



EA Engineering, Science, and Technology, Inc.

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30 March 2006

RECEIVED

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RIDEM OFFICE OF LEGAL SERVICES

Mr. Joseph T. Martella, II, Senior Engineer
Rhode Island Department of Environmental Management
Office of Waste Management
Site Remediation Program
235 Promenade Street
Providence, Rhode Island 02908

RE: Additional Response to Public Comments, Former Gorham Manufacturing Facility,
Parcel B, 333 Adelaide Avenue, Providence, Rhode Island
Case No. 2005-029
EA Project No. 61965.01

Dear Mr. Martella:

On behalf of the Providence Department of Public Property (City), EA Engineering, Science, and Technology, Inc. (EA) is offering the following Additional Response to Public Comments (ARPCs) for the above-referenced site. For the purposes of this ARPC submittal, the term "Site" is defined as Parcel B of the former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island. The City has carefully reviewed all comments provided in the Rhode Island Department of Environmental Management (RIDEM) response letter dated 10 March 2006. In accordance with RIDEM's response letter, this ARPC addresses all specific questions and requests for additional information contained therein. This letter and associated attachments, along with the City's original Response to Public Comments (RPCs) dated 24 January 2006, are intended to fulfill RIDEM requirements set forth in Rules 7.07 and 7.09 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations).

This ARPC is structured as follows:

- **Section 1**—City's response to RIDEM's request for additional information and to questions posed by RIDEM in a letter to the City dated 10 March 2006
- **Section 2**—City's response to additional public comments not included in original RPCs dated 24 January 2006 per RIDEM request
- **Attachments**—Supporting documentation.

To facilitate referencing during review of this document, the numbering scheme included in this ARPC corresponds with the numbering scheme used by RIDEM in their 10 March 2006 letter.



1. CITY'S RESPONSE TO RIDEM'S REQUEST FOR ADDITIONAL INFORMATION AND TO QUESTIONS POSED BY RIDEM

COMMENT No. 2(c): RIDEM does not agree with the City's conclusion that the public comments made by Mr. Kevin Hood are not substantive regarding the proposed remedy for Parcel B since Mr. Hood's comment challenges the ability of the remedy to adequately protect the users of Parcel B from exposure to hazardous substances on the adjacent, unremediated Park Parcel (Parcel D).

Response—The proposed remedy for Parcel B, when combined with the assurances outlined in the two Rhode Island Superior Court Orders (the Orders) signed on 29 March 2006 regarding the placement of restrictive fencing and accepted timetables for additional assessment and implementation of remedial activities at the Park Parcel, will adequately protect the users of Parcel B. Copies of the final executed Orders are provided in Attachment A.

COMMENT No. 2(e): RIDEM states that the City's response is unacceptable because it does not discuss safeguards that will be incorporated into the operation and maintenance of the remedy to guarantee proper, consistent, long-term, proactive compliance with the regulations, Remedial Action Work Plan (RAWP), Soil Management Plan, Environmental Land Usage Restriction (ELUR), and other applicable restrictions.

Response—RIDEM's comment contains a statement that the City's response to Mr. Fischbach should include a discussion of safeguards to be included in the operation and maintenance of the remedy to guarantee compliance with the regulations, RAWP, Soil Management Plan, ELUR, and other applicable restrictions. General safeguards expected to be included in the RAWP were presented to the public during the Public Forum regarding this site on 5 October 2005. A copy of the transcript for the Public Forum was included in the City's 24 January 2006 submittal. Safeguards that are planned for the operations and maintenance of the final remedy will include, at a minimum, annual inspections and repairs, as necessary, to the engineered cap; periodic inspections and maintenance, as necessary, to the installed fencing; and an indoor air monitoring plan including routine monitoring and maintenance, as required. At this juncture, the City has yet to receive formal RIDEM approval that the site investigation is complete and formal concurrence with the preferred remedial alternative via a Remedial Decision Letter. Specific details will be incorporated into a RAWP and submitted to RIDEM as soon as possible after the City's receipt of a Remedial Decision Letter.

COMMENT No. 2(f): RIDEM states that the City should revise its response to deal directly with the issue of how to reduce the risk of exposure to students who may get on to the unremediated Park Parcel and timeframes for removal actions as well as interim and long-term remediation of the Park Parcel

Response—The proposed remedy for Parcel B, when combined with the assurances outlined in the attached Orders regarding additional restrictive fencing and accepted timetables for additional assessment and implementation of remedial activities at the Park Parcel, will adequately protect the users of Parcel B.



COMMENT No. 2(l): RIDEM states that the City's response should be modified to respond to the issue of the ventilation system's ability to protect the school in light of the failed Textron remediation on Parcel A (Stop & Shop Parcel).

Response—Historical hydrogeological investigations indicate that groundwater flows in a northwesterly direction beneath portions of Parcel A toward Mashpaug Pond. Therefore, it is theoretically possible that the lateral extent of the contaminated groundwater plume could extend further to the northwest under a portion of the proposed school building. The sub-slab venting system will be designed to prevent soil vapors (if any) from entering the building through a series of suction fans, subsurface piping, sub-slab aggregate material, and other design features. Therefore, in addition to being designed to protect the proposed school building from vapor intrusion resulting from low levels of volatile organic compounds identified beneath Parcel B, the proposed ventilation system will also remove soil vapors (if any) emanating from contaminated groundwater that could potentially migrate from upgradient areas to beneath the school on Parcel B.

COMMENT No. 3(f): RIDEM states that the City's response should address the issue of whether there are long-term, interim measures that could/should be taken to protect Parcel B users from exposure until a final remedy can be implemented at the Park Parcel.

Response—The proposed remedy for Parcel B, when combined with the assurances outlined in the attached Orders regarding additional restrictive fencing and accepted timetables for additional assessment and implementation of remedial activities at the Park Parcel, will adequately protect the users of Parcel B.

COMMENT No. 3(k): RIDEM states that the compliance status for adjacent remedies should be incorporated into annual reporting for Parcel B as a cross-referencing mechanism.

Response—The City will incorporate the compliance status of institutional controls at adjacent Parcels A, C, and D into annual compliance status reports prepared for Parcel B.



2. CITY'S RESPONSE TO ADDITIONAL PUBLIC COMMENTS NOT INCLUDED IN THE ORIGINAL RESPONSE TO COMMENTS DATED 24 JANUARY 2006 PER RIDEM REQUEST

COMMENT 4(a)(i): RIDEM requests that the City respond to questions regarding ELURs made at the 19 October 2005 Public Hearing by S. Fonseca. Specifically, S. Fonseca asks for an explanation of the importance of the ELUR, whether it is an important part of the RAWP, is it legally binding, and does it transfer with the deed?

Response—The ELUR is an important part of the proposed remedy. A Draft ELUR will be prepared and submitted to RIDEM, along with the RAWP, upon the City's receipt of a Remedial Decision Letter. Its purpose will be to prevent exposure to hazardous materials identified at Parcel B by imposing certain restrictions upon the use and activities at Parcel B. Upon receipt of RIDEM's approval of the ELUR for Parcel B and completion of the remedy at Parcel B, the ELUR will be recorded in the City of Providence's Land Evidence Records and will be legally binding upon and enforceable against the property owner (City of Providence), its successors, and any future holder of any interest in Parcel B. For additional information regarding the general format and potential content of the Parcel B ELUR, please refer to the ELUR template from RIDEM's website included in Attachment B. The City intends to utilize RIDEM's ELUR template as a guide when preparing the ELUR for Parcel B.

COMMENT 4(a)(ii): RIDEM requests that the City respond to Steven Fischbach's question regarding the need for a multi-layered engineered cap to prevent burrowing animals from bringing up contamination.

Response—As recorded on Pages 7 and 8 of the Public Hearing Transcript, Mr. Fischbach states that it is essential to have a crushed stone barrier as part of an engineered cap to prevent burrowing animals from bringing contaminants to the surface. The majority of the proposed Parcel B development will consist of impenetrable concrete pavement, asphalt pavement, or the school building footprint itself. These areas comprise approximately 99 percent of the site, which will effectively limit the potential for burrowing animals to bring contaminants to the surface. The previously discussed annual engineered cap inspections and maintenance activities incorporated into the ELUR for Parcel B will include, among other requirements, a specific requirement to observe landscaped areas for evidence of burrowing animals, inspections, and maintenance. Attachment C includes a copy of a letter from the Environmental Protection Agency (EPA) regarding the use of a crushed stone barrier in the design of a shallow engineered cap at a former landfill site in Providence. The EPA letter, although not specifically written to address the cap design proposed for Parcel B, clearly identifies potential technical problems (e.g., cap damage caused by gravel layer displacement resulting from seasonal freeze/thaw cycles) associated with incorporating a gravel layer in engineered cap designs.

COMMENT 4(a)(iii): RIDEM requests that the City respond to Betty Baily's question regarding the inclusion of security and barbwire fencing in the proposed fencing program.

Response—At this time, the City does not intend to include barbed wire fencing in the proposed fencing program for Parcel B. However, at this time, the City does intend to provide multiple layers of security, including signage, deterrent vegetation, routine inspections, and regular maintenance as required to maintain the integrity and effectiveness of the fencing program. Please refer to the



aforementioned Orders (Attachment A) for more information regarding the fencing barrier details and installation timetable.

A map depicting the approximate location of the fence is included as Exhibit A to the Orders in Attachment A. Additional details of the proposed fencing program will be included in the RAWP to be prepared and submitted upon receipt of a Remedial Decision Letter.

COMMENT 4(a)(iv): RIDEM requests that the City respond to Henry Marciano's questions regarding underground storage tanks which allegedly contained solvents and not water.

Response—Mr. Marciano's question has been carefully considered and evaluated along with the entirety of his Public Hearing testimony. In particular, the City has considered the following four issues to properly evaluate Mr. Marciano's questions: (1) where were the underground storage tanks located on the former Gorham Manufacturing site relative to Parcel B; (2) were solvents stored and released from the underground storage tanks; (3) if a historical release of solvents occurred, does the release pose a risk at the site, and (4) will the remedy proposed for Parcel B be protective with respect to potential hazards posed by a release of solvents (if any) from these tanks. Specifically, Mr. Marciano states that a document prepared in the 1950s by an appraisal company on behalf of Gorham Manufacturing indicated underground storage of solvents beneath Building N in the vicinity of the northeast corner of Parcel B. However, historical aerial photographs and mapping produced during previous site investigations by others indicate that Building N was located approximately 150 feet to the east of Parcel B's easternmost boundary in the area of the current Stop and Shop building's northwest building corner. Mr. Marciano also states that: in 1995, RIDEM directed Textron to excavate the underground storage tanks located beneath the former location of Building N, a professional environmental company performed a preliminary investigation and concluded that the tanks contained water, and permission was granted by RIDEM to excavate and remove the tanks. Although there is no reason to doubt that the tanks had historically stored solvents in the 1950s, there is also no reason to doubt that the tanks contained water in 1995, and there is no evidence that a release of solvents occurred from the former tanks. Also, in September 2005, the City installed a soil boring and groundwater monitoring well (Post LRAWP-7) in the area of Parcel B closet to the former Building N location (i.e., northeast corner of Parcel B). Neither the soil data nor the groundwater data collected from this location yielded analytical evidence suggesting the presence of solvents or other compounds in concentrations that would not be addressed by the proposed remedy.

COMMENT 4(a)(v): RIDEM requests that the City respond to Representative Thomas Slater's question regarding a plume under Adelaide Avenue and the site.

Response—Representative Slater asked if EA is going to explain the plume and how much it affects the site near the pond. Representative Slater then asks RIDEM what remedy they suggest for the plume.

Representative Slater is referring to a tetrachloroethylene (PCE) plume currently undergoing remediation by Textron in accordance with a RIDEM-approved RAWP. The City believes that a portion of the plume exists beneath Adelaide Avenue, but the majority of the plume resides beneath the paved area east of Parcel B currently occupied by the paved parking lot for the adjacent Stop & Shop parcel (Parcel A). Please refer to the City's response provided in 2(1) above for additional information regarding the PCE plume and how it may affect the Site.



In November 2005, Textron's consultant (Shaw Environmental, Inc.) submitted a remedial action work plan addendum to RIDEM for Parcel A to complete additional site assessment activities and to evaluate alternative remediation technologies per RIDEM request. RIDEM conditionally approved Textron's work plan in January 2006. Shaw Environmental, Inc., on behalf of Textron, met with RIDEM on 1 March 2006 to discuss RIDEM's conditions and comments, and provided a response letter to RIDEM on 9 March 2006. A copy of the 9 March 2006 letter is provided in Attachment D. Based upon the above information, it is the City's opinion that Textron is actively working with RIDEM to further investigate and remediate the plume under Adelaide Avenue and Parcel A.

COMMENT 4(b)(i): RIDEM requests that the City respond to Sylvia Aldredge's 10 November 2005 letter that includes questions regarding the source or sources of clean fill, a technical description of the proposed sub-slab ventilation system, how high the fence will be, and what kind of greenery will make up the "impenetrable brush."

Response—Ms. Aldredge's questions are related to specific details regarding the elements of the proposed remedy. Generally, the source of clean fill is determined by the general contractor providing the fill, the fill will be sampled at an approved frequency for a variety of approved compounds, and will be rejected as unsuitable if residential criteria are not met in accordance with a soil management plan to be included with the RAWP. Please refer to the responses to Comments 2(I), 4(a)(iii), and 4(a)(v) above for more information regarding the fencing details and the sub-slab ventilation system. Final design details associated with these issues will be incorporated into a RAWP and submitted to RIDEM as soon as possible after the City's receipt of a Remedial Decision Letter.

COMMENT 4(b)(ii): RIDEM requests that the City respond to questions regarding buried construction debris included in a letter from Mark Fonseca dated 12 November 2005.

Response—Geotechnical soil borings and test pits completed in 2005 indicated the presence of construction debris down to approximately 10 ft below grade in some areas at the site. Soil greater than 10 ft below grade at the site has been documented to consist primarily of fine to coarse sand with little silt and cobble/gravel. Construction debris identified beneath the area of the proposed school, was removed from the site in accordance with the Limited RAWP conducted in August 2005. Soil, groundwater, and soil vapor sampling activities were completed at Parcel B prior to and at the conclusion of the Limited RAWP in areas both within and outside the proposed school building footprint and, therefore, the presence of said construction debris had no impact upon the site characterization. The construction debris beneath the future school building footprint will have no impact upon the ability of the proposed engineered cap to be effective since it has been removed. In areas outside the proposed school footprint, the presence of buried construction debris may have an impact upon the engineered cap if the some of the debris (e.g. wood) has the potential to settle. Therefore, the RAWP will include regular annual inspections and maintenance procedures in accordance with the ELUR to ensure the long-term effectiveness of the engineered cap. Please refer to the City's response to Comment 4(a)(i) above for more information relative to the importance of the ELUR with respect to the proposed remedy for Parcel B.



The City trusts that this ARPC, in conjunction with the City's 24 January 2006 submittal, satisfactorily fulfills the regulatory obligations set forth in the Remediation Regulations regarding responding to public comments, and respectfully requests formal approval of the Site Investigation and this ARPC in the form of a Remedial Decision Letter.

On behalf of the City, if you have any questions or require additional information, please do not hesitate to contact either of the undersigned at 401-736-3440.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC.

A handwritten signature in black ink, appearing to read 'Peter M. Grivers', written in a cursive style.

Peter M. Grivers, P.E., LSP
Project Manager

A handwritten signature in black ink, appearing to read 'Timothy C. Regan', written in a cursive style.

Timothy C. Regan, P.E., M.B.A.
Client Manager/Senior Engineer

PMG/TR/mkp

Attachment

cc: A. Sepe, Providence Department of Public Property
T. Deller, Providence Redevelopment Agency
B. Wagner, Esq., RIDEM Legal Services
K. Owens, RIDEM Office of Waste Management
L. Hellested, RIDEM Office of Waste Management
S. Rapport, City of Providence Law Department
J. Ryan, Partridge, Snow, & Hahn
Former Gorham Site – Parcel B Repository – Knight Memorial Library

Appendix A

Rhode Island Superior Court Consent Orders

STATE OF RHODE ISLAND
PROVIDENCE, SC.

SUPERIOR COURT

W. MICHAEL SULLIVAN, Director
RHODE ISLAND DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT,

Plaintiff,

v.

C.A. No. 05-2553

CITY OF PROVIDENCE, RHODE ISLAND
By and through its agencies the PROVIDENCE
DEPARTMENT OF PUBLIC PROPERTIES
and the PROVIDENCE SCHOOL
DEPARTMENT,

Defendant.

PROVIDENCE REDEVELOPMENT
AGENCY,

Defendant – Intervenor

YMCA OF GREATER PROVIDENCE

Defendant – Intervenor

CONSENT ORDER (Parcels B & C)

This matter came before the Court on March 15, 2006, before the Honorable Daniel A. Procaccini. After hearing thereon, it is hereby:

ORDERED, ADJUDGED AND DECREED:

WHEREAS, the Rhode Island Department of Environmental Management (“RIDEM”) filed a complaint in this matter against the City of Providence (the “City”) relating to the City’s development of a public high school at a property located at 333 Adelaide Avenue, Providence, Rhode Island, Providence Tax Assessors Plat 51, Lot 170, Parcel B (“Parcel B”);

WHEREAS, Parcel B is one of four parcels (Parcel A, B, C, and D), including Mashapaug Cove, that together comprise what is known as the “Former Gorham Manufacturing” property, a 37-acre former industrial site at 333 Adelaide Avenue, Providence, Rhode Island (the “Site”). The City, by and through the Providence Redevelopment Agency, is the owner of the entire Site and is a “Responsible Party” pursuant to R.I.G.L §§23-19.14-6 and §3.60 of RIDEM’s “Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases” (the “Remediation Regulations”) and a “Performing Party” pursuant to §3.49 of the Remediation Regulations.

WHEREAS the Site is known to be contaminated with a variety of hazardous chemical compounds relating to its prior use as an industrial manufacturing facility and is listed in the U.S. Environmental Protection Agency's ("EPA's) Comprehensive Environmental Response Compensation and Liability Information System ("CERCLIS") database as EPA ID No. RID982542318;

WHEREAS, pursuant to a lease with the City, the YMCA of Greater Providence (the "YMCA") began plans in 2000 to assess the remedial measures necessary to build its proposed 14,500 square foot one-story recreational community resource Providence Metropolitan headquarters facility on approximately five acres of what is known as the "main" portion of Parcel C of the Site;

WHEREAS, Parcel A was investigated and is undergoing remediation pursuant to a RIDEM-approved remedial action work plan ("RAWP"), and has been developed with a supermarket shopping plaza. There are still ongoing remedial issues involving contamination on Parcel A;

WHEREAS, the northwestern portion of the Site, adjacent to the Mashapaug Pond includes Parcel D and the remaining portion of Parcel C (the "Park Parcel"). The portion of Parcel C included in the Park Parcel is hereby defined to incorporate all areas of Parcel C that have not been investigated or are not proposed to be remediated pursuant to a RAWP submitted by the Greater Providence YMCA, dated February 9, 2005 (the "YMCA RAWP"). The portion of Parcel C included in the Park Parcel is delineated and defined on a map of the Site, which is attached as Exhibit A;

WHEREAS, Textron, Inc. ("Textron"), a "Responsible Party" under R.I.G.L. §§23-19.14-3(m) and 23-19.14-6 and §3.60 of Remediation Regulations, agreed to remediate contaminated soil and groundwater at the Site pursuant to an April 2001 RAWP, approved by RIDEM on October 10, 2001;

WHEREAS, the YMCA was granted intervenor status in this action on February 16, 2006;

WHEREAS, in February 2005, the YMCA submitted a RAWP to RIDEM proposing to remediate and to develop a portion of Parcel C for its headquarters and recreational facility (the "YMCA Parcel"). The YMCA Parcel is defined as that portion of Parcel C that has been investigated and is proposed to be remediated pursuant to the YMCA RAWP, as depicted on Exhibit A. The YMCA's proposed remedy, which has conceptually been approved by RIDEM in a May 24, 2004, Remedial Decision Letter, involves capping site soils and installing an active sub-soil ventilation system to prevent vapors from entering the YMCA building, and recording an environmental land use restriction (ELUR) to ensure that these controls are maintained for the YMCA Parcel;

WHEREAS, the YMCA has timely responded to RIDEM requirements and RIDEM comments on the YMCA's RAWP, including all public notice requirements, and is currently waiting for RIDEM's issuance of an "Order of Approval" for the RAWP;

WHEREAS, the City has proposed to remediate and develop Parcel B as a public high school and is currently addressing RIDEM requirements for developing a RAWP for Parcel B that is similar to the YMCA RAWP. On September 26, 2005, RIDEM issued a Program Letter for Parcel B to the City, wherein RIDEM indicated that the site investigation was complete and reviewed the City's preferred remedial alternative, which includes capping site soils and installing an active sub-soil ventilation system to prevent vapors from entering the school building, and recording an environmental land use restriction (ELUR) to ensure that these controls are maintained for Parcel B;

WHEREAS, RIDEM has determined that the construction can begin of the buildings, associated parking, and landscaping on the YMCA Parcel and Parcel B, once RAWP approvals are issued for each of the Parcels, and once a physical barrier that prevents access to the Park Parcel, as detailed below, is in place;

WHEREAS, both the YMCA and the City have an urgent need to begin construction and occupy their buildings, and will in fact start construction activities at their respective parcels in accordance with the timelines set forth in this Order;

WHEREAS, the City has expressed that it needs to use and occupy the school on Parcel B by January 1, 2007;

WHEREAS, the Parties and the Court wish to establish a schedule that will permit removal actions, site investigation work, remedial activities and the construction of the YMCA headquarters and the school to proceed on a pace that will both provide for compliance with all applicable statutory and regulatory requirements and meet the requirements and needs facing the YMCA and the City, and permit both parties to obtain the necessary financing;

NOW, THEREFORE, it is ORDERED:

A. Barrier to Prevent Access to Park Parcel

Within 45 days of the date of this Order, the City shall complete the installation of a Barrier to prevent access to the Park Parcel.

The Barrier shall, at minimum, include a chain link fence at least eight feet (8') in height and shall be planted at the base on the developed side of the fence with briars or other deterrent vegetation so as to discourage climbing or cutting of the fence.

The Barrier shall be installed as indicated by the markings on the map of the Site, attached as Exhibit A.

The fence should include one or more locking gates placed at appropriate locations and of a sufficient size to allow for the entry and egress of personnel and equipment necessary to investigate and remediate the Park Parcel. Signs in both English and Spanish shall be affixed to the fence at regular intervals stating: "Warning -- Keep Out -- Environmental Clean-Up In Progress."

The City shall continue to maintain and keep in place the Barrier until such time as the Park Parcel has been remediated to a level that is sufficient to safely permit limited public recreational activities.

B. YMCA Construction on "Main" portion of Parcel C (the "YMCA Parcel")

By April 15, 2006, RIDEM shall complete its review of the YMCA's February 16, 2006, Response to Comments on the February 9, 2005, YMCA RAWP, and issue to the YMCA either: (a) a written Order of Approval of the YMCA RAWP, or (b) written comments that list any deficiencies in the Response to Comments. Within fourteen (14) days of the YMCA satisfactorily addressing the RIDEM comments, if any, RIDEM shall issue its Order of Approval of the YMCA's RAWP.

Upon (1) completion of the installation of the Barrier, and (2) RIDEM's Approval of the YMCA's RAWP, RIDEM agrees that the YMCA may proceed to initiate construction activities and to implement the approved YMCA RAWP.

C. City's School Construction on Parcel B

On or before March 30, 2006, the City shall submit to RIDEM its response to RIDEM's response to public comment on the technical feasibility of the City's Site Investigation Report for Parcel B. Within ten (10) days of RIDEM's receipt of the City's response, RIDEM shall issue a (a) Remedial Decision Letter for Parcel B, or (b) written comments that list any deficiencies in the City's response. Within ten (10) days of the City satisfactorily addressing the RIDEM comments, if any, RIDEM shall issue a Remedial Decision Letter for Parcel B.

Upon receipt of the Remedial Decision Letter for Parcel B, the City shall submit to RIDEM, the state senator and state representative representing this district, and the Knight Memorial Library, in both hard copy and electronic format, its proposed RAWP for Parcel B. Within thirty (30) days of RIDEM's receipt of the City's RAWP, RIDEM shall complete its review of the City's proposed RAWP and issue to the City either: (a) a written Order of Approval of the RAWP for Parcel B, or (b) written comments that list any deficiencies in the proposed RAWP. Within ten (10) days of the City satisfactorily addressing the RIDEM comments, if any, RIDEM shall issue its Order of Approval of the City's RAWP for Parcel B.

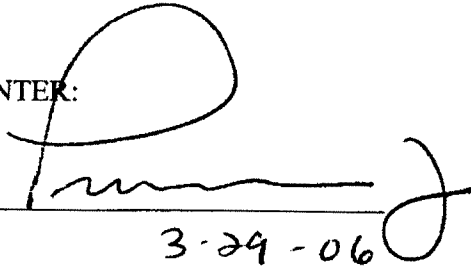
Upon (1) completion of the installation of the Barrier, and (2) RIDEM's Approval of the City's RAWP for Parcel B, RIDEM agrees that the City may proceed to initiate construction activities and to implement the City's Approved RAWP on Parcel B.

D. Ongoing Involvement of the Court

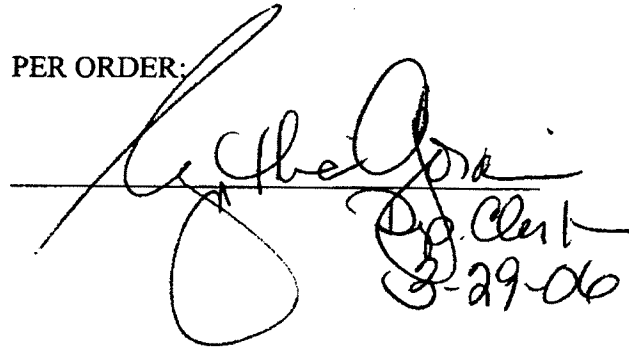
The Court shall retain jurisdiction over the Site and implementation of this Consent Order, and will entertain requests from the parties or from representatives of the public to convene status conferences regarding the implementation of this Consent Order.

ENTERED as an Order of this Court on this 29th day of March, 2006.

ENTER:


3-29-06

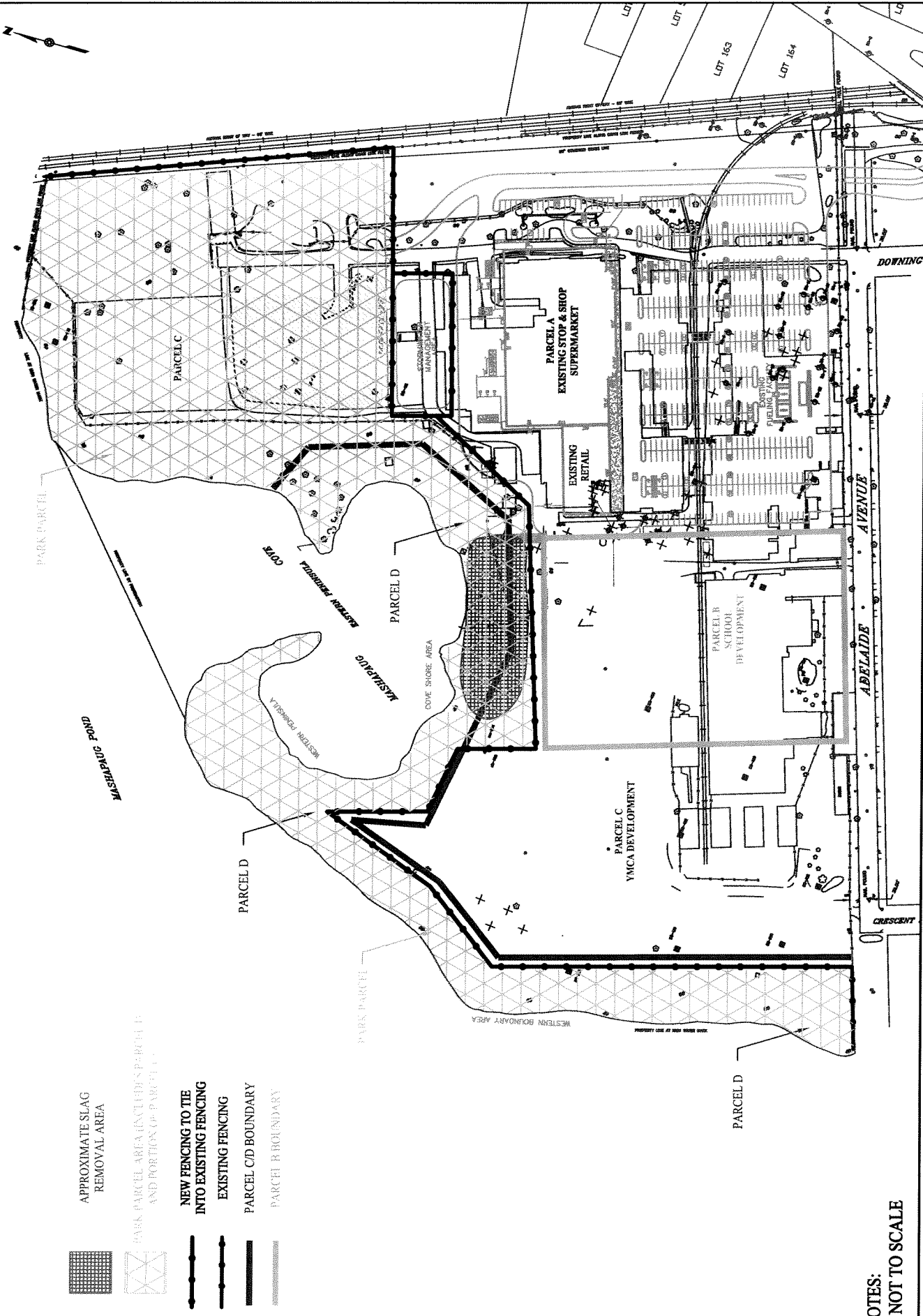
PER ORDER:


Dep. Clerk
3-29-06

704714

EXHIBIT

A



FORMER GORHAM MANUFACTURING FACILITY
 PROVIDENCE, RHODE ISLAND
 EXHIBIT A

NOTES:
 1) NOT TO SCALE

STATE OF RHODE ISLAND
PROVIDENCE, SC.

SUPERIOR COURT

W. MICHAEL SULLIVAN, Director :
RHODE ISLAND DEPARTMENT OF :
ENVIRONMENTAL MANAGEMENT, :
:

Plaintiff, :

v. :

C.A. No. 05-2553

CITY OF PROVIDENCE, RHODE ISLAND :
By and through its agencies the PROVIDENCE :
DEPARTMENT OF PUBLIC PROPERTIES :
and the PROVIDENCE SCHOOL :
DEPARTMENT, :

Defendant. :

PROVIDENCE REDEVELOPMENT :
AGENCY, :

Defendant – Intervenor :

YMCA OF GREATER PROVIDENCE :

Defendant – Intervenor :

CONSENT ORDER (Park Parcel)

This matter came before the Court on March 15, 2006, before the Honorable Daniel A. Procaccini. After hearing thereon, it is hereby:

ORDERED, ADJUDGED AND DECREED:

WHEREAS, the Rhode Island Department of Environmental Management (“RIDEM”) filed a complaint against the City of Providence (the “City”) relating to the City’s development of a public high school at a property located at 333 Adelaide Avenue, Providence, Rhode Island, Providence Tax Assessors Plat 51, Lot 170, Parcel B (“Parcel B”);

WHEREAS, Parcel B is one of four parcels (Parcel A, B, C, and D), including Mashapaug Cove, that together comprise what is known as the “Former Gorham Manufacturing” property, a 37-acre former industrial site at 333 Adelaide Avenue, Providence, Rhode Island (the “Site”). The City, by and through the Providence Redevelopment Agency, is the owner of the entire Site and is a “Responsible Party” pursuant to R.I.G.L §§23-19.14-6 and §3.60 of RIDEM’s “Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases”

(the "Remediation Regulations") and a "Performing Party" pursuant to §3.49 of the Remediation Regulations.

WHEREAS the Site is known to be contaminated with a variety of hazardous chemical compounds relating to its prior use as an industrial manufacturing facility and is listed in the U.S. Environmental Protection Agency's ("EPA's) Comprehensive Environmental Response Compensation and Liability Information System ("CERCLIS") database as EPA ID No. RID982542318;

WHEREAS, the northwestern portion of the Site, adjacent to the Mashpaug Pond includes Parcel D and a portion of Parcel C (the "Park Parcel"). The Park Parcel is delineated and defined on a Map of the Site, which is attached as Exhibit A. The portion of Parcel C included in the Park Parcel is also delineated and identified on this Map;

WHEREAS, the City agrees to undertake certain Removal Actions on the Park Parcel as set forth below;

WHEREAS, the City agrees to complete a comprehensive Site Investigation and Remedial Action on the Park Parcel, pursuant to the Schedule set forth below;

WHEREAS the RIDEM is required, pursuant to R.I.G.L. §23-19.14-5(a), to "develop and implement a process to ensure community involvement throughout the investigation and remediation of contaminated sites."

WHEREAS, the neighbors in the Site area and other interested parties seek to continue their involvement in activities relating to the investigation and remediation of the Park Parcel contemplated by this Order;

WHEREAS, Textron, Inc. ("Textron"), a "Responsible Party" under R.I.G.L. §§23-19.14-3(m) and 23-19.14-6 and §3.60 of the Remediation Regulations, agreed to remediate contaminated soil and groundwater at the Site pursuant to an April 2001 "Remedial Action Work Plan," approved by RIDEM on October 10, 2001.

NOW, THEREFORE, it is ORDERED:

I. Removal Actions

a. Within sixty (60) days of the date of this Order, the City shall begin excavation and removal of:

(1) The so-called "slag pile" approximately located on the upland portion of Parcels C and/or D, behind Parcel B.

(2) Several piles of material located on the northern portion of Parcel C, behind Parcel A, which are believed to contain soil, solid waste and demolition debris that were removed from Parcel A during its development.

- b. To the maximum extent practical, the Removal Actions shall not interfere with or make the performance of any long-term remedy more difficult, costly, or time consuming.
- c. The City shall complete the above listed Removal Actions on the Park Parcel within 180 days of entry of this Order, and shall submit to RIDEM a comprehensive report describing the adequate completion of the Removal Actions, including detailed information on all activities performed, e.g. any sampling data and results, an inventory of materials removed and a map showing the locations from which drums, barrels, other containers and any solid waste were removed (the "Removal Actions Report").
- d. Within thirty (30) days of its receipt of the Removal Actions Report, RIDEM may issue comments listing any deficiencies in the Removal Actions Report.

II. Site Investigation

The City shall complete a comprehensive Site Investigation of the Park Parcel and Method I Remedial Actions on the Park Parcel for industrial/commercial use in accordance with the Remediation Regulations. The City shall undertake this Site Investigation and any necessary Remedial Actions in accordance with the Scope and Schedule set forth below. It is recognized that the investigatory and remedial work set forth may be performed by Textron.

- a. Within 120 days of entry of the above Consent Order, the City shall complete a site investigation of the Park Parcel and submit a Site Investigation Report ("SIR") to DEM for review and consideration.
- b. The Site Investigation shall meet the requirements of the Remediation Regulations and will be designed to support three permanent remedial alternatives protective of Park Parcel's final use, which is presently identified by the City as industrial/commercial.
- c. The Site Investigation shall include an evaluation of contaminants that have been found on the Site or that are reasonably connected to historic activities on the Site, including at a minimum:

- VOCs (EPA Method 8260)
- SVOCs and PAHs (EPA Method 8270)
- TPH (EPA Method 8100M)
- 13 Priority Pollutant Metals + Barium (EPA Methods 6010/7470)
- Pesticides (EPA Method 8081A)
- PCBs (EPA Method 8082)
- 17 Dioxin / Furan (EPA Method 8290)
- Total Cyanide

- d. In order to speed review and facilitate RIDEM efforts to provide information to the general public, raw data generated during the investigation (e.g., laboratory analytical

data) shall be forwarded in hard copy and electronic format to RIDEM and to the state senator and state representative representing this district, along with an appropriate map or maps illustrating the approximate sampling locations, within seven (7) days of receipt of the data from the laboratory.

- e. The inclusion of historical analytical data in the SIR is permissible provided that the data was properly collected, preserved (if required), and analyzed in accordance with standard laboratory protocols and industry accepted analytical methods and employed detection limits below the applicable RIDEM criteria.
- f. To facilitate the City's site investigation efforts and effective community involvement, RIDEM will provide the City and the state senator and state representative representing this district with a full copy of the Final Report (including all laboratory data, sampling location maps, and other pertinent attachments or supporting documentation) summarizing the site investigation completed by RIDEM and/or its subcontractors in December 2005 within seven (7) days of RIDEM's receipt of the report from its contractor.
- g. If discovered during the course of the site investigation, the City shall properly excavate, handle, store and transport the following materials to an appropriate off-site disposal facility: (1) any contamination found to exceed DEM-established upper concentration limits or "UCLs," (2) any drums, barrels, other containers, as well as any solid waste on-site, (3) any reasonably discrete areas found to contain contaminants in significant exceedance of DEM-established industrial/commercial standards.

III. Final Park Parcel Remedy

- a. The SIR shall include a discussion of no fewer than three (3) final remedial alternatives, and a recommended final remedy for the Park Parcel. The recommended final remedy shall be sufficiently supported by the SIR and detailed as to permit RIDEM to review and, if appropriate, conceptually approve the proposed remedy.
- b. The goal of the proposed final remedy shall be to bring the Park Parcel into compliance with applicable RIDEM-established industrial/commercial standards.
- c. Within sixty (60) days of receipt of the SIR, RIDEM will issue either a Program Letter that provides RIDEM concurrence that the SIR is conceptually complete and conceptual concurrence with the preferred remedial alternative, or a letter outlining deficiencies in the SIR. Within fourteen (14) days of the City satisfactorily addressing the RIDEM comments, if any, RIDEM shall issue a Program Letter for the Park Parcel.
- d. Upon receipt of a Program Letter, the City will complete public notification and participation requirements relative to the SIR and preferred remedial alternative as required by statute, regulation and as set forth in the April 1, 2005, Letter of Responsibility issued to the City by RIDEM for Parcel B. Within thirty (30) days of RIDEM's receipt of the City's proposed Response to Public Comments regarding the

technical feasibility of the preferred remedy proposed for the Park Parcel, RIDEM shall issue either a Remedial Decision Letter approving the SIR and identifying the preferred remedial alternative, or a letter outlining deficiencies in the Response to Public Comments. Within fourteen (14) days of the City satisfactorily addressing the RIDEM comments, if any, DEM shall issue a Remedial Decision Letter for the Park Parcel.

- e. Upon receipt of the Remedial Decision Letter for the Park Parcel, the City shall prepare and submit a RAWP for the Park Parcel outlining the details, scope of work, and timetable associated with implementing the preferred remedy. The timetable for implementing the remedy will be structured in a manner, to the greatest extent practical, to ensure that the RAWP is completed by or before September 2008.
- f. Within sixty (60) days of submission of the RAWP for the Park Parcel, RIDEM shall review the RAWP and provide either a RAWP approval letter or a letter outlining deficiencies in the RAWP. Within fourteen (14) days of the City satisfactorily addressing the RIDEM comments, if any, RIDEM shall issue a RAWP approval to the City for the Park Parcel.
- g. Within 30 days of receipt of RAWP approval for the Park Parcel, the City will initiate the RAWP. The City will use its best efforts to complete the Remedial Action on the Park Parcel by September of 2008, and RIDEM will use its best efforts to take all necessary steps to permit the City to achieve that goal.
- h. Nothing herein shall affect, change, or limit in any way the authority RIDEM has under the Remediation Regulations and any applicable statutes to take or require actions against any party relating to the Site, subject to the provisions in this Consent Order (Park Parcel) and Consent Order (Parcels B & C) affecting the Site.

IV. Public Notice and Comment

All of the applicable Public Notice provisions set forth in the Remediation Regulations apply to the activities set forth in this Order. In addition to these and the public notice provisions set forth in Sections II and III above, the following public notice and comment provisions also apply:

- (1) RIDEM shall hold a public meeting on the second Friday of every month at 12:00 noon at its offices at 235 Promenade Street, or other sites and times during working hours, to answer questions and to brief the public on any sampling, data, reports, actions, and any other pertinent information relating to this Order and investigations and activities at the Site. The City shall not unreasonably deny a request from RIDEM to attend any such public meeting. The first such public meeting shall take place on Friday, May 15, 2006.
- (2) The City shall simultaneously send a copy of this report to the state senator and state representative representing this district, and the Knight Memorial Library.
- (3) All documents submitted to RIDEM by the City shall be accompanied by an electronic copy of the submission in a format susceptible to posting on RIDEM's internet web-site (e.g. PDF.)

(4) RIDEM shall also simultaneously send a copy of its responses, if any, to the City to the state senator and state representative representing this district and the Knight Memorial Library.

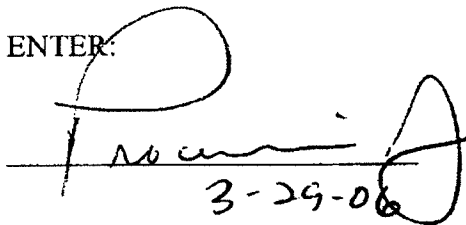
(5) At least seven (7) days prior to the commencement of the Removal Actions provided in this Order, the City shall distribute a flyer written in English and Spanish informing the public that certain Removal Actions and Site Investigation activities are about to take place, that a Barrier has been installed to keep the public off of the Park Parcel, warning the public to stay off the Park Parcel, and providing the names and phone numbers of contact persons for RIDEM and the City's contractor(s) to report complaints or evidence of trespassing on the Park Parcel. The flyer shall be distributed to merchants at the Stop and Shop Plaza, to students attending the Reservoir Avenue Elementary School and the Feinstein High School, and to residents who live adjacent to the Site.

V. Ongoing Involvement of the Court

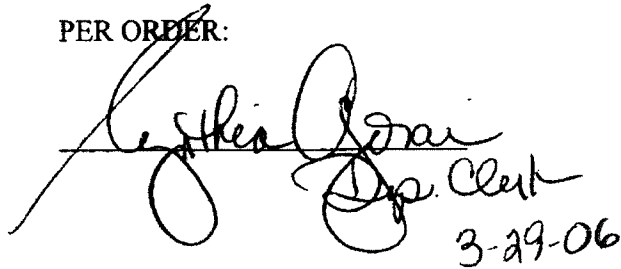
The Court shall retain jurisdiction over the Site and implementation of this Consent Order, and will entertain requests from the parties or from representatives of the public to convene status conferences regarding the implementation of this Consent Order.

ENTERED as an Order of this Court on this 29th day of March, 2006.

ENTER:


3-29-06

PER ORDER:








Cynthia Garcia
Dep. Clerk
3-29-06

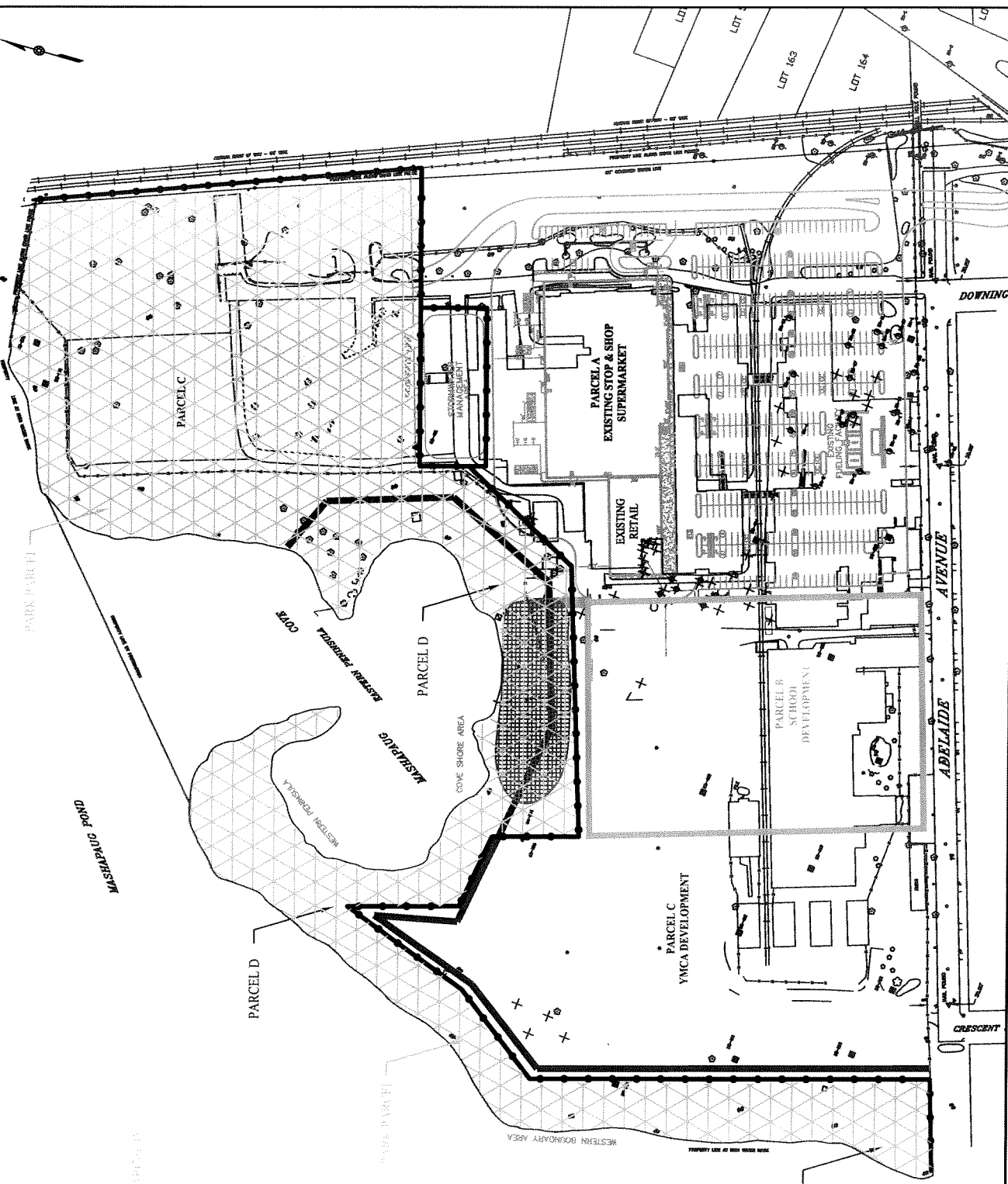
704731 v1

EXHIBIT

A



-  APPROXIMATE SLAG REMOVAL AREA
-  PARK PARCEL AREA QUINCY TRIPS PROPERTY AND PARKING LOT - PAR. 1, 2, 3
-  NEW FENCING TO TIE INTO EXISTING FENCING
-  EXISTING FENCING
-  PARCEL C/D BOUNDARY
-  PARCEL B BOUNDARY



NOTES:
1) NOT TO SCALE

FORMER GORHAM MANUFACTURING FACILITY
PROVIDENCE, RHODE ISLAND
EXHIBIT A

Appendix B

Draft ELUR

ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction (.Restriction.) is made on this _____ day of _____, 20__ by **[property owner]**, and its successors and/or assigns (hereinafter, the "Grantor").

WITNESSETH:

WHEREAS, the Grantor _____ (name) is the owner in fee simple of certain real property identified as **[specify Plat, Lot(s), address and Town or City]** Rhode Island (the "Property"), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property (or portion thereof identified in the Class I survey which is attached hereto as Exhibit 2A and is made a part hereof) has been determined to contain soil and/or groundwater which is contaminated with certain **[hazardous materials and/or petroleum]** in excess of applicable **[residential or industrial/commercial direct exposure criteria, and/or applicable groundwater objectives]** criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations");

WHEREAS, the Grantor has determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1 et seq.;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: **[Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter]** issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of **[hazardous materials and/or petroleum]** and to abate hazards to human health and/or the environment, and in accordance with the **[Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter]**, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the **[Property/Contaminated Site]**;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.

NOW, THEREFORE, Grantor agrees as follows:

- A. Restrictions Applicable to the [Property/Contaminated Site]:** In accordance with the [Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter], the use, occupancy and activity of and at the [Property/ Contaminated Site] is restricted as follows:
- i No residential use of the [Property/Contaminated Site] shall be permitted that is contrary to Department approvals and restrictions contained herein;
 - ii No groundwater at the [Property/Contaminated Site] shall be used as potable water;
 - iii No soil at the [Property/Contaminated Site] shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the Remedial Action Work Plan (RAWP) or Soil Management Plan (SMP) approved by the Department in a written approval letter dated _____ (date) Exhibit B and attached hereto;
 - iv [Humans engaged in activities at the [Property/Contaminated Site] shall not be exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved direct exposure criteria set forth in the Remediation Regulations];
 - v [Water at the [Property/Contaminated Site] shall be prohibited from infiltrating soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved leachability criteria set forth in the Remediation Regulations];
 - vi [No subsurface structures shall be constructed on the [Property/Contaminated Site] over groundwater containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved GB Groundwater Objectives set forth in the Remediation Regulations];
 - vii [The engineered controls at the [Property/ Contaminated Site] described in the [RAWP or SMP] contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in [residential or industrial/commercial] activity from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved [residential or industrial/commercial] direct exposure criteria in accordance with the Remediation Regulations]; and
 - viii [The engineered controls at the [Property/ Contaminated Site] described in the [RAWP or Soil Management Plan SMP] contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained so that water does not infiltrate soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved leachability criteria set forth in the Remediation Regulations.]

B. No action shall be taken, allowed, suffered, or omitted at the [Property/ Contaminated Site] if such action or omission is reasonably likely to:

- i Create a risk of migration of hazardous materials and/or petroleum;
- ii Create a potential hazard to human health or the environment; or
- iii Result in the disturbance of any engineered controls utilized at the **[Property/Contaminated Site]**, except as permitted in the Department-approved **[RAWP or SMP]** contained in Exhibit B.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv Grantor shall communicate at the time of written notification to the Department its intention to conduct the emergency response actions and provide a schedule to complete the emergency response actions;
- v Grantor shall continue to implement the emergency response actions, on the schedule submitted to the Department, to ensure that the **[Property/Contaminated Site]** is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the **[Property/Contaminated Site]**, emergency maintenance and repair of utility lines shall only require restoration of the **[Property/Contaminated Site]** to its condition prior to the maintenance and repair of the utility lines; and
- vi Grantor shall submit to the Department, within ten (10) days after the completion of the emergency response action, a status report describing the emergency activities that have been completed.

- D. Release of Restriction; Alterations of Subject Area:** The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the **[Property/Contaminated Site]** inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the **[Property/Contaminated Site]** from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the **[Property/Contaminated Site]** in accordance with applicable regulations.
- E. Notice of Lessees and Other Holders of Interests in the [Property/Contaminated Site]:** The Grantor, or any future holder of any interest in the **[Property/Contaminated Site]**, shall cause any lease, grant, or other transfer of any interest in the **[Property/Contaminated Site]** to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the **[Property/Contaminated Site]**.
- F. Enforceability:** If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.
- G. Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each owner and any other party entitled to control, possession or use of the **[Property/Contaminated Site]** during such period of ownership or possession.
- H. Inspection & Non-Compliance:** It shall be the obligation of the Grantor, or any future holder of any interest in the **[Property/Contaminated Site]**, to provide for annual inspections of the **[Property/Contaminated Site]** for compliance with the ELUR in accordance with Department requirements.

[An officer or director of the company with direct knowledge of past and present conditions of the [Property/Contaminated Site] (the "Company Representative"), or] A qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the [Property/Contaminated Site], evaluate the compliance status of the [Property/Contaminated Site] on an annual basis. Upon completion of the evaluation, the [Company Representative or] environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the [Property/Contaminated Site] an evaluation report detailing the findings of the inspection, and noting any compliance violations at the [Property/Contaminated Site]. If the [Property/Contaminated Site] is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the [Property/Contaminated Site] shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the [Property/Contaminated

Site] into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the **[Property/Contaminated Site]** may be voided at the sole discretion of the Department.

I. Terms Used Herein: The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

[Name of person(s), company, LLC or LLP]

By: _____
Grantor (signature) Grantor (typed name)

STATE OF RHODE ISLAND

COUNTY OF _____

In (CITY/TOWN), in said County and State, on the ____ day of _____, 20____, before me personally appeared _____, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.

Notary Public: _____

My Comm. Expires: _____

Appendix C

EPA Letter Regarding Engineered Cap Design



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

March 13, 2006

Ms Nancy Kafka
Parks for People Program
Trust for Public Land
33 Union Street
Boston, MA 02108

RE: Brownfields Grant BF 98195801

Dear Ms Kafka:

I am writing in connection with the brownfields grant named above to discuss the technical aspects of the cap design for your project at 67 Melissa Street in Providence, Rhode Island; the property is the site of the former Ponagansett Avenue landfill. I understand from the Brownfields Project Officer for this grant that technical issues have been raised through public advocacy by the local residents; you have requested assistance in addressing those issues.

EPA has awarded a \$200,000 cleanup grant to Trust for Public Land (TPL) to assist with the cleanup and redevelopment of this property. According to the terms and conditions of the brownfields grant, TPL shall ensure that work done with these funds complies with the requirements of Section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). TPL must also ensure that cleanup activities supported with this funding comply with all applicable federal and state laws and regulations and are protective of human health and the environment. And finally, TPL must enroll the cleanup property in the Rhode Island Department of Environmental Management (RIDEM) Voluntary Cleanup Program so that the state can oversee and approve the cleanup.

Numerous discussions have been held among the EPA Brownfields Project Officer, RIDEM, and the environmental engineer hired to direct and oversee cleanup activities at this site to ensure that the terms and conditions of the grant have been, and will continue to be, met. The three parties to those discussions agree that the work performed to date is consistent with the proposal submitted to EPA for this grant money and that the final design for the cap is consistent with the design proposed during the public meeting held on Thursday, June 29, 2004, in Providence, Rhode Island.

The Remedial Action Work Plan for the site was reviewed by RIDEM and approved on May 19, 2005. RIDEM policy¹ requires that an engineered landfill cap designed to limit direct exposure consist of a minimum of two feet of clean fill or the equivalent. The present cap design meets RIDEM's definition for the equivalent of two feet of clean fill. In addition, landscaping will be incorporated at the site which will add additional depth to the cap above the landfill and further protect against potential exposure to contaminants.

¹ See Policy for Marginal Risk Sites – RIDEM-OWM dated January 29, 2002; and Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93, dated March 31, 1993, and amended in August, 1996, and February, 2004.

Toll Free • 1-888-372-7341

Internet Address (URL) • <http://www.epa.gov/region1>

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The cap design is consistent with cap designs proposed and implemented within the State of Rhode Island and the City of Providence. Examples of such caps include those at 100 Bosworth Street in Providence, at the Providence Public Housing Authority – Roger Williams Home Site, at the Rau Fasteners site, at the Riverside Gateway Project, and at the Save the Bay site.

Concerned community residents have suggested the addition of a gravel layer to the proposed cap. Gravel layers are not typically utilized in caps designed to address the cleanup needs present at the TPL site. Typically, a gravel layer is utilized to control site drainage and leachate; occasionally, it is considered as a bio-barrier.

The EPA Brownfields Project Officer, RIDEM, and the grantee's environmental engineer considered the use of a gravel layer, but agreed that the addition of a gravel layer is not technically sound at this site. The cap design is too shallow to support both a gravel layer and a geo-synthetic liner, and the seasonal freezing and thawing would displace the gravel layer which would effectively destroy the cap. They have determined that the approved cap design in conjunction with environmental land use restrictions (ELURs) that will be developed for the site are sufficiently protective of human health and the environment for the end use specified for the property.

EPA strongly encourages TPL to involve the City of Providence and the local residents in the development of the ELURs and Site Management Plan for the site. Because land use is under the jurisdiction of local government, the City of Providence will play a significant role in the management and oversight of any institutional controls implemented at the site. EPA believes that proper maintenance of the cap can be adequately addressed through a well thought-out maintenance plan and enforcement of any ELURs placed on the site.

After a careful review of the available information for this Brownfields project, the EPA Brownfields Project Officer has determined that TPL is in compliance with the terms and conditions of the grant, and that the proposed cap design is protective of human health and the environment for the contaminants of concern. However, EPA also values the input of concerned residents on brownfields projects in their communities; we encourage you to continue a dialogue with the community throughout the remainder of this project.

If you have any questions or comments concerning this review, please feel free to contact Carol Tucker, Brownfields Section Chief at 617-918-1221 or tucker.carol@epa.gov, Dorrie Paar, Project Officer for this grant at 617-918-1432 or paar.dorrie@epa.gov. All questions from legal counsel should be addressed to Rona Gregory at 617-918-1096 or gregory.rona@epa.gov.

We look forward to the completion of this important project that will contribute to the development of the Woonasquatucket River Greenway and improve the quality of life for all those who use the river.

Sincerely,



Susan Studlien, Director FORSS

Office of Site Remediation and Restoration

Appendix D

Shaw Environmental Letter To RIDEM Regarding Parcel A



Shaw Environmental, Inc.

3 Riverside Drive
Andover, MA 01810-1141
978.691.2100
Fax: 978.691.2101

March 9, 2006

PN: 101960

Mr. Joseph Martella, II
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

**Re: Response to Conditions and Comments
Remedial Action Work Plan Addendum
Additional Investigation Activities
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, RI
Case No. 97-030**

Dear Mr. Martella:

Thank you for meeting with us on March 1, 2006. On behalf of Textron Inc. (Textron), Shaw Environmental, Inc. (Shaw) has prepared this response to Rhode Island Department of Environmental Management's (RIDEM's) conditions and comments, dated January 6, 2006, concerning the Remedial Action Work Plan (RAWP) Addendum, prepared by Shaw, dated November 21, 2005. The following responses are provided below:

1. Textron will notify all abutting property owners, tenants, and interested parties per RIDEM's request.
2. As part of the additional investigation activities, alternative remediation methods will be evaluated and considered to address the tetrachloroethene (PCE) source area.
3. As discussed at the March 1, 2006 meeting, Textron will install and sample the following monitoring wells (see attached figure for proposed locations of additional wells):

Deep well pair south of MW-101S&D

A deep and shallow well pair will be installed along the Adelaide Avenue boundary of the site south of MW-101S&D. These wells will be screen at similar elevations as MW-101S&D and will be sampled and analyzed for VOCs by USEPA Method 8260B.

Mr. Joseph Martella
March 9, 2006
Page 2 of 2

PN: 101960

Well pairs along the Parcel B boundary

Two well pairs will be installed along the Parcel B boundary (along the western edge of the Stop&Shop property). These wells will be screened at similar elevations as MW-101S&D and will be sampled and analyzed for VOCs by USEPA Method 8260B.

As agreed at the March 1, 2006 meeting, to address RIDEM's request for a deep aquifer monitoring point in the vicinity of MW-112, existing monitoring well MW-209D will be used. MW-209D is located within 15 feet of MW-112 and is screened from 55 feet to 65 feet below ground surface.

If you have any questions concerning this matter, please contact Ed Van Doren at (978) 691-2130.

Sincerely,

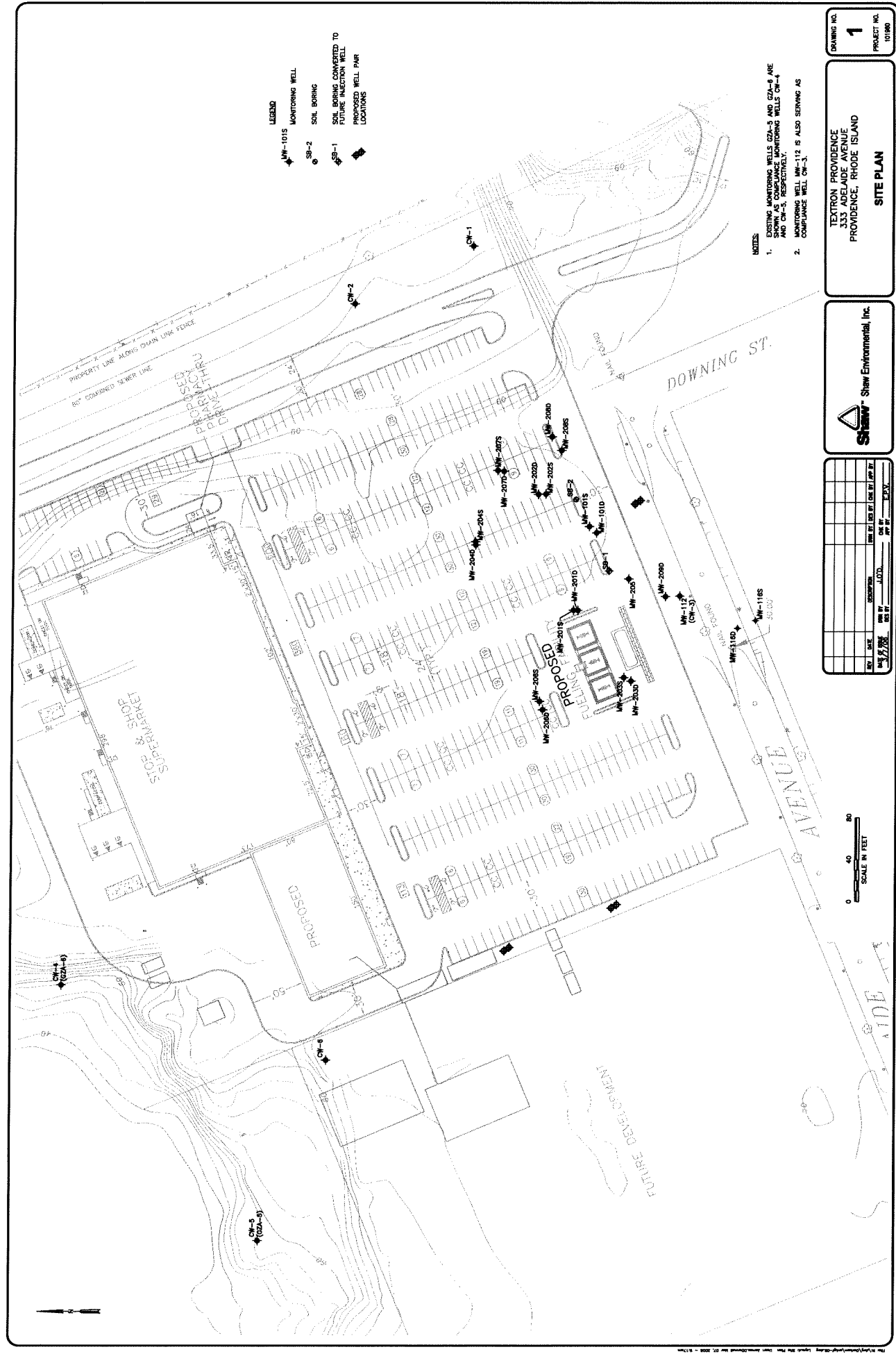
SHAW ENVIRONMENTAL, INC.

Edward P. Van Doren, PE, LSP
Client Program Manager



Attachments

cc: Craig Roy, RIDEM OWR
Greg Simpson, Textron
Thomas Dellar, City of Providence
Karriem Van Leesten, City of Providence



- LEGEND**
- MW-101S MONITORING WELL
 - SB-2 SOIL BORING
 - SB-1 SOIL BORING CONVERTED TO FUTURE INSURION WELL
 - COMPLIANCE WELL LOCATION

- NOTES**
1. EXISTING MONITORING WELLS MW-101S AND MW-102S ARE ALSO SERVING AS COMPLIANCE WELLS CW-1 AND CW-2, RESPECTIVELY.
 2. MONITORING WELL MW-112 IS ALSO SERVING AS COMPLIANCE WELL CW-3.

DRAWING NO. **1**
PROJECT NO. 101890

TEXTRON PROVIDENCE
333 ADELAIDE AVENUE
PROVIDENCE, RHODE ISLAND
SITE PLAN



REV.	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	DATE

