg PCB must be accompanied by a QEP Opinion and Generator Statement that the materials are not subject to the Toxic Substance Control Act (TSCA). Non-soil materials (i.e. C&D Fines) > 1 mg/Kg are subject to RIDEM
6. C&D Fines are subject to Asbestos Testing by Polarized Light Microscopy and must contain <1% by volume asbestos.
7. Testing frequencies may be modified at the discretion of the landfill's operator and/or consultant.
8. Arsenic and Lead values for shaping and grading materials are site specific proposed values