

NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION

---

In the Matter of the  
Violations of Articles 3, 17, 19, 27, and 71 of the  
Environmental Conservation Law

by

Revere Smelting and Refining Corporation., RSR Corporation,  
and ECO-BAT New York LLC,

Respondents.

---

ORDER ON CONSENT  
and  
ADMINISTRATIVE  
SETTLEMENT

Index # 3-20100528-80

Site # 336053

WHEREAS,

1. The New York State Department of Environmental Conservation (the  
"Department") has the following responsibilities:

A. Carrying out the policy of the State of New York to conserve, improve and  
protect its natural resources and environment and control water, land, and air pollution consistent  
with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the  
Environmental Conservation Law ("ECL").

B. Implementing Inactive Hazardous Waste Disposal Site remedial programs  
pursuant to Article 27, Title 13 of the Environmental Conservation Law ("ECL") and Part 375 of  
Title 6 of the Official Compilation of Codes, Rules and Regulations ("6 NYCRR"). The  
Department may issue orders consistent with the authority granted to the Commissioner by such  
statute.

C. Regulating hazardous waste from generation to disposal pursuant to ECL  
Article 27, Title 9, and 6 NYCRR Parts 370 through 374 and 376. The Department may issue  
permits and orders consistent with the authority granted to the Commissioner by this statute.

D. Regulating and prohibiting discharges into the ground or surface water  
pursuant to ECL Article 17 *et seq.*, and *inter alia* 6 NYCRR Part 703. The Department may  
promulgate regulations, issue permits, and issue orders consistent with the authority granted to  
the Commissioner by this statute.

E. Prohibiting and regulating air emissions pursuant to ECL Article 19 *et  
seq.*, and *inter alia* 6 NYCRR Part 201. The Department may promulgate regulations, issue

permits, and issue orders consistent with the authority granted to the Commissioner by this statute.

2. This Order is issued pursuant to the Department's authority under, *inter alia*, ECL Articles 3, 17, 19, 27 and 71 including: sections 3-0301, 17-0501, 17-0701, 17-0803, 17-1743, and 19-0305 of Articles 3, 17 and 19; sections of Titles 9 and 13 of Article 27; and sections 71-1929, 71-1943, 71-2103, 71-2705, and 71-2727 of Article 71.

3. Revere Smelting and Refining Corporation ("Respondent Revere"), is a corporation organized and existing under the laws of the state of Delaware, and is authorized to do business in New York.

4. RSR Corporation ("Respondent RSR") is a corporation organized and existing under the laws of the State of Delaware, which is not authorized to do business in New York, and owns 100% of the outstanding stock of Respondent Revere.

5. ECO-BAT New York LLC ("Respondent Eco-Bat," and together with Respondent Revere, the "Respondents") is a limited liability company organized and existing under the laws of the state of Delaware, which is authorized to do business in New York and which acquired the Site (as that term is hereinafter defined) from Revere in 2003.

6. Respondent Eco-Bat owns approximately 61 acres of land on four contiguous parcels (Lot #'s 41-1-70.21, 41-1-70.23, 41-1-73.1, and 41-1-73.22) located at or around 65 Ballard Road, Middletown New York, 10941 (the "Site"). See Exhibit A for a map of the Site.

7. Respondent Revere has operated the Site as a non-ferrous metal recycling facility, including secondary lead smelting and lead acid battery recycling since 1972, and continues to perform these operations on a portion of the Site (such portion of the Site, consisting of the buildings and paved areas used by Respondent Revere as a non-ferrous recycling facility is hereinafter referred to as the "Facility"). The Site is listed on the Department's list of inactive hazardous waste disposal sites as site number 336053 with a class 2 designation.

8. Respondent Revere entered into three prior Orders on Consent (Index # A3-0402-9911, effective September 28, 2000; Index # D3-0502-12-06, effective June 25, 2007; Index # D3-0001-11-07, effective June 26, 2008) with the Department that cover the investigation and remediation of the Site pursuant to ECL Article 27, Title 13 and 6 NYCRR Part 375. The prior Orders on Consent divided the Site into four operable units ("OUs"), with OU-1 consisting of all on-Site soil excluding soil which underlies the Facility, OU-2 consisting of all on-Site groundwater, OU-3 consisting of off-Site environmental media, and OU-4 consisting of the Facility and of soil underlying the Facility.

9. Portions of the Facility (or OU-4) are subject to ECL Article 27, Title 9, 6 NYCRR Parts 370 through 374 and 376, and a permit ("Part 373 Permit") issued under 6 NYCRR Part 373 authorizing the storage of hazardous waste at certain locations at the Facility (permit number 3-3352-00145/00001-0). Respondents are currently operating the Facility

pursuant to a continuation, pursuant to Section 401.2 of the State Administrative Procedures Act, of its Part 373 Permit.

10. By certified letter dated September 9, 2010 the Department sent Respondents a Notice of Hearing and Complaint, alleging that Respondents had violated ECL Articles 17, 19, 27, and 71 and 6 NYCRR Parts 201, 370-376, 703 and applicable conditions of existing permits and consent orders. The September 9, 2010 Notice of Hearing and Complaint is attached hereto as Exhibit B.

11. Respondents consent to the issuance of this Order and Respondent Revere admits that it violated: Module (I)(D)(8) of the Part 373 Permit by failing to timely report a spill at the containment building at the Facility; Module II(J)(1) of the Part 373 Permit by failing to notify appropriate authorities of a spill at the containment building at the Facility; and condition 1-23, Item 1-23.7 of Respondents' Title V air permit (Permit ID 3-23352-00145/00049).

12. Solely with regard to the matters set forth below, Respondents hereby waive any right to a hearing as may be provided by law, consent to the issuance and entry of this Order, and agree to be bound by its terms. Respondents consent to and agree not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agree not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

#### **I. NOTICE OF HEARING AND COMPLAINT**

The Department's Notice of Hearing and Complaint dated September 9, 2010, attached hereto as Exhibit B, and all allegations of any violation of law, rule, regulation or permit against Respondents raised therein are hereby resolved by this Order and Respondents' compliance with the terms and the conditions of this Order. Additionally, all allegations of ECL, regulatory, or permit violations that are within the actual knowledge of the Department and that occurred from September 9, 2010 until the effective date of this Order, are hereby resolved by this Order and Respondents' compliance with the terms and the conditions of this Order.

#### **II. COMPLIANCE**

A. To the extent that provisions of this Order conflict with provisions of the Part 373 Permit, the provisions of this Order will control and, with respect to any such conflicting provisions, the Part 373 permit is hereby superceded by the terms and conditions of this Order. Except for the activities authorized and required by this Order, conditions of all existing permits regarding operations at the Facility will continue to apply under this Order.

B. Respondent Revere agrees that it will replace the existing containment building floor system (the "Pan Floor") with a new containment building secondary containment floor system (the "New Containment Floor System") in accordance with the requirements contained in Paragraph II.B.1-11 below. The Part 373 Permit renewal process will not resume until the

Department has received and approved the Engineer's Certification (as that term is defined below) pursuant to the provisions of Paragraph II.B.8 below.

1. Respondent Revere and the Department have previously agreed to a preliminary design (the "Preliminary Design") for a replacement of the Pan Floor system in the containment building at the Facility (the "New Containment Floor System"), a copy of which is attached as Exhibit C. Exhibit C also contains a description of minimum specifications for the New Containment Floor System.
2. Within **45** calendar days of the effective date of this Order, Respondent Revere will submit for Department approval construction plans and specifications ("Construction Plans and Specifications"), including operating and maintenance requirements, for the New Containment Floor System. The Construction Plans and Specifications shall be consistent with Exhibit C.
3. The Department shall review the Plans and Specifications to determine whether, if constructed in accordance therewith, the New Containment Floor System will comply with all applicable provisions of 6 NYCRR 373-3.30, 40 CFR Part 264.1100 *et. seq.* and any other applicable requirements regarding storage and processing of hazardous waste for recovery of non-ferrous metals ("Requirements").
4. If the Department determines that any aspect of the Construction Plans and Specifications do not comply with all applicable Requirements, the Department shall provide Respondent Revere with written notice of how the Construction Plans and Specifications fail to meet any applicable Requirements. Within 20 calendar days of receipt of such determination, Respondent Revere shall either provide the Department with revised Construction Plans and Specifications addressing the alleged noncompliance, or commence dispute resolution proceedings as set forth in paragraph VII hereof.
5. If the Department determines that the Construction Plans and Specifications (as originally submitted or as revised) are in compliance with all Requirements, the Department shall provide the Respondent Revere with written notice of its approval of such Construction Plans and Specifications, and Respondent Revere shall be authorized to commence construction of the New Containment Floor System in compliance with such Construction Plans and Specifications.
6. The Department shall have the right to observe the construction of the New Containment Floor System and ensure that it is built in material compliance with the Construction Plans and Specifications. If the Department identifies any facts or circumstances that result in a determination by the Department that the New Containment Floor System is not being built in material compliance with the approved Construction Plans and

Specifications, it shall provide written notice to Respondent Revere specifically identifying such facts or circumstances. Within **5** business days of receipt of such determination, Respondent Revere shall either provide the Department with revised Construction Plans and Specifications addressing the alleged noncompliance, or commence dispute resolution proceedings as set forth in paragraph VII hereof. During the pendency of any dispute resolution proceedings, the Department may authorize Respondent Revere to continue construction of the New Containment Floor System, except for any portions thereof subject to such dispute resolution proceedings.

7. If any changes to the approved Construction Plans and Specifications become necessary during the course of construction which change the design of the New Containment Floor System (as distinguished from changing the means and methods of construction), Respondent Revere shall send a copy of the proposed change order to the Department for approval. The Department shall have **10** business days to review and either approve or disapprove of the change order. If the Department disapproves of the change order, it shall provide Respondent Revere with a written explanation of why the change order was disapproved, and Respondent Revere shall have the right to either resubmit the proposed change order with changes addressing the Department's concerns (in which case the **10** business day review period will begin anew), or commence the dispute resolution procedures set forth in paragraph VII hereof.
8. Upon completion of the construction of the New Containment Floor System, Respondent Revere shall submit for the Department's approval as-built plans, with a certification (the "Engineer's Certification") by a Professional Engineer that satisfies the requirements of 6 NYCRR 373-3.30(b)(3)(ii).
9. If the New Containment Floor System is constructed in compliance with the approved Construction Plans and Specifications, and operates in compliance with the applicable requirements set forth in 6 NYCRR 373-3.30 (Containment Buildings), the Department agrees to incorporate, without alteration, the New Containment Floor System into the draft Part 373 Permit renewal for the Facility. The draft Part 373 Permit will be subject to public review and other aspects of the permitting process. However, assuming the New Containment Floor System is constructed in compliance with the approved Construction Plans and Specifications and is operating in compliance with the applicable requirements set forth in 6 NYCRR 373-3.30 (Containment Buildings), the Department anticipates that the New Containment Floor System will be an element of the final Part 373 Permit.
10. Upon Respondents' execution of a contract with the party or parties responsible for construction of the New Containment Floor System, Respondents will provide a copy of the contract to the Department.

11. Provided that the Department approves the Construction Plans and Specifications by no later than March 15, 2011, Respondent Revere agrees that construction and installation of the New Containment Floor System shall be complete and the Engineer's Certification shall be submitted to the Department by no later than December 31, 2011. If the Department approves the Construction Plans and Specifications after March 15, 2011, Respondent Revere agrees that construction and installation of the New Containment Floor System shall be complete and the Engineer's Certification shall be submitted to the Department by no later than ten (10) months after the Department's approval of the Construction Plans and Specifications.

C. 1. Within 30 days of the effective date of this Order, Respondent Revere will submit for Department approval a RCRA Facility Investigation/Corrective Measures Study Work Plan for OU-4, which will contain, among other things, plans for delineating the horizontal and vertical extent of contamination beneath the main plant building and surrounding paved areas ("RCRA Facility Investigation"), and a plan for assessing alternative corrective measures to address the results of the RCRA Facility Investigation ("Corrective Measures Study"). Such work plan shall include a schedule for implementation.

2. Respondent Revere shall submit to the Department, within forty-five (45) calendar days of a Record of Decision issued by the Commissioner establishing corrective measures, closure, or post closure actions for OU-4, a cost estimate for implementation of such corrective measures, closure, or post closure actions. Within 45 calendar days of the Department's modification or approval of such cost estimate, Respondent Revere shall submit to the Department updated financial assurance using one or more of the financial instruments in 6 NYCRR 373-2.8 in the amount sufficient to cover the cost of corrective measures, closure, post closure actions for OU-4. Notwithstanding the requirements of this subparagraph, Respondent Revere must adjust the amount of financial assurance to account for inflation and to reflect any conditions discovered in performing the RCRA Facility Investigation/Corrective Measures Study.

3. Nothing contained in this Consent Order shall affect any right of Respondents to seek judicial review of any Record of Decision issued by the Commissioner.

D. 1. Within 45 calendar days of the effective date of this Order, Respondent Revere will submit for Department approval a work plan for design, construction, and operation of a Trailer Parking Area ("TPA") that shall meet all the requirements for container storage of 6 NYCRR 373-2.9. The TPA: shall be of a sufficient size to accommodate a maximum of 16 trailers; shall be located on the Site; shall consist of a bermed/paved parking area that is designed with sumps to collect storm water, and collected storm water will be managed at Respondent Revere's water treatment plant; and shall include a roof system that is designed to shed precipitation and minimize storm water.

2. The TPA can store trailers for a maximum of 7 days. If there is a significant Facility upset that requires storage of trailers for more than 7 days, Respondent Revere, on a case-by-case basis, can request from the Department permission to extend the parking period. Respondent Revere shall request an extension in writing from the Department, and the Department's consent for an extension will not be unreasonably withheld.

E. Within 30 calendar days of the effective date of this Order, Respondent Revere will submit for Department approval a Spill Response Protocol work plan that will detail Respondents' response and reporting for spills resulting in any release from the containment building or at the hazardous waste storage area. Notwithstanding the Spill Response Protocol, Respondents must report and address all spills in accordance with applicable law, regulation, and permit conditions.

F. Until the Department approves the Engineer's Report, Respondent Revere will hire and employ a full-time Site Monitor to act as a third-party independent monitor of the activities performed at the Site and the Facility. The selection of such Site Monitor will be subject to Department approval and the Department has the right to, among other things: oversee work performed by the Site Monitor; review all field notes, summaries, analyses, and conclusions and any other records prepared by the Site Monitor; and the unilateral right at any time to remove the Site Monitor and require Respondent Revere to hire a New Site Monitor.

G. Upon the effective date of this Order, Respondent Revere will immediately begin implementation of the Material and Groundwater Management Plan attached hereto as Exhibit D.

H. All previous Orders on Consent referenced above are hereby terminated and superceded by this Order.

1. Operable Units (OUs) for Inactive Hazardous Waste Site No. 336053 will be redefined as follows: OU-1 is now defined as all environmental media, other than groundwater (OU-2), on property currently owned by Respondent Eco-Bat to the east of Ballard Road in the Town of Wallkill, Orange County, New York (Tax Parcels 41-1-70.21, 41-1-70.22, 41-1-70.23, 41-1-71.22, 41-1-73.1, 41-1-73.22, 41-1-74.82, and 41-1-76), except for the Facility (OU-4), and all environmental media, other than groundwater, not owned by Respondent Eco-Bat in the Town of Wallkill, Orange County, New York within Tax Parcels 60-1-120 and 41-1-72.2. OU-2 remains all on-Site groundwater. OU-3 is all off-Site media impacted by Respondents' activities, except environmental media other than groundwater on property not owned by Respondent Eco-Bat that is included in OU-1. Finally, OU-4 remains the Facility.

2. a. Respondent Revere and the Department have developed a draft remedial plan for OU-1, attached hereto as Exhibit E. Within 30 calendar days of the effective date of this Order, Respondent Revere shall submit volume and cost estimates for the activities detailed in the draft remedial plan. The Department will review such volume and cost estimates and will then develop a proposed remedial action plan for OU-1, consistent with Exhibit E. The parties acknowledge that proposed remedial action plans are subject to public review and comment and may change based on public comment. However, assuming the proposed remedial

action plan for OU-1 does not significantly change after public review and comment as adopted in a Record of Decision, Respondent Revere agrees to implement the remedy for OU-1 that is adopted in a Record of Decision. Whether or not a change is deemed significant will be subject to dispute resolution in Section VII of this Order.

b. Unless implementation of the remedy for OU-1 is complete (excluding Site Management) within thirty months of the date of issuance of a Record of Decision for OU-1, Respondents shall post financial assurance using one or more of the financial instruments in 6 NYCRR 373-2.8 in the amount of the cost projection for the remainder of the remedy selected in the Record of Decision, as proposed by Respondents and approved by the Department.

3. With respect to the remaining Operable Units (OU-2, OU-3 and OU-4), remedial investigation, remedial action, corrective action, closure and post closure actions will be governed by Sections III through XI below, provided, however, that any work plan for OU-2 and OU-3 previously implemented by Revere and approved by the Department under any prior Order need not be implemented again, although the Department reserves the right to require supplemental or additional work pursuant to other provisions of this Order.

4. To the extent that the Record of Decision for OU-1 or any work plan for any OU requires access to property not owned by any of the Respondents, the Respondents' obligations with respect thereto under this Order shall be contingent on obtaining such access. Respondent Revere shall use commercially reasonable efforts to obtain such access and if such access cannot be obtained despite such efforts, Respondent Revere shall notify the Department, in writing, and request the Department's assistance in obtaining such access.

### **III. DEVELOPMENT, PERFORMANCE, AND REPORTING OF WORK PLANS**

#### **A. Work Plans**

Notwithstanding any of the provisions in Section II above, all activities at the Site that comprise any element of a remedial, corrective action, or closure program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order and all activities shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, as required under CERCLA, 42 U.S.C. § 9600 *et seq.* and, where applicable, United States Environmental Protection Agency guidance regarding RCRA Facility Investigations/Corrective Measures Studies. The Work Plan(s) under this Order shall address both on-Site and off-Site conditions and shall be developed and implemented in accordance with 6 NYCRR 375-1.6(a), to the extent applicable. All Department-approved Work Plans shall be incorporated into and become enforceable parts of this Order. Upon approval of a Work Plan by the Department, Respondent Revere shall implement such Work Plan in accordance with the schedule contained therein. Notwithstanding any of the provisions in Section II above, nothing in this Subparagraph shall mandate that any particular Work Plan be submitted.



Each Work Plan submitted shall use one of the following captions on the cover page:

1. Site Characterization (“SC”) Work Plan: a Work Plan whose objective is to identify the presence of any hazardous waste disposal at the Site;
2. Remedial Investigation/Feasibility Study (“RI/FS”) Work Plan: a Work Plan whose objective is to perform a Remedial Investigation and a Feasibility Study;
3. RCRA Facility Investigation (RFI) Work Plan: a Work Plan whose objective is to perform a RCRA Facility Investigation;
4. Corrective Measures Study (CMS) Work Plan: a Work Plan whose objective is to identify and provide for the development and implementation of plans to correct any releases of hazardous waste or constituents caused by hazardous waste generation and/or disposal;
5. Interim Remedial Measure (“IRM”) Work Plan: a Work Plan whose objective is to provide for an Interim Remedial Measure;
6. Remedial Design/Remedial Action (“RD/RA”) Work Plan: a Work Plan whose objective is to provide for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in the ROD;
7. Closure/Post Closure Work Plan: a Work Plan whose objective is to identify and provide for the development and implementation of final plans to close a hazardous waste facility; or
8. Site Management Plan: a Work Plan whose objective is to identify and implement the institutional and engineering controls required for the Site, as well as any necessary monitoring and/or operation and maintenance of the remedy.

B. Modifications to Work Plans

The Department shall notify Respondent Revere in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph III.A or to ensure that the remedial, corrective action, or closure objectives otherwise protects human health and the environment. Upon receipt of such notification, Respondent Revere shall provide written notification as provided at 6 NYCRR 375-1.6(d)(3) as to whether it will modify the Work Plan, or invoke dispute resolution.

C. Submission of Final Reports and Annual Reports

1. In accordance with the schedule contained in a Work Plan, Respondent Revere shall submit a final report as provided at 6 NYCRR 375-1.6(b) and a final engineering report as provided at 6 NYCRR 375-1.6(c).

2. Any final report or final engineering report that includes construction activities shall include "as built" drawings showing any changes made to the remedial, corrective action, closure design, or the IRM.

3. In the event that the final engineering report for the Site requires Site management and/or post closure requirements, Respondent Revere shall submit an annual report by the 1<sup>st</sup> day of the month following the anniversary of the start of the Site management and/or post closure. Such annual report shall be signed by a Professional Engineer or by such other qualified environmental professional as the Department may find acceptable and shall contain a certification as provided at 6 NYCRR 375-1.8(h)(3). Respondent Revere may petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

#### D. Review of Submittals

1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondents make pursuant to this Order within sixty (60) calendar days. The Department's response shall include, as provided at 6 NYCRR 375-1.6(d), an approval, modification request, or disapproval of the submittal, in whole or in part.

2. Upon the Department's written approval of a Work Plan, such Department-approved Work Plan shall be deemed to be incorporated into and made a part of this Order and shall be implemented in accordance with the schedule contained therein.

3. If the Department modifies or requests modifications to a submittal, it shall specify the reasons for such modification(s). Within fifteen (15) calendar days after the date of the Department's written notice that Respondents' submittal has been disapproved, Respondent Revere shall notify the Department of its election as provided at 6 NYCRR 375-1.6(d)(3). If Respondent Revere elects to modify or accept the Department's modifications to the submittal, Respondent Revere shall, within thirty (30) calendar days after such election, make a revised submittal that incorporates all of the Department's modifications to the first submittal. In the event that Respondent Revere's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent Revere shall be in violation of this Order unless it invokes dispute resolution pursuant to Section VII and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

4. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within fifteen (15) calendar days after the date of the Department's written notice that Respondent Revere's submittal has been disapproved, Respondent Revere shall notify the Department of its election as provided at 6 NYCRR 375-1.6(d)(4). If Respondent Revere elects to modify the submittal, Respondent Revere shall, within thirty (30) calendar days after such election, make a revised submittal that addresses all of the Department's stated reasons for

disapproving the first submittal. In the event that Respondent Revere's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent Revere shall be in violation of this Order unless it invokes dispute resolution pursuant to Section VII and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

#### **IV. PENALTIES**

With respect to the violations which the Department alleged in its Notice of Hearing and Complaint dated September 9, 2010 against Respondents, and with respect to alleged ECL, regulatory, or permit violations that are within the actual knowledge of the Department and that occurred from September 9, 2010 until the effective date of this Order, the Department, in settlement of any and all such violations, hereby assesses against Respondent Revere:

##### **A. Civil Penalty**

A payable penalty in the amount of ONE HUNDRED AND FIFTY THOUSAND DOLLARS (\$150,000). Respondent Revere will pay this amount within thirty (30) calendar days of the effective date of this Order, by check made payable to the order of the New York State Department of Environmental Conservation. Respondent Revere will submit such settlement payments as required by this Order to:

Office of General Counsel  
New York State Department of Environmental Conservation  
625 Broadway, Floor 14<sup>th</sup> Floor  
Albany, New York 12233-5500  
Attn: Christopher Horan, Esq.

##### **B. Environmental Benefit Project**

1. Respondent Revere must implement an EBP that complies with the Department's Environmental Benefit Projects Policy (CP-37) and must expend not less than THREE HUNDRED THOUSAND DOLLARS (\$300,000) in the implementation. If the project is completed for less than the calculated EBP value, Respondent Revere shall, at the sole discretion and direction of the Department, either pay the remaining balance as penalty, or implement one or more additional, Department-approved EBPs having a cost no less than the remaining balance.

2. Within 30 calendar days of the effective date of this Order, unless the Department determines that additional time is warranted and grants an extension in writing, Respondent Revere shall submit to the Department a description of and plan for an EBP that includes a schedule for implementation ("EBP Implementation Plan"), which is subject to the Department's review and approval. The EBP Implementation Plan shall not include any EBPs for work at the Site or the upgrades of the Facility. Respondent Revere shall make such changes to the EBP Implementation Plan as the Department may require. If the EBP Implementation Plan has not been approved by the Department within one year of the effective date of this Order, then

the amount set forth in subparagraph IV(B)(1) shall be paid as a penalty for the violations set forth herein. Upon the Department's approval, the EBP Implementation Plan shall be an enforceable part of this Order.

## **V. PAYMENT OF STATE COSTS**

A. Within forty-five (45) calendar days after the effective date of this Order, Respondent Revere shall pay to the Department a sum of money which shall represent reimbursement for past State Costs as provided at 6 NYCRR 375-1.5(b)(3).

B. Within forty-five (45) calendar days after receipt of an itemized invoice from the Department, Respondent Revere shall pay to the Department a sum of money which shall represent reimbursement for State Costs, other than those identified in Subparagraph V.A, for work performed at or in connection with the Site, as provided at 6 NYCRR 375-1.5(b)(3).

C. Personal service costs shall be documented as provided at 6 NYCRR 375-1.5(b)(3)(ii). The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.

D. Such invoice shall be sent to Respondents at the following address:

VP Plant Operations  
Revere Smelting & Refining Corporation  
65 Ballard Road  
Middletown, NY

With a copy to:

Philip H. Gitlen, Esq.  
Whiteman Osterman & Hanna LLP  
One Commerce Plaza  
Albany, NY 12260

E. Each such payment shall be made payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, New York 12233-7012

F. Each party shall provide written notification to the other within ninety (90) calendar days of any change in the foregoing addresses.

G. Respondent Revere may contest invoiced costs as provided at 6 NYCRR 375-1.5(b)(3)(v) and (vi).

## **VI. FAILURE & VIOLATION OF ORDER**

A. Failure to perform any obligation under this Order shall constitute a violation of this Order and the ECL, and may subject Respondents to revocation of the Part 373 Permit and termination of this Order.

B. If Respondents fail to comply with any term or condition set forth in this Order in the time or manner specified herein, then Respondent Revere shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondents are in violation of any term or condition of this Order. Stipulated penalties shall be due and payable pursuant to the following schedule:

<u>PERIOD OF NONCOMPLIANCE</u>	<u>PENALTY PER DAY</u>
1st day through 15th day	\$1000.00
16th day through 30th day	\$2500.00
31st day and each day thereafter	\$7500.00

Stipulated penalties shall begin to accrue on the first day Respondents are in violation of a term or condition of this Order and shall continue to accrue through the final day of correction of any violation. Such sums shall be due and payable within sixty (60) calendar days after receipt of notification from the Department assessing the stipulated penalties. If such payment is not received within sixty (60) calendar days after Respondents receive such notification from the Department, interest shall be payable at the rate specified by the New York Civil Practice Law and Rules for interest on a judgment on the overdue amount from the day on which it was due through, and including, the date of payment. Stipulated penalties shall be paid by certified check or money order, made payable to New York State Department of Environmental Conservation, and shall be delivered personally or by certified mail, return receipt requested, to Office of General Counsel, N.Y.S.D.E.C., 625 Broadway, 14<sup>th</sup> Floor, Albany, N.Y. 12233-1500, Attn: Christopher Horan, Esq. Payment of the stipulated penalties shall not in any way alter Respondents' obligation to complete performance under the terms of this Order. The payment of stipulated penalties as set forth above shall not limit the Department's right to seek such other relief as may be authorized by law.

## **VII. DISPUTE RESOLUTION**

In the event disputes arise under this Order, Respondents may, within fifteen (15) calendar days after Respondents knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution as provided at 6 NYCRR 375-1.5(b)(2). These provisions are applicable to all activities performed pursuant to this Order, including those which will later be incorporated into a draft Part 373 Permit.

## **VIII. ENVIRONMENTAL EASEMENT**

A. If a Department-approved final engineering report for the Site relies upon one or more institutional and/or engineering controls, Respondents (or the owner of the Site) shall submit to the Department for approval an Environmental Easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36, and 6 NYCRR 375-1.8(h)(2). Upon acceptance of Environmental Easement by the State, Respondents shall comply with the requirements of 6 NYCRR 375-1.8(h)(2).

B. If a ROD, closure or post closure plan provides for no action other than implementation of one or more institutional controls, Respondents shall cause an environmental easement to be recorded under the provisions of Subparagraph VIII.A above.

## **IX. PUBLIC NOTICE**

A. Within thirty (30) calendar days after the effective date of this Order, Respondent Revere shall provide notice as provided at 6 NYCRR 375-1.5(a). Within sixty (60) calendar days of such filing, Respondents shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondents Revere or Eco-Bat propose to transfer by sale or lease the whole or any part of Respondents' interest in the Site, or becomes aware of such transfer, such Respondents shall, not fewer than forty-five (45) calendar days before the date of transfer, or within forty-five (45) calendar days after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondents to secure the repayment of money or the performance of a duty or obligation.

## **X. TERMINATION**

This Order shall terminate five calendar days after the Department's written determination that Respondents have satisfied all the requirements set forth in Section II of this Order, paid all penalties required by the Order, and completed all phases of all remedial, closure, and post-closure programs including site management. All provisions of this Order not specifically incorporated into or superceded by a new Part 373 Permit shall survive the issuance of any such permit.

## **XI. STANDARD PROVISIONS**

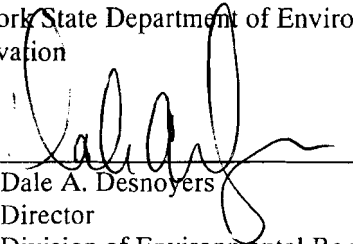
Respondents will further comply with the standard provisions which are attached, and which constitute material and integral terms of this Order and are hereby incorporated into this document.

DATED: Albany, New York

FEB 01 2011

Acting Commissioner Joe Martens  
New York State Department of Environmental  
Conservation

By:

  
Dale A. Desnoyers

Director

Division of Environmental Remediation

CONSENT BY RESPONDENT

Respondent **REVERE SMELTING & REFINING CORPORATION** hereby consent to the issuing and entering of this Order without further notice, waive their right to a hearing herein, and agree to be bound by the terms, conditions and provisions contained in this Order.

By (Signature): *John A. De Paul*

Print Name: JOHN A. DE PAUL

Title: Senior Vice President

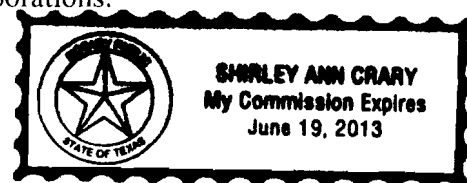
Date: January 21, 2011

ACKNOWLEDGMENT

STATE OF Texas ) ss:  
COUNTY OF Dallas )

On the 21<sup>st</sup> day of January in the year 2011 before me personally came John A. De Paul to me known, who, being by me duly sworn, did depose and say that ~~s/he~~ resides in Texas that s/he is the S.V.P. of Revere Smelting & Refining Corp., the corporations described in and which executed the above instrument, and that s/he signed his/her name thereto by authority of the board of directors of said corporations.

*Shirley Ann Crary*  
Notary Public  
Signature and Office of individual taking acknowledgment





CONSENT BY RESPONDENT

Respondent ECO-BAT, NEW YORK, LLC hereby consents to the issuing and entering of this Order without further notice, waive their right to a hearing herein, and agree to be bound by the terms, conditions and provisions contained in this Order.

By (Signature):

Print Name:

Title:

Date:

ACKNOWLEDGMENT

STATE OF ENGLAND ) ss:  
COUNTY OF CHESTERFIELD

On the 25<sup>th</sup> day of January in the year 2011 before me personally came GEORGE IRVING CUMMINS to me known, who, being by me duly sworn, did depose and say that s/he resides in MATLOCK ENGLAND that s/he is the DIRECTOR of ECO-BAT NEW YORK LLC, the limited liability company described in and which executed the above instrument; and that s/he signed his/her name thereto by authority of the member(s) of said limited liability company.

Notary Public

Signature and Office of individual taking acknowledgment

STEPHEN GORDON

Notary Public

Chesterfield

England

## **STANDARD PROVISIONS**

**Payment.** Any penalty assessed pursuant to the terms and conditions of this Order shall be paid by submitting a certified or cashier's check or money order, payable to the Department of Environmental Conservation, to: Department of Environmental Conservation, Office of General Counsel, Attn: Christopher Horan Esq., 625 Broadway, 14th Floor, Albany, New York 12233-5550. Unpaid penalties imposed by this Order shall bear interest at the rate of 9 percent per annum for each day the penalty, or any portion thereof, remains unpaid. Payments received shall first be applied to accrued interest charges and then to the unpaid balance of the penalty.

**Communications.** Except as otherwise specified in this Order, any reports, submissions, and notices herein required shall be made to: Attn: William Bennett and Anand Patel, NYS Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany, New York 12233-5550, with a copy to Christopher Horan, Esq. and Andrew Guglielmi, Esq.

**Duration.** This Order shall take effect when it is signed by the Commissioner of Environmental Conservation, or his designee, and shall expire when Respondent has fully complied with the requirements of this Order.

**Access.** For the purpose of monitoring or determining compliance with this Order, employees and agents of the Department shall be provided access to any facility, site, or records owned, operated, controlled or maintained by Respondent, in order to inspect and/or perform such tests as the Department may deem appropriate, to copy such records, or to perform any other lawful duty or responsibility.

**Force Majeure.** If Respondent cannot comply with a deadline or requirement of this Order, because of an act of God, war, strike, riot, catastrophe, or other condition which was not caused by the negligence or willful misconduct of Respondent and which could not have been avoided by the Respondent through the exercise of due care, Respondent shall apply in writing to the Department within a reasonable time after obtaining knowledge of such fact and request an extension or modification of the deadline or requirement.

**Indemnity.** Except for the willful misconduct of the Department, State of New York, and their representatives and employees, Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages and costs resulting from the acts and/or omissions of Respondent, intentional, negligent, or otherwise, of every nature and description, arising out of or resulting from the compliance or attempted compliance with the provisions of this Order by Respondent or its employees, servants, agents, successors or assigns.

**Modifications.** No change in this Order shall be made or become effective except as specifically set forth by written order of the Commissioner, being made either upon written application of Respondent, or upon the Commissioner's own findings after notice and opportunity to be heard have been given to Respondent. Respondent shall have the burden of proving entitlement to any modification requested pursuant to this Standard Provision or the "Force Majeure" provision, *supra*. Respondent's requests for modification shall not be unreasonably denied by the Department, which may impose such additional conditions upon Respondent as the Department deems appropriate. Notwithstanding the foregoing, if Respondent seeks to modify an approved Work Plan, a written request shall be made to the Department.

**Permit Exemption.** The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for activities conducted pursuant to this Order as provided at 6 NYCRR 375-1.12(b), (c), and (d).

**Other Rights.** Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting (1) any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against anyone other than Respondent; (2) any right of the Department to enforce administratively or at law or in equity, the terms, provisions and conditions of this Order; (3) any right of the Department to bring any future action, either administrative or judicial, for natural resource damages, or for any other violations of the ECL, the rules and regulations promulgated thereunder, or conditions contained in orders or

permits, if any, issued by the Department to Respondent; (4) the summary abatement powers of the Department, either at common law or as granted pursuant to statute or regulation.

**Entire Agreement.** This Order shall constitute the entire agreement of the Department and Respondent with respect to settlement of those violations specifically referenced herein.

**Headings.** The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.

**Signature of Order.** This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.

**Binding Effect.** The provisions, terms, and conditions of this Order shall be deemed to bind Respondent and Respondent's heirs, legal representatives, receivers, trustees in bankruptcy, successors and assigns.

**Service.** If Respondent is represented by an attorney with respect to the execution of this Order, service of a duly executed copy of this Order upon Respondent's attorney by ordinary mail shall be deemed good and sufficient service.

**Multiple Respondents.** 1. If more than one Respondent is a signatory to this Order, use of the term "Respondent" in these Standard Provisions shall be deemed to refer to each Respondent identified in the Order.

2. If there are multiple parties signing this Order, the term "Respondent" shall be read in the plural, the obligations of each such party under this Order are joint and several, and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s) under this Order.

Exhibit A  
Map of the Site

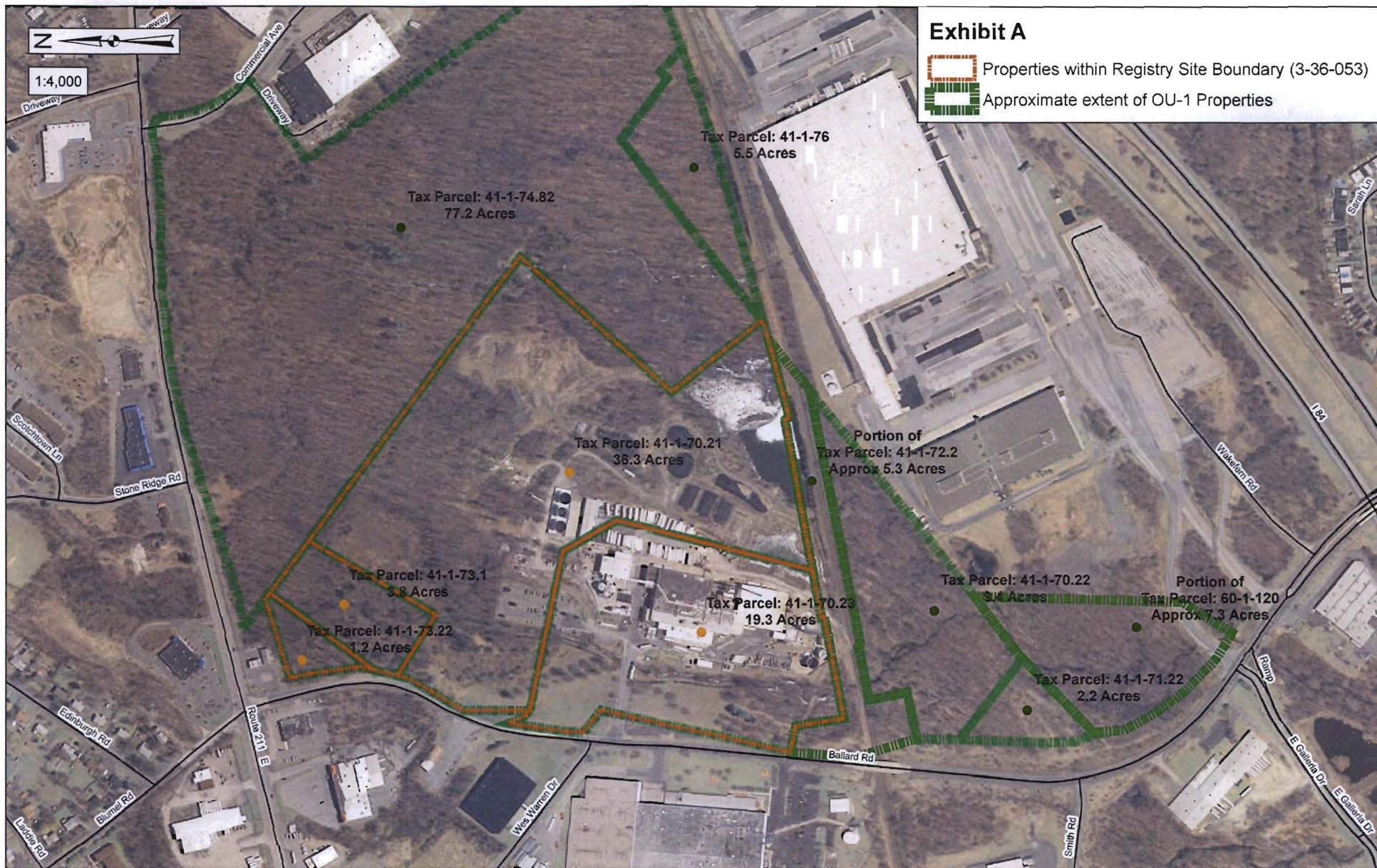


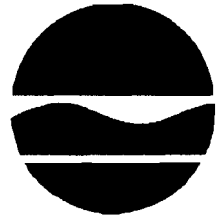
Exhibit B

Notice of Hearing and Complaint



**New York State Department of Environmental Conservation  
Office of General Counsel**

625 Broadway  
Albany, New York 12233-5500  
Phone: (518) 402-9509 • FAX: (518) 402-9019  
Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Alexander B. Grannis  
Commissioner

**CERTIFIED MAIL,  
RETURN RECEIPT REQUESTED**

September 9, 2010

Mr. Robert E. Finn  
Chief Executive Officer  
Revere Smelting and Refining, Inc. & RSR Corporation  
2777 Stemmons Frwy  
18<sup>th</sup> Floor  
Dallas, TX 75207

ECO-BAT New York, LLC  
C/O CT Corporation System  
111 Eighth Avenue  
New York, NY 10011

Re: Notice of Hearing and Complaint re: Revere Smelting facility,  
65 Ballard Road, Middletown, NY 10941  
DEC case #: CO 3-20100528-80

Dear Mr. Finn and Sir/Madam:

The New York State Department of Environmental Conservation has made a preliminary finding that your company has violated certain provisions of the Environmental Conservation Law (ECL), and regulations pertaining to solid and hazardous waste management, water pollution, air emissions, and remediation promulgated under the authority of ECL Article 27, Titles 9 and 13, Article 17, Titles 5, 7, 8, and 17, and Article 19, Title 3. The alleged violations are fully set forth in the enclosed administrative Complaint which is hereby served upon you pursuant to §622.3 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York. Also enclosed is a Notice of Hearing.

Possible sanctions for violations of Article 27, Titles 9 and 13, and their implementing regulations include a civil penalty of up to \$37,500 and an additional penalty of up to \$37,500

for each day of violation; for a second offense, a civil penalty of up to \$75,000 plus \$75,000 for each day of violation may be imposed. The Department is also entitled to injunctive relief concerning violations of these statutory and regulatory provisions. Violations of Article 17 Titles 5, 7, and 8, and related regulations or permit conditions also may subject your Company to a penalty of \$37,500 per violation, while violations of Article 17, Title 17 may subject your Company to a penalty of \$3,750. The Department is entitled to injunctive relief for any violations of Article 17. Your Company may also be subject to a penalty of \$18,000 for the first day of any violation of Article 19 and its implementing regulations, and an additional penalty of \$15,000 for each day during which such violation persists.

Your company is entitled by law to a full administrative hearing on this matter. Should your company decide to contest the Department's allegations, an Answer must be served within twenty days of receipt of the Complaint. A pre-hearing conference has been scheduled for October 21, 2010 at 10:00 am, in room 1417 of the Department's Central Office located at 625 Broadway in Albany, New York. Should your company fail to file an Answer or attend the pre-hearing conference, the Department will move for a default judgment and request that the Office of Hearings issue an Order granting all the relief requested in the attached complaint

Sincerely,

*Christopher H. Horan*

Christopher H. Horan  
Senior Attorney

and

*Andrew Guglielmi*

Andrew Guglielmi  
Senior Attorney

Enclosures

Cc: Mr. Philip Gitlen  
Mr. James Walsh

EDMS #373703



STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

-----X  
In the Matter of Alleged Violations of Articles 3, 17, 19, 27,  
and 71 of the New York State Environmental Conservation  
Law ("ECL") and Parts 201, 370 through 376, and 703 of  
Title 6 of the Official Compilation of Codes, Rules and  
Regulations of the State of New York ("NYCRR")

-By-

NOTICE OF HEARING  
DEC Case No.  
CO 3-20100528-80

Revere Smelting and Refining Corporation,  
RSR Corporation, and  
ECO-BAT New York LLC

Respondents.  
-----X

**PLEASE TAKE NOTICE**, that pursuant to Articles 3, 17, 19, 27, and 71 of the Environmental Conservation Law of the State of New York ("ECL") and Parts 201, 370 through 376, 622, and 703 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR") a hearing shall be convened on a date which will be set by the Office of Hearings upon the filing of a Statement of Readiness for Adjudicatory Hearing as set forth in 6 NYCRR 622.9, to consider certain violations Respondents are charged with having committed, specifically violations of ECL Article 17, Titles 5, 7, 8 and 17, Article 19, Title 3, Article 27, Titles 9 and 13, and Article 71, Titles 19, 21 and 27 and 6 NYCRR Parts 201, 370 through 376, and 703.

**PLEASE TAKE NOTICE**, that Respondents must serve an Answer to this Notice of Hearing and Complaint on the attorneys who had signed the Notice of Hearing and Complaint within twenty (20) days of receipt of this Notice of Hearing and Complaint, in accordance with the provisions of 6 NYCRR 622.4 and that any affirmative defenses will be waived unless raised in the Answer; that failure to serve an Answer as provided above will result in a default and a waiver of Respondents' right to a hearing; that Respondents must appear at the hearing in person or by representative, with or without counsel; that all witnesses will testify under oath and a record of the proceeding will be made; that Respondents may request issuance of subpoenas to compel attendance of witnesses and production of records relative to the matter; and that Respondents may cross-examine witnesses and examine evidence produced against Respondents. Failure to appear at the hearing shall constitute a default and waiver of Respondents' right to a hearing.

**PLEASE TAKE NOTICE**, that the hearing will be convened whether or not Respondents appear; and should Respondents be found to have violated the aforementioned statute and/or regulations, an Order will be issued assessing penalties upon Respondents and/or directing other and further relief. Any penalties assessed upon Respondents shall be in

accordance with the provisions of ECL 71-1929, 71-1943, 71-2103 and 71-2705. The assessment of penalties shall not preclude the DEC from taking other appropriate and authorized legal and/or administrative action.

**PLEASE TAKE FURTHER NOTICE**, that you are required to attend a pre-hearing conference which will be held at the following date, time and place:

DATE: October 21, 2010

TIME: 10 AM

PLACE: New York State Department of Environmental Conservation  
625 Broadway, Conference Room 1417  
Albany, NY 12233

**Failure to appear at the pre-hearing conference at the date, time and place set forth above will result in a default and waiver of Respondent's right to a hearing.**

Dated: September 9, 2010  
Albany, New York

STAFF OF THE NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

By: Andrew Guglielmi  
Andrew O. Guglielmi, Esq.  
Senior Attorney  
New York State Department of  
Environmental Conservation  
Bureau of Remediation and Revitalization  
625 Broadway, 14<sup>th</sup> Floor  
Albany, New York 12233-5500  
Tel. (518) 402-9507

& By: Christopher H. Horan (EH)  
Christopher H. Horan  
Senior Attorney  
New York State Department of  
Environmental Conservation  
Bureau of Minerals/Solid & Hazardous Materials  
625 Broadway, 14<sup>th</sup> Floor  
Albany, New York 12233-5500  
Tel. (518) 402-9507

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

-----X  
In the Matter of Alleged Violations of Articles 3, 17, 19, 27,  
and 71 of the New York State Environmental Conservation  
Law ("ECL") and Parts 201, 370 through 376, and 703 of  
Title 6 of the Official Compilation of Codes, Rules and  
Regulations of the State of New York ("NYCRR")

-By-

Revere Smelting and Refining Corporation,  
RSR Corporation, and  
ECO-BAT New York LLC

COMPLAINT  
DEC Case No.  
CO 3-20100528-80

Respondents.  
-----X

The New York State Department of Environmental Conservation Staff ("Department Staff"), by their attorneys, Christopher H. Horan, Esq. and Andrew O. Guglielmi, Esq., in this administrative proceeding instituted pursuant to Article 3, Titles 17 and 19 of Article 17, Title 3 of Article 19, and Titles 9 and 13 of Article 27 of the Environmental Conservation Law (ECL) and Parts 201, 370 through 376 and 703 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("NYCRR"), alleges the following as and for a complaint against Respondents, Revere Smelting and Refining Corporation, RSR Corporation and ECO-BAT New York LLC.

**JURISDICTION AND PARTIES**

1. The Department of Environmental Conservation ("DEC" or "the Department") is an executive department of the State of New York with jurisdiction and authority to adopt and enforce codes, rules and regulations relating to hazardous waste treatment, storage and disposal facilities and implementation of remedial programs at inactive hazardous waste sites to protect human health and the environment, and to regulate air and groundwater pollution pursuant to Articles 3, 17, 19, 27, and 71 of the ECL.

2. Revere Smelting and Refining Corporation ("Respondent Revere") is a corporation organized and existing under the laws of the State of Delaware and is authorized to do business in the State of New York. Since 1972, Respondent Revere has operated a secondary lead smelting and lead acid battery processing facility (the "Facility") located at 65 Ballard Road, Middletown, NY 10941.

3. The Facility is a portion of a 55-acre parcel of land which has been identified, classified and is listed on New York State's registry of inactive hazardous waste sites, as Site Number 336053 (the "Site"). Respondent Revere is currently implementing a remedial program

at the Site, with oversight from the Department, pursuant to ECL Article 27, Title 13 and 6 NYCRR Part 375.

4. RSR Corporation ("Respondent RSR") is a foreign business corporation organized and existing under the laws of the state of Delaware, and it is not authorized to do business in New York.

5. Upon information and belief, Respondent RSR owns 100 percent of the outstanding stock of Respondent Revere.

6. Upon information and belief, Respondent RSR possesses the authority to make and prevent business decisions of Respondent Revere, and to exercise managerial control over Respondent Revere's hazardous waste management.

7. ECO-BAT New York, LLC ("Respondent Eco-Bat") is a foreign corporation incorporated and organized under the laws of the state of Delaware and is authorized to do business in the State of New York.

8. Upon information and belief, the assets of Respondent Revere were sold to Respondent Eco-Bat in early 2003.

9. On January 31, 2005, Respondent Eco-Bat and Respondent Revere applied for a Part 373 permit renewal. On the application, Respondent Eco-Bat is listed as the owner and Respondent Revere is listed as the operator.

#### **NATURE OF THE PROCEEDING**

10. This Complaint arises out of inspections of Respondents' Facility and adjacent areas in the spring and fall of 2009 and early 2010, along with a review of quarterly reports and other documentation. Respondents' ongoing and historical secondary lead smelting and lead acid battery processing operations have produced and released to the environment hazardous substances and hazardous wastes including materials contaminated with high levels of lead and other toxic substances.

11. Inspections by Department Staff revealed, among other things, that in September 2009 Respondents failed to properly report and manage a catastrophic spill (the "Spill") of thousands of gallons of high pH water, contaminated with lead dust and other hazardous waste constituents from the containment building. The containment building is where the storage of hazardous waste is authorized pursuant to a 6 NYCRR Part 373 permit. Respondents continue to improperly maintain their primary and secondary containment measures inside and under their containment building resulting in repeated releases of hazardous substances to the environment.

12. Following the Spill, Respondents failed to make a hazardous waste determination on the contaminated soil and gravel impacted by the Spill. Respondents then moved the soil and gravel from the location of the Spill to another area of the site which had already been analyzed and characterized in an ongoing remedial program. In doing so, Respondents created an

unpermitted hazardous waste storage area in an inactive hazardous waste site and impacted a hazardous waste remediation.

13. In incidents in the fall of 2009 and early 2010, it was discovered that Respondents interfered with an ongoing remedial investigation by removing contaminated concrete from the front of their facility and interior of the containment building and transporting it to the same portion of the inactive hazardous waste site where the soil and gravel from the Spill was disposed.

14. Department inspectors also found in September 2009 that Respondents were improperly storing and handling their universal waste fluorescent lamps.

15. A prior enforcement action was initiated against Respondent for violations related to the unauthorized storage of batteries. This violation was discovered in March 2009, and, as the enforcement proceeding has not as yet been resolved and relates to the same facility and regulatory program, the original Notice of Violation and proposed Order on Consent sent to Respondent Revere by the Department on May 13, 2009 are withdrawn, and this action has been incorporated into this Complaint.

16. In addition to conducting regular inspections of Respondents' facility, Department staff review submissions required by Respondents' operating permits. It was recently discovered that Respondents have not updated financial assurance documentation as required by law to reflect inflation and costs for corrective measures and current closure.

17. Department staff also recently discovered that Respondents were in violation of their Title V air permit. They sent Respondents a notice of violation letter on May 5, 2010 pertaining to air emission exceedances which occurred in January and February, 2010, and were discovered after a review of Respondents' quarterly report for this period.

18. Department Staff bring this proceeding to 1) require Respondents to complete certain measures, including construction of an approved liner system for the containment building; 2) prevent Respondents from further violating the ECL by transporting and storing material illegally; 3) compel Respondents to perform all necessary remedial measures in the area where contaminated material was stored; and 4) punish Respondents through a civil penalty of at least \$953,000 to stop a continued pattern of noncompliance.

#### **STATUTORY AND REGULATORY BACKGROUND**

19. ECL 27-0913(1)(a) states that: "No person shall engage in storage, treatment, or disposal, including storage at the site of generation, of hazardous wastes without first having obtained a permit pursuant to title seven of this article. Such permits shall require corrective action, including corrective action beyond the facility boundary where necessary to protect human health and the environment, for all releases of hazardous waste or constituents from any solid waste management unit at a permitted treatment, storage or disposal facility, regardless of the time at which waste was placed in such unit, and shall contain schedules of compliance for

such corrective action where such corrective action cannot be completed prior to issuance of the permit.”

20. ECL 27-0914(2) states that: “No person shall dispose of hazardous waste without authorization.”

21. ECL Section 27-0901(2) provides in relevant part that: “Disposal means the abandonment, discharge, deposit, injection, dumping, spilling, leaking or placing of any substance so that such substance or any related constituent thereof may enter the environment .....,”

22. 6 NYCRR 372.2(a)(2) requires that any person who generates a solid waste make a determination as to whether such waste is a hazardous waste.

23. 6 NYCRR 373-2.2(g)(1) provides in relevant part, that: “The owner or operator must inspect the facility for malfunctions and deterioration, operator errors and discharges which may be causing or may lead to: (i) a release of hazardous waste constituents to the environment...”

24. 6 NYCRR 373-2.6(c) states in relevant part, that: “...The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that hazardous constituents...detected in the ground water...do not exceed the concentration limits...”

25. 6 NYCRR 373-3.3(b) provides in relevant part, that: “...Facilities must be maintained and operated to minimize the possibility of ...any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.”

26. 6 NYCRR Part 373-2.8(c)(1) through (4) require that the financial assurance for site closure which hazardous waste facilities must maintain pursuant to (a)(1) of this subpart be adjusted to account for inflation and current closure and post-closure costs.

27. 6 NYCRR 373-2.8(d)(1)(ii) requires that schedule A of the trust agreement described in this subpart be updated within 60 days of a change in cost estimate.

28. Section 3 of the trust agreement requires that schedule B specify the correct letter of credit, and the money and property which constitutes the funded part of the trust.

29. 6 NYCRR 373-2.8(d)(6) provides that the amount of financial assurance must be at least equal to the current cost estimate, where multiple financial assurance mechanisms are used.

30. 6 NYCRR 374-3.2(d)(4)(i) requires that universal waste lamps are kept in a container which is closed, structurally sound, adequate to prevent breakage, is compatible with the contents, and shows no evidence of leakage, spillage, or damage.

31. 6 NYCRR 374-3.2(d)(4)(ii) requires that universal waste lamps which are broken or show evidence of damage or leakage be immediately cleaned up and placed in compatible containers.

32. 6 NYCRR 374-3.2(e)(5) requires that universal waste lamp containers be marked with the words "universal waste lamps", "waste lamps", or "used lamps."

33. 6 NYCRR 374-3.2(h)(1) requires that a handler immediately contain any release of universal waste, or residue from universal waste.

34. 6 NYCRR 374-3.2(h)(2) requires that a handler determine whether any release from universal waste is a hazardous waste, and if so to handle in accordance with hazardous waste regulations.

35. 6 NYCRR Part 374-1.7(a)(2) states that if batteries are stored prior to reclamation, then the storage is subject to all provisions of Part 373-1 of this subpart including permitting.

36. In accordance with an August 31, 1988 EPA guidance document, Respondent Revere's July 28, 1995 Responsiveness summary included with the Part 373 Permit requires that lead acid batteries not be stored on trucks for a period more than 24 hours when offloading is not immediately possible, without being subject to the requirements of 6 NYCRR Part 373-1, including permitting.

37. Module II(J)(1) of the Part 373 Permit references 6 NYCRR 373-2.4(g); specifically requiring that this provision be followed, and that the Permittees' emergency coordinator take the following actions in the event of a release, fire, or explosion at the facility which could threaten human health or the environment outside the facility: 1) immediately notify appropriate state and local agencies of the incident; 2) properly treat, store, or dispose of any recovered waste, contaminated soil or surface water, or any other material resulting from the release; 3) notify the commissioner that the facility is in compliance with the requirement of 6 NYCRR 373-3.4(g)(8) before resuming operations in the affected areas of the facility, and 4) submit a complete written report of the incident within fifteen days of its occurrence.

38. Module I(D)(8) of the Part 373 Permit requires that the Permittees notify DEC of any release from the containment building within twenty-four hours, and submit a written report of the incident within five days of its occurrence.

39. Module II Section P of the 373 Permit requires that Respondents demonstrate continued compliance with 6 NYCRR 373-2.8(d).

40. Section C(2) of Module X of Respondents' Part 373 Permit requires Respondents to maintain the primary barrier of the containment building, including the sacrificial concrete of the primary barrier, to be free of significant cracks, gaps, corrosion or other deterioration that could cause hazardous waste to be released from the barrier.

41. Section C(4) of Module X of Respondents' Part 373 Permit sets forth the procedures Respondents are required to follow upon detection of leakage from the primary barrier of the containment building. Such procedures provide, in part, that a written determination by the Department is required regarding whether the containment building unit must be removed from service completely or partially until repairs and cleanup are complete.

42. ECL Article 27, Title 13 authorizes the Department to implement hazardous waste remedial programs at inactive hazardous waste sites and the Department implements these programs pursuant to the regulations in 6 NYCRR Part 375.

43. 6 NYCRR 375-1.11(b)(2) states that it is a violation to engage in any activity that (i) prevents or significantly interferes with a proposed or ongoing remedial program or (ii) that is reasonably foreseeable to expose the public health or the environment to a significantly increased threat of harm or damage at any site.

44. 6 NYCRR 375-1.11(d)(1) states that any person proposing to change the use of a site shall notify the Department at least 60 days before the change of use.

45. Consent Order #D3-0001-11-07, signed by Respondent Revere in June 2008, states in Section II(A) that all activities taken by Respondents in Operable Units 1 and 2 of the inactive hazardous waste site shall be taken pursuant to and in accordance with one or more Department-approved work plans.

46. Section 17-0501 of the ECL prohibits persons from directly or indirectly, throwing, draining, running or otherwise discharging into such waters organic or inorganic matter that shall cause or contribute to a condition in contravention of the standards adopted by the Department pursuant to Section 17-0301.

47. ECL Section 17-0701(1)(a), provides that: "It shall be unlawful for any person, until a written SPDES permit therefore has been granted by the commissioner, or by his designated representative, and unless such permit remains in full force and effect to: a. make or cause to make or use any outlet or point source for the discharge of sewage, industrial waste or other wastes or the effluent therefrom, into the waters of this state, ...."

48. ECL section 17-0701(1)(b), provides in part that: "It shall be unlawful for any person, until a written SPDES permit therefore has been granted by the commissioner, or by his designated representative, and unless such permit remains in full force and effect to: b. Construct or operate and use a disposal system for the discharge of sewage, industrial waste, or other wastes or the effluent therefrom, into the waters of the state, ...."

49. ECL Section 17-0803 provides, in relevant part, that: "Except as provided by subdivision five of section 17-0701 of this article, it shall be unlawful to discharge pollutants to the waters of the state from any outlet or point source without a SPDES permit issued pursuant hereto or in a manner other than as prescribed by such permit."



50. ECL 17-1743 states that any person in possession of more than 1100 gallons of a liquid that, if released, would be likely to pollute the lands, waters or groundwater of the state in contravention of standards must notify the Department immediately upon the person's knowledge of the release.

51. 6 NYCRR 703.3 and 703.5, state in part that the groundwater standards for Class GA waterways of the state for pH concentrations should range between 6.5 and 8.5, and for lead cannot exceed a "maximum allowable concentration" of 25 micrograms per liter (ug/l), respectively.

52. 6 NYCRR 703.6(a) states that "unless a demonstration is made to the contrary, it shall be presumed that a discharge to the ground or unsaturated zone is a discharge to groundwater."

53. ECL 19-0305 states that "The commissioner is hereby authorized to enforce the codes, rules and regulations of the department established in accordance with this article."

54. 6 NYCRR 201-7.1 provides that a source owner or operator may elect to accept federally enforceable permit terms and conditions which restrict or cap emissions from a stationary source or emission unit, in order to avoid being subject to applicable requirements which the source would otherwise be subject to.

55. Condition 1-23 of Respondent's Title V permit modification requires: 1) that Respondent maintain a continuous monitoring system on its short rotary furnace; 2) that the data from this system be submitted to the Department in quarterly reports, and 3) that the short-term nitrogen oxides emissions from the furnace not exceed 7.7 pounds per hour.

56. ECL 71-1929, provides in part that: "A person who violates any of the provisions of, or who fails to perform any duty imposed by titles one through 11 inclusive and Title 19 of Article 17..... or the rules, regulations, orders or the determinations of the commissioner promulgated thereto ..... shall be liable to a penalty of not to exceed thirty-seven thousand five hundred dollars per day for each violation, and in addition thereto, such person may be enjoined from continuing such violation as hereinafter provided."

57. ECL 71-1943 states that any person who fails to notify the Department of a release, discharge or spill into the waters of the state as described in section 17-1743 shall, upon conviction, be fined not more than \$3,750 or imprisoned for not more than one year, or both.

58. ECL 71-2103 states that any person who violates Article 19 of the ECL or any implementing rule or regulation, or any order of the DEC Commissioner, shall be liable, in the case of a first violation, for a civil penalty of up to \$18,000 and an additional penalty of up to \$15,000 for each day during which the violation continues.

59. ECL 71-2705(1), states that any person who violates Titles 9 or 13 of Article 27 of the ECL, or any implementing rule or regulation, or any order of the DEC Commissioner,

shall be liable, in the case of a first violation, for a civil penalty of up to \$37,500 and an additional penalty of up to \$37,500 for each day during which the violation continues.

60. Pursuant to ECL 71-2727, for violations of Article 27 or any rule or regulation promulgated thereto, the Commissioner of the Department can order injunctive relief in the form of any such remedial or corrective action measures as may be necessary or appropriate.

### **FACTS**

#### **Hazardous Waste Operations Background**

61. Respondent Revere has been operating a lead smelting and lead acid battery recycling facility at the Site since 1972.

62. Respondent Revere was issued a hazardous waste TSD permit, permit #3-3352-00145/00001-0, (the "373 permit") in January 1995, following a series of hazardous waste and air quality enforcement proceedings in the late 1980s and early 1990s. The 373 permit required, among other things, that Respondent Revere operate its facility in accordance with all DEC regulations, and that specific corrective actions be performed. The 373 Permit also required the Permittees to fund a site monitor.

63. The 373 permit allows Respondents to accept used lead acid batteries (mostly from automobiles) for reprocessing. The batteries are crushed and the lead, plastic and acid are separated. The lead is resmelted, the plastic is washed and sent off-site and the acid is converted to sodium sulfate and sold.

64. A containment building was constructed to prevent the hazardous constituents in the stored piles of materials (lead and acid) from escaping into the environment. To prevent sulfuric acid with dissolved lead from entering groundwater, the floor of the containment building is constructed of a layer of sacrificial concrete over a primary layer of steel, under the primary steel layer, separated by eight inches is a secondary layer of steel ("the pan floor system"). The eight-inch space between them formed a leak detection system.

65. Between 2000 and 2003, a number of permit and regulatory violations, similar in nature to the violations alleged herein, were discovered during the required semi-annual inspections of the facility. The Department and Respondents settled these violations by a Consent Order in 2006, and Respondents' past violations provide a basis for increased penalties in the present action.

66. The 373 permit was set to expire on July 28, 2005, and Respondents timely submitted an application to renew on January 31, 2005.

67. Respondents permit renewal application designated Respondent Eco-Bat as the owner and Respondent Revere as the operator.

68. On June 28, 2006, the Department issued a notice of complete application and intent to deny, based in part on Respondents' refusal to construct a containment system

conforming to Department requirements, and failure to demonstrate the integrity of the existing pan floor system.

69. Respondents contested the Department's denial in a request for a hearing and settlement conference dated July 26, 2006. Negotiations related specifically to the containment building are still ongoing. Respondents have continued operations at the Facility under an "extended" 373 permit, pursuant to the State Administrative Procedures Act Section 401(2).

70. In September 2006, Respondents opened up the pan floor system and used a robotic camera to assess the condition of the interior of the steel pans. The videos revealed numerous seeps, cracks, standing and flowing fluids and deterioration of the steel.

71. The videos show that numerous problem areas exist and that there are significant and recurring failures in the steel barriers that have allowed contaminants to escape the containment building and enter the soil and groundwater underneath.

72. Sampling and monitoring of groundwater in close proximity to the containment building is ongoing. As of June 2010 sampling results taken by the Department in monitoring wells MW-9 and MW-21B showed that concentrations of lead in groundwater in wells in close proximity to the containment building were 125.0 micrograms per liter (ug/L) and 155.0 (ug/L) respectively.

#### **Financial Assurance Conditions**

73. As Part 373 Permittees, Respondents are required to post appropriate financial assurance to cover the costs of corrective action, site closure, and post closure pursuant to 6 NYCRR Part 373-2.8.

74. To fulfill this requirement, Respondents submitted a trust agreement following issuance of the 373 Permit.

75. Respondents have failed to update their trust agreement as required. Respondents have not updated Schedule A of the trust agreement since 2002 to reflect the current cost estimate. Additionally, Respondents have not updated the trustee bank on the trust agreement and the bank listed on the letter of credit in Schedule B.

76. Upon information and belief, Respondents' financial assurance is approximately \$109,000 less than what is required.

#### **Hazardous Waste Remedial Background**

77. In 2000, due to past and ongoing activities at the Site, the Department determined that the Site should be listed as a "class 2" site on the registry of inactive hazardous waste disposal sites, pursuant to ECL 27-1305.

78. Following the Site's listing, Respondent Revere entered into a Consent Order with the Department. The September 28, 2000 Consent Order (#A3-0402-9911) divided the Site into four operable units (OUs). The OUs are identified as:

- a. OU-1, being identified as all on-Site soil which is not within OU-4;
- b. OU-2, being defined as all on-Site groundwater;
- c. OU-3, being defined as off-Site environmental media, including but not limited to groundwater, soils, adjacent wetlands, ecosystem and/or any environmental media impacted by on-Site activities; and
- d. OU-4, being defined as the Plant (Facility).

There are two additional consent orders, D3-0001-11-07 for OU-1 and OU-2, *supra*, and D3-0502-12-06 for OU-3.

### Inspections

79. On March 24, 2009 the Facility was inspected by Mr. More, an authorized employee of the Department who conducts semi-annual inspections of the Facility. Mr. More observed eight tractor trailers containing lead-acid batteries in a parking lot behind the manufacturing plant, which was not a hazardous waste storage area. The dates on the trailers indicated that the batteries had been stored on them for over twenty four hours, in violation of the Permittees' own responsiveness summary, which only allowed the Permittees to store lead acid batteries on trucks for less than 24 hours.

80. On September 15, 2009, near the northeast corner of the containment building, there was a catastrophic release from Respondents' seventeen thousand gallon tank holding water with a pH of 8.9 or higher. This water flowed over the containment building floor, where it was likely contaminated with lead dust, sodium sulfate, and other debris.

81. The force of this release (the "Spill") blew out the wall of the containment building and escaped from the building, with a significant amount of water flowing onto soil already contaminated with lead, and over railroad tracks behind the facility, into the groundwater, and potentially into a drainage swale leading to an unnamed tributary of the Wallkill River.

82. Respondents failed to immediately report the Spill. In a subsequent letter to the Department, dated November 9, 2009, Respondent Revere stated that "the water mixture did not constitute a reportable spill."

83. On September 16, 2009, the day after the Spill, the facility was visited by Mr. Gronwald from the Department's Division of Solid and Hazardous Materials, for reasons unrelated to the Spill. Mr. Gronwald observed a white crystal salt like material on the soil, gravel, and rail lines behind the containment building in the aftermath of the Spill, and reported his findings to Mr. More prior to Mr. More's regularly scheduled semi-annual inspection of the Facility.

84. On September 23, 2009, Mr. More inspected the Facility, and found the same white crystal salt like substance. Mr. More discovered that an unknown quantity of soil and

gravel had been moved from the location of the Spill to an area of OU-1 without Respondents making a hazardous waste determination, and without Departmental approval or notification. Mr. More observed that the pile of soil and gravel was not completely covered, and he could not discern whether there was an impermeable barrier between the pile of contaminated soil and gravel, and the ground.

85. When asked about the Spill, Mr. More was told by Mr. Walsh, Respondent Revere's Facility manager, that he called Respondent RSR's corporate headquarters in Texas. According to Mr. Walsh, he was told not to report the Spill, because it was "just water."

86. Mr. More also observed a pile of broken concrete potentially contaminated with lead, which had been moved by Respondents without notifying the Department, from a location in front of the Facility (OU-4), and placed near the location of the contaminated soil and gravel from the Spill moved to OU-1.

87. At the September 23 inspection, Mr. More also discovered four crushed unmarked boxes of universal waste fluorescent lamps, and loose and broken bulbs in Respondents' warehouse, with shards of glass on the floor, and broken bulb caps indicating a potential release from them to the environment.

88. On October 8, 2009, a letter was sent from the Department to Respondent Revere requesting submission of the results of a hazardous waste determination on the gravel, soil, and concrete which were moved from the site of the Spill and from the front and interior of the Facility to an area in OU-1.

89. On October 20, 2009, over one month after the Spill, Respondents conducted a hazardous waste analysis of the contaminated soil and gravel at the Department's request, and determined that all of it was hazardous waste.

90. Respondents submitted the analysis results to the Department with the November 9, 2009 letter, *supra*, in which they also acknowledged for the first time that the Spill was not solely water as they had previously claimed, and was in fact a softened soda ash mixture with a pH of 8.9.

91. On October 21, 2009 and February 3, 2010, authorized employees of the Department visited the Site to further assess the aftermath of the Spill and the activities being conducted by Respondent Revere in OU-1 related to staging soil and gravel from the Spill area, and staging concrete from the construction in the front of the facility and concrete from inside the Facility (OU-4) in the same area of OU-1.

92. On October 21, 2009, Department Staff observed that there were still piles of soil and concrete in the area of OU-1. The Department screened the soil and concrete for lead using a surface screening device called an X-Ray Fluorescence Analyzer. The soil and concrete piles exhibited elevated levels of lead with a maximum concentration of 19,739 ppm of lead.

93. Between December 17, 2009 and January 25, 2010 significant work was done in an attempt to repair the leaking pan floor in the containment building. This work necessitated the removal of sections of the concrete floor in the containment building. Upon information and belief, this material was moved to OU-1.

94. On February 3, 2010 Department Staff observed the area of OU-1 and found that additional piles of concrete had been moved into the area that had not been present in November of 2009.

95. The additional piles of concrete had a reddish-orange stained color and, upon information and belief, had come from the containment building only after being pressure-washed.

96. On February 3, 2010, Department staff used an X-Ray Fluorescence Analyzer to screen several piles of concrete and found elevated concentrations of lead including one detection over 280,000 ppm (or 28%) lead on a reddish-orange stained surface.

97. On February 11, 2010, Department staff visited the Site again, and learned that additional concrete was being moved. Also, they learned that there was no protocol for testing the concrete prior to moving it, meaning that no hazardous waste determination had ever been made.

#### **Air Emission Exceedances**

98. Lead smelting and other related processes conducted at the Facility generate air emissions of nitrogen oxides. These emissions are regulated pursuant to a Title V permit, which was issued in November 2007, and expires in November 2012.

99. In November 2008 the Title V permit was modified to cover a short rotary furnace, which Respondent Revere planned to construct for additional slag refining. The short rotary furnace came into operation in December 2009.

100. Pursuant to the Title V permit modification, Respondent Revere was scheduled to submit a report for the first quarter of 2010 on April 30, 2010, which was submitted on May 3, 2010, with a revised version submitted on May 13, 2010.

101. From this report, Department staff determined that air emissions from the short rotary furnace exceeded the emission limit for nitrogen oxides in January and February, 2010.

102. The report indicated that Respondent Revere emitted 8.24 pounds per hour of nitrogen oxides in January, and 12.70 pounds per hour in February.

103. Respondent was notified of these violations in a letter dated May 5, 2010.

**CAUSES OF ACTION**  
**(Violations of ECL Article 27, Title 9,**  
**6 NYCRR Parts 372-374 and the Part 373 Permit)**

104. **As and for a FIRST cause of action**, the Department alleges that at the time of the March 24, 2009 inspection, Respondents had created an unpermitted hazardous waste storage area in violation of ECL 27-0913(1), by storing eight tractor trailers of lead-acid batteries in the facility parking area for over twenty-four hours. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

105. **As and for a SECOND cause of action**, the Department alleges and says that Respondents failed to comply with Module (I)(D)(8) of the 373 Permit, by failing to orally report the Spill within twenty-four hours from when the Spill occurred. Respondents also failed to submit a written report of the Spill within five days of its occurrence as required by Module (I)(D)(8) of the 373 Permit. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

106. **As and for a THIRD cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of ECL 27-0913(1). Respondents' movement of soil and gravel contaminated by the Spill from its original location by the rail track into OU-1 created an unpermitted hazardous waste storage area in violation of this statute. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

107. **As and for a FOURTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents had violated ECL 27-0914(2) by disposing of hazardous waste generated by the Spill and construction activities without authorization. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

108. **As and for a FIFTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of 6 NYCRR 372.2(a)(2). Respondents had not made the required hazardous waste determination on the soil and gravel contaminated during the Spill. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

109. **As and for a SIXTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of Module II(J)(1) of the 373 Permit, as they failed to notify appropriate state and local authorities of the Spill, failed to notify the Commissioner that the facility was in compliance with 6 NYCRR 373-3.4(g)(8) before resuming operations in the affected portion of the Facility, and failed to submit a complete written report of the incident within fifteen days of when the Spill occurred. Pursuant to ECL

71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

110. **As and for a SEVENTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of 6 NYCRR 374-3.2(d)(4)(i), by failing to store its universal waste lamps in closed, structurally sound containers with no evidence of breakage or damage, and which were compatible with the contents. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

111. **As and for an EIGHTH cause of action**, the Department alleges and says that Respondents violated 6 NYCRR Part 374-3.2(d)(4)(ii), by failing to immediately clean up and place in an appropriate container the loose and broken lamps which were found on the floor of the Facility warehouse at the time of the September 23, 2009 inspection. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

112. **As and for a NINTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of 6 NYCRR Part 374-3.2(e)(5), by failing to appropriately label the containers of universal waste lamps in the facility warehouse. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation, and is entitled to injunctive relief pursuant to ECL 71-2727.

113. **As and for a TENTH cause of action**, the Department alleges and says that at the time of the September 23, 2009 inspection, Respondents were in violation of 6 NYCRR 374-3.2(h)(1) and 374-3.2(h)(2), by failing to clean up loose hazardous waste lamps on the floor of the Facility warehouse, failing to clean up shards of glass from the broken lamps, and failing to determine whether any of this debris or releases from the broken lamps constituted a hazardous waste. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations, and is entitled to injunctive relief pursuant to ECL 71-2727.

114. **As and for an ELEVENTH cause of action**, the Department alleges and says that Respondents violated 6 NYCRR 373-2.8, by failing to update the trust agreement to reference the appropriate banks in Schedules A and B, and failing to provide sufficient financial assurance to cover the current cost estimate. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for this violation.

**(Violations of ECL Article 17 )**

115. **As and for a TWELFTH cause of action**, the Department alleges and says Respondents discharged corrosive and lead hazardous substances into the groundwater of the State of New York adjacent to and beneath the Facility in contravention of the standards adopted by the Department. This is a violation of ECL Section 17-0501, due to discharges from the numerous cracks and seeps in the pan floor system, and due to the Spill. Pursuant to ECL 71-



1929, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations.

116. **As and for a THIRTEENTH cause of action**, the Department alleges and says Respondents made use of an outlet or point source to discharge industrial wastes or other wastes into the groundwater of the State of New York adjacent to and beneath the Facility. This is a violation of ECL Section 17-0701(1)(a), due to discharges from the numerous cracks and seeps in the pan floor system, and due to the Spill. Pursuant to ECL 71-1929, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations.

117. **As and for a FOURTEENTH cause of action**, the Department alleges and says Respondents operated a disposal system for the discharge of industrial or other wastes or the effluent therefrom into the groundwater of the State of New York adjacent to and beneath the Facility. This is a violation of ECL Section 17-0701(1)(b), due to discharges from the numerous cracks and seeps in the pan floor system, and due to the Spill. Pursuant to ECL 71-1929, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations.

118. **As and for a FIFTEENTH cause of action**, the Department alleges and says Respondents discharged pollutants to the waters of the state from an outlet or point source without a SPDES permit issued pursuant thereto for the discharge of industrial or other wastes or the effluent therefrom into the groundwater of the State of New York adjacent to and beneath the Facility. This is a violation of ECL Section 17-0803, due to discharges from the numerous cracks and seeps in the pan floor system, and due to the Spill. Pursuant to ECL 71-1929, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations.

119. **As and for a SIXTEENTH cause of action**, the Department alleges and says that Respondents violated ECL 17-1743 because they did not immediately notify the Department of the Spill, which was likely to pollute the lands, groundwater and surface water of the state. Pursuant to ECL 71-1943, the Department is entitled to a fine of \$3,750 and other appropriate relief from Respondents for their failure to immediately report the Spill.

**(Violations of ECL Article 27, Title 13 implementing  
regulations at 6 NYCRR Part 375, and the Consent Order)**

120. **As and for a SEVENTEENTH cause of action**, the Department alleges and says that Respondents violated 6 NYCRR 375-1.11(b)(2) because the movement and staging (without an adequate impermeable liner) of concrete, soil, and gravel contaminated with lead and other hazardous substances in an area that had already been sampled, analyzed and preliminarily assessed for remedial purposes significantly interferes with an ongoing remedial program and exposes the public health and the environment to a significantly increased threat of harm or damage at the Site. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations, and is entitled to injunctive relief pursuant to ECL 71-2727.

121. **As and for an EIGHTEENTH cause of action**, the Department alleges and says that Respondents violated 6 NYCRR 375-1.11(d)(1) because they did not give the Department

sixty (60) days notice that they were changing the use of an area of OU-1 for storage of contaminated concrete, soil and gravel. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations, and is entitled to injunctive relief pursuant to ECL 71-2727.

122. **As and for a NINETEENTH cause of action**, the Department alleges and says that Respondents violated Consent Order #D3-0001-11-07 because activities performed by Respondents in the movement and staging of contaminated concrete, soil and gravel in OU-1 were not taken pursuant to, or in accordance with, a Department-approved work plan. Pursuant to ECL 71-2705, the Department is entitled to a penalty of no more than \$37,500 per day for each of these violations, and is entitled to injunctive relief pursuant to ECL 71-2727.

**(Violations of Article 19 and the Title V permit)**

123. **As and for a TWENTIETH cause of action**, the Department alleges and says that in January and February, 2010, Respondents violated condition 1-23 of their Title V permit, by emitting more than 7.7 pounds per hour of nitrogen oxides. Pursuant to ECL 71-2103, the Department is entitled to a penalty of no more than \$18,000 for the first day of violation, and \$15,000 for each day the violation continues.

**WHEREFORE**, the Department Staff request an Order from the Commissioner granting the following relief:

**I. With respect to causes of action one through eleven:**

A. ordering either: 1) revocation of Respondents' Part 373 permit; or 2) imposition of the following conditions on Respondents:

1. Within ninety (90) days of the effective date of an Order, Respondents will provide Financial Assurance to the Department in a manner conforming to the requirements of 6 NYCRR 373-2.8, with the Department as beneficiary. Such Financial Assurance shall cover:
  - a. at least \$15.5 million to cover remedial costs associated with OU-1;
  - b. a good faith estimate, based on a long-term pump and treat system for contaminated groundwater, to cover remedial costs associated with OU-2;
  - c. a good faith estimate for off-site remedial activities in OU-3;
  - d. a good faith estimate associated with OU-4, of closure, post-closure, and corrective action costs;
2. Respondents must perform a RCRA Facility Investigation for OU-4;
3. Respondents must expand their permitted container storage area so that Respondents will not violate their permit condition of up to 24-hour storage of batteries;

4. Respondents must repair and renovate the containment building and any other portion of the Facility which was affected by or contributed to the releases from the containment building, including the Spill;
5. Respondents must replace the existing pan floor system with a Department-approved liner system for the containment building, within six (6) months of the effective date of an Order; and

B. directing Respondents to pay a civil penalty of \$369,000 or such other amount as may be deemed appropriate, not to exceed the maximum amount permitted by law, within 30 days of service of a copy of the final decision and order in this matter.

**II. With respect to causes of action twelve through sixteen,** directing Respondents to pay a civil penalty in the amount of \$160,000 or such other amount as may be deemed appropriate, not to exceed the maximum amount allowed by law, within 30 days from the date of service of a copy of the final decision and order in this matter.

**III. With respect to causes of action seventeen through nineteen:**

A. directing Respondents to pay a civil penalty in the amount of \$369,000 or such other amount as may be deemed appropriate, not to exceed the maximum amount allowed by law, within 30 days from the date of service of a copy of the final decision and order in this matter; and

B. directing Respondents to cease and desist any further movement and staging (without a Department approved work plan) of contaminated concrete, soil, gravel or potentially contaminated material of any kind into any of the Operable Units of the Site other than OU-4 or an appropriate control area as approved by the Department; and

C. directing Respondent to take all remedial measures necessary to return to pre-disposal conditions all of the areas in OU-1 that have been contaminated by the movement and staging of contaminated concrete, soil, gravel, or potentially contaminated material of any kind.

D. directing Respondents to prepare and submit for the Department's approval a Soil and Materials Management Plan for OU-4.

**IV. With respect to cause of action twenty,** directing Respondents to pay a civil penalty in the amount of \$55,000 or such other amount as may be deemed appropriate, not to exceed the maximum amount allowed by law, within 30 days from the date of service of a copy of the final decision and order in this matter.

**V. With respect to all causes of action:**

A. declaring Respondents jointly and severally liable for the alleged violations of ECL Articles 17, 19, 27, and 71 and 6 NYCRR Parts 201, 370-376, 703 and all applicable conditions of existing permits and consent orders, and

B. such other and further relief as may be just and proper.

Dated: September 9, 2010  
Albany, New York

STAFF OF THE NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

By: Andrew Guglielmi  
Andrew O. Guglielmi, Esq.  
Senior Attorney  
New York State Department of  
Environmental Conservation  
Bureau of Remediation and Revitalization  
625 Broadway, 14<sup>th</sup> Floor  
Albany, New York 12233-5500  
Tel. (518) 402-9507

& By: Christopher H. Horan (EA)  
Christopher H. Horan  
Senior Attorney  
New York State Department of  
Environmental Conservation  
Bureau of Minerals/Solid & Hazardous Materials  
625 Broadway, 14<sup>th</sup> Floor  
Albany, New York 12233-5500  
Tel. (518) 402-9507

Exhibit C

Preliminary Design and Minimum Specifications of Containment  
Floor System

### Minimum Specifications for the New Containment Floor System

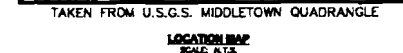
Revere will remove the existing Pan Floor System in the Containment Building, and any concrete below the Pans if damaged or otherwise deemed unsuited as a base for the new liner system, as shown on the attached preliminary design drawings. Revere will, at a minimum, install a three liner liquid collection system and leak detection system. The top layer of this system will consist of an acid resistant coated concrete layer. This will be followed by pea gravel, then an acid resistant geomembrane capable of collecting and directing liquid to a sump.

The layer under this will be fine sand over another geomembrane. This layer will have PVC pipes running above the geomembrane and the entire length of the system. Each pipe will have an acid sensitive wire that will help locate a leak, should one occur.

The third and final layer will again be a layer of fine sand over another geomembrane. This layer will also have pvc pipes running above the geomembrane and the entire length of the system, and each pipe will have an acid sensitive wire that will help locate a leak.

The entire system as presently contemplated is shown on the attached preliminary design drawings and will be able to monitor for leaks continuously.

**TOWN OF WALLKILL, ORANGE COUNTY, NEW YORK**  
**OCTOBER 11, 2010**



INDEX OF DRAWINGS				
PAGE NO.	REV.	SHEET NO.	DATE	DESCRIPTION
1	3	71	XXXXXXXX	TITLE SHEET
2	6	8P1	XXXXXXXX	SITE ESTABLISHMENT
3	1	8P2	XXXXXXXX	VEGETATION REMOVAL AND GRADING PLAN
4	2	8P3	XXXXXXXX	CONCRETE KEY PLAN
6	3	8P4	XXXXXXXX	CONCRETE CHILLER PLANT
6	6	8P4	XXXXXXXX	FOUNDATION PLAN
7	2	8P4	XXXXXXXX	CONCRETE LAYOUT AND GRADING KEY PLAN
8	2	8P7	XXXXXXXX	GEOTECHNICAL PRIMARY LAYER INSTALLATION AND GRADING KEY PLAN
9	2	8P8	XXXXXXXX	LAYOUT AND FINISHED FLOOR INSTALLATION AND GRADING KEY PLAN
10	6	8P9	XXXXXXXX	FOUNDATION WATER DIAGRAM
11	6	8P10	XXXXXXXX	CROSS SECTION A-A
12	6	8P11	XXXXXXXX	CROSS SECTION B-B
13	6	8P12	XXXXXXXX	BUILDING CROSS SECTION C-C
14	6	8P13	XXXXXXXX	BUILDING CROSS SECTION D-D
16	2	A1-A	XXXXXXXX	PHASE 1 AREA DEMOLITION PLAN
16	2	A1-B	XXXXXXXX	PHASE 1 AREA CLIM GRADING PLAN
17	2	A1-C	XXXXXXXX	PHASE 1 AREA PRIMARY GEOTECHNICAL GRADING PLAN
18	6	A1-D	XXXXXXXX	PHASE 1 AREA LAYOUT AND FINISHED FLOOR GRADING PLAN
18	2	A2-A	XXXXXXXX	PHASE 2 AREA DEMOLITION PLAN
20	2	A2-B	XXXXXXXX	PHASE 2 AREA CLIM GRADING PLAN
21	2	A2-C	XXXXXXXX	PHASE 2 AREA PRIMARY GEOTECHNICAL GRADING PLAN
22	6	A2-D	XXXXXXXX	PHASE 2 AREA LAYOUT AND FINISHED FLOOR GRADING PLAN
23	1	8D1	XXXXXXXX	CONTAMINANT DETAILS
24	1	8D2	XXXXXXXX	CONTAMINANT DETAILS
25	2	8D3	XXXXXXXX	CONTAMINANT DETAILS
26	6	8D4	XXXXXXXX	CONTAMINANT DETAILS
27	6	8D5	XXXXXXXX	CONTAMINANT DETAILS
28	6	8D6	XXXXXXXX	TRANSITION DETAILS

**SEE CIVIL ENGINEERING:**  
CHAZEN ENGINEERING & LAND SURVEYING CO., P.C.  
547 RIVER STREET, TROY, NY 12180  
CONTACT: DAN STONE  
PHONE: (518) 273-0060

**Big Mouth**  
New York  
100-100-1000  
100-100-1000  
100-100-1000  
100-100-1000

PROGRESS PRINT 19-11-18 - NOT FOR CONSTRUCTION



**THE UNIVERSITY OF CHICAGO**

THE  
*Chazen*  
COMPANIES  
Highway Company  
Plumbing  
Refrigeration & Air Conditioning  
Landscaping & Irrigation

CHAZEN ENGINEERING, LAND SURVEYING  
& LANDSCAPE ARCHITECTURE CO., P.C.

[illegible]

REVERSE CONTAINMENT SYSTEM REPLACEMENT

TITLE SHEET

TOWN OF WELLS, CRAWFORD COUNTY, NEW YORK

division	MAC	document	del
date	6/27/00	month	mar
project no.		40815.02	
sheet no.		71	

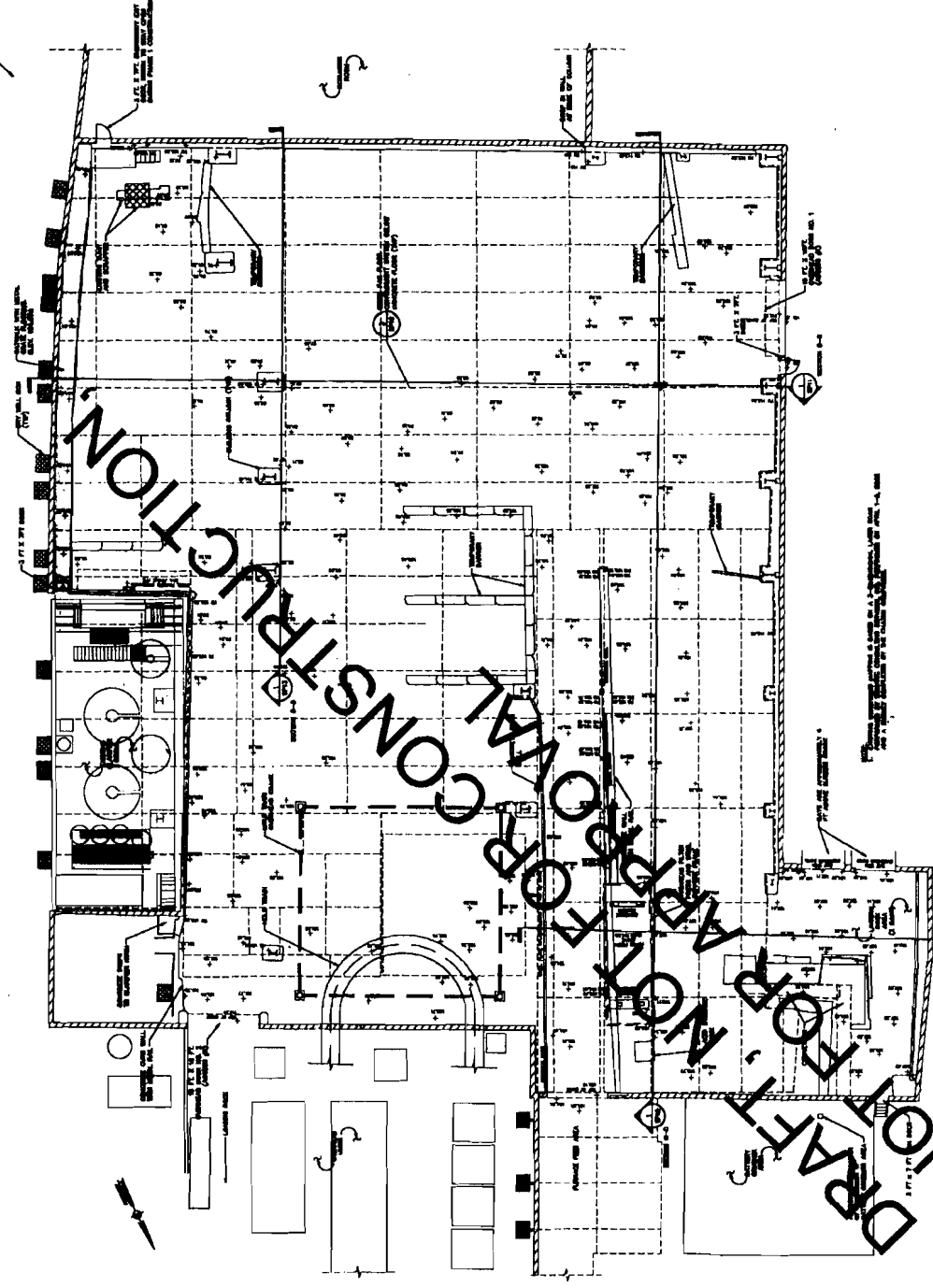








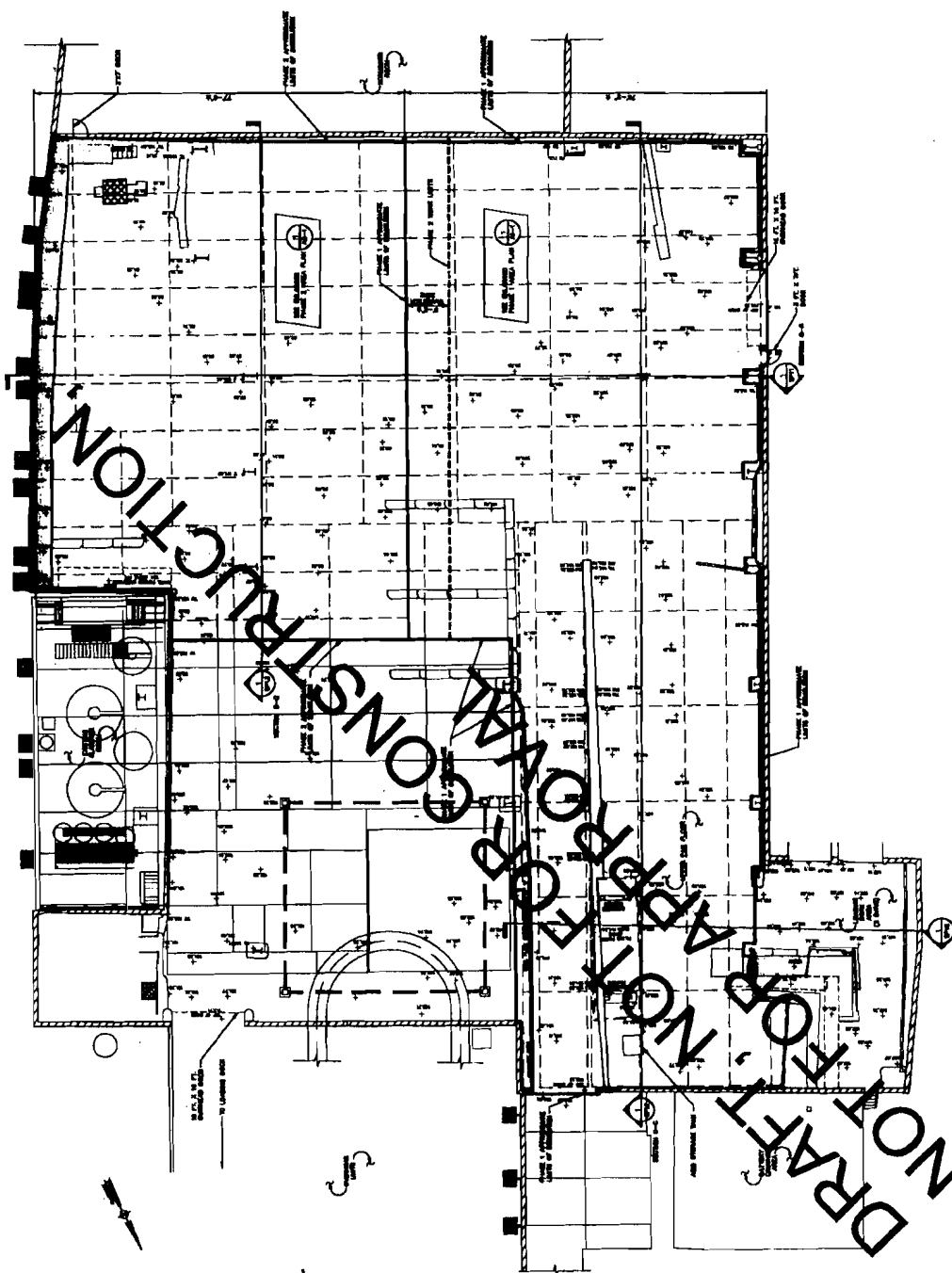
SEE SHEET 10-11-18



THIS PLAN IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

PROCESSES PRINT 10-11-18 - NOT FOR CONSTRUCTION

		ENGINEERING CONTRACT NO. 10-11-18	
		DATE: 10-11-18	BY: [Signature]
YARD BUILDING EXISTING CONDITIONS PLAN			
TOWN OF WALWALLA, WA			



PROCESS PART 10-11-10 - NOT FOR CONSTRUCTION

**CONFIDENTIALITY AND PRIVACY NOTICE**

## DEMOLITION KEY PLAN

**ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED**

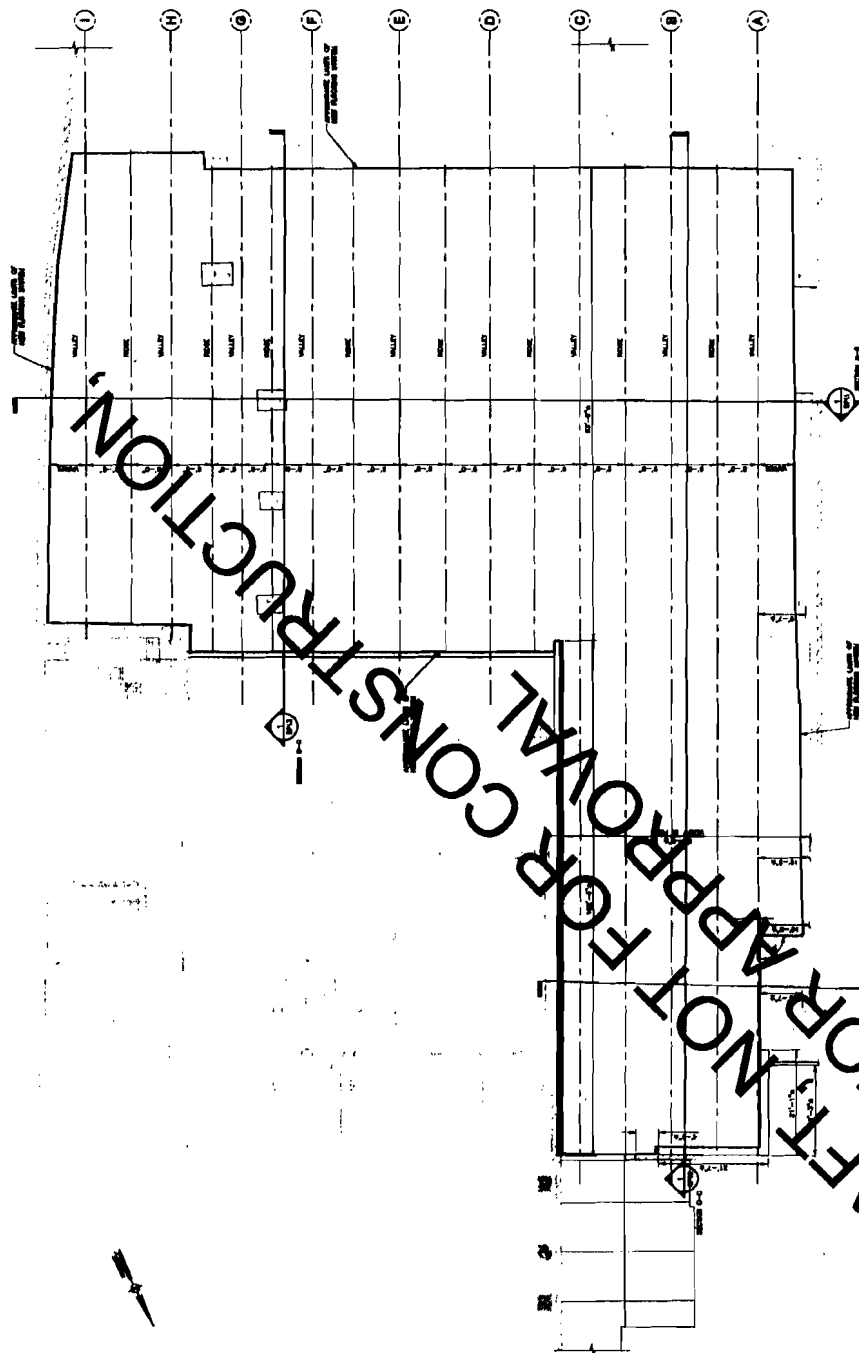
CHAZEN ENGINEERING, LAND SURVEYING

CHADEN ENGINEERING, LAND SURVEYING  
LANDSCAPE ARCHITECTURE CO. P.C.

THE *Chorten* COMPANIES.

**THE UNIVERSITY OF MICHIGAN LIBRARY**

# THE NEW YORK TIMES



PROCESSING PRINT 10-11-10 - NOT FOR CONSTRUCTION

## CONCLUSIONS

### CONTAINMENT CELL KEY PLAN

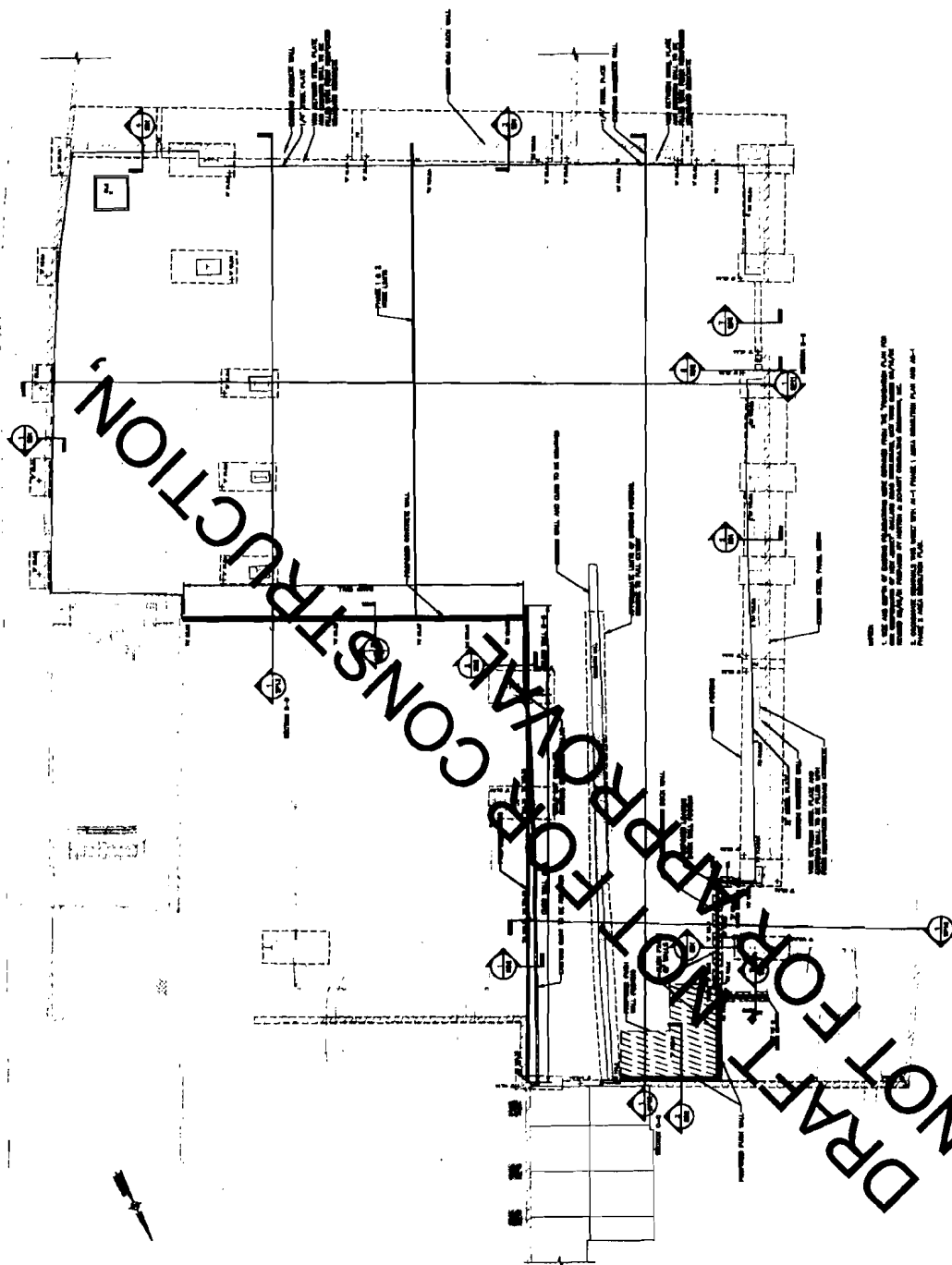
**THE UNIVERSITY OF CHICAGO PRESS**

CHAZEN ENGINEERING, LAND SURVEYING

THE *Chazen* COMPANIES

新加坡坡底街





**PROGRAMS FUNT 10-11-10 - NOT FOR CONSTRUCTION**

### **SYSTEM COMPONENTS/ SYSTEM REPLACEMENT**

## FOUNDATION PLAN

**DEPARTMENT OF HEALTH, COMMUNITY SERVICES, AND SENIORS**

[illegible]

CHAZON ENGINEERING, LAND SURVEYING

LANDSCAPE ARCHITECTURE CO., P.C.

Year	Number of cases	Number of deaths
1990	10	0
1991	15	0
1992	20	0
1993	25	0
1994	30	0
1995	35	0
1996	40	0
1997	45	0
1998	50	0
1999	55	0
2000	60	0
2001	65	0
2002	70	0
2003	75	0
2004	80	0
2005	85	0
2006	90	0
2007	95	0
2008	100	0
2009	105	0
2010	110	0
2011	115	0
2012	120	0
2013	125	0
2014	130	0
2015	135	0
2016	140	0
2017	145	0
2018	150	0
2019	155	0
2020	160	0
2021	165	0
2022	170	0
2023	175	0
2024	180	0
2025	185	0
2026	190	0
2027	195	0
2028	200	0
2029	205	0
2030	210	0
2031	215	0
2032	220	0
2033	225	0
2034	230	0
2035	235	0
2036	240	0
2037	245	0
2038	250	0
2039	255	0
2040	260	0
2041	265	0
2042	270	0
2043	275	0
2044	280	0
2045	285	0
2046	290	0
2047	295	0
2048	300	0
2049	305	0
2050	310	0
2051	315	0
2052	320	0
2053	325	0
2054	330	0
2055	335	0
2056	340	0
2057	345	0
2058	350	0
2059	355	0
2060	360	0
2061	365	0
2062	370	0
2063	375	0
2064	380	0
2065	385	0
2066	390	0
2067	395	0
2068	400	0
2069	405	0
2070	410	0
2071	415	0
2072	420	0
2073	425	0
2074	430	0
2075	435	0
2076	440	0
2077	445	0
2078	450	0
2079	455	0
2080	460	0
2081	465	0
2082	470	0
2083	475	0
2084	480	0
2085	485	0
2086	490	0
2087	495	0
2088	500	0
2089	505	0
2090	510	0
2091	515	0
2092	520	0
2093	525	0
2094	530	0
2095	535	0
2096	540	0
2097	545	0
2098	550	0
2099	555	0
2100	560	0

12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199120012011202120312041205120612071208120912101211121212131214121512161217121812191220122112221223122412251226122712281229123012311232123312341235123612371238123912401241124212431244124512461247124812491250125112521253125412551256125712581259126012611262126312641265126612671268126912701271127212731274127512761277127812791280128112821283128412851286128712881289129012911292129312941295129612971298129913001

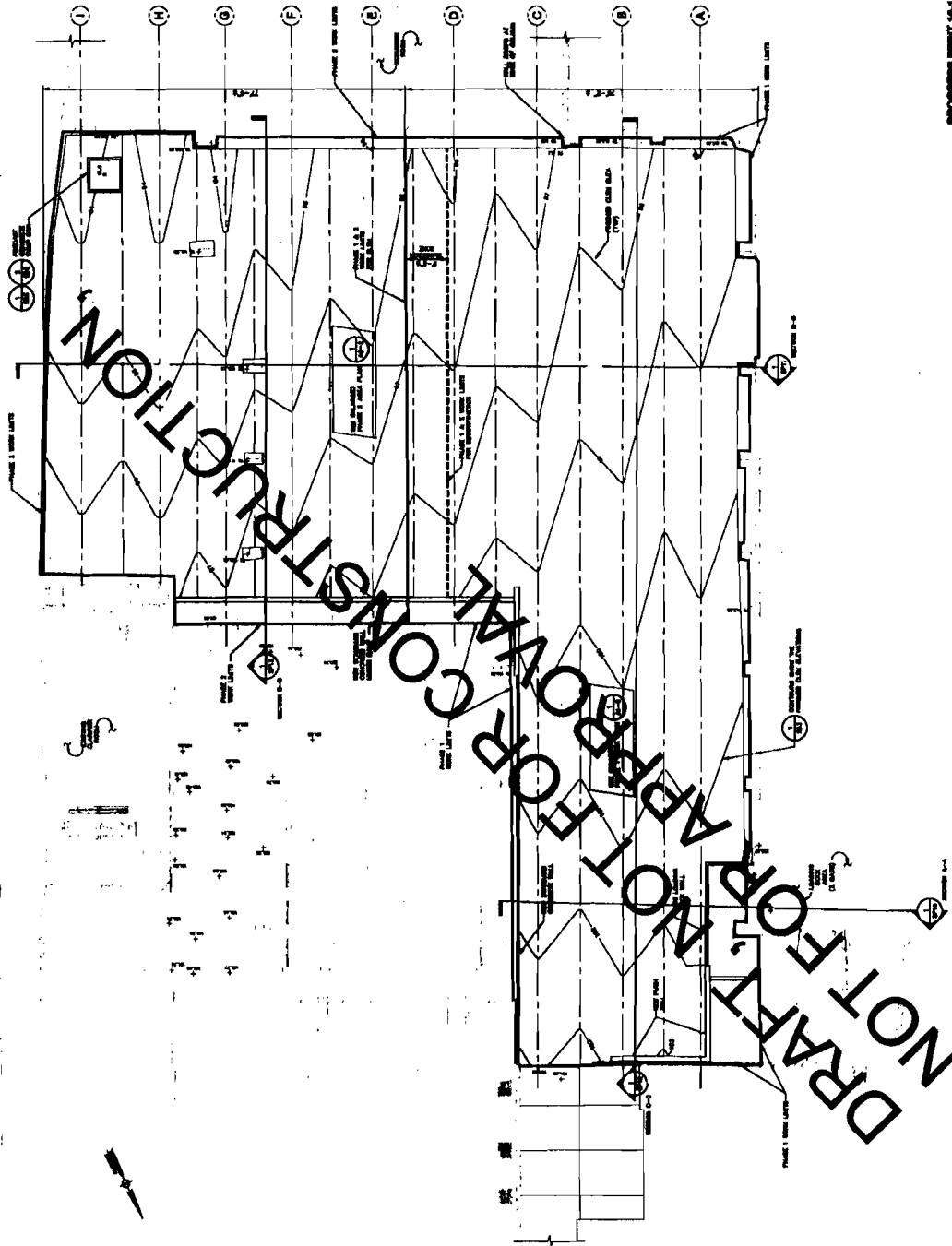
1000

\_\_\_\_\_

THE *Chazen* COMPANIES.

THE UNIVERSITY OF CHICAGO PRESS

100



PROPOSED PRINT 16-11-16 - NOT FOR CONSTRUCTION

REPAIRS CONTAMINATED SYSTEM REPLACEMENT

**CLEAN INSTALLATION  
AND GRADING KEY PLAN**

TYPE OF WALLS, EXISTING GRAVEL, NEW PAVES

NO.	DESCRIPTION	DATE	BY	CHECKED BY
1	REVISION			
2				
3				
4				
5				
6				
7				
8				
9				
10				

CLARKSON ENGINEERING, LAND SURVEYING  
 & LANDSCAPE ARCHITECTURE CO., P.C.  
 1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM

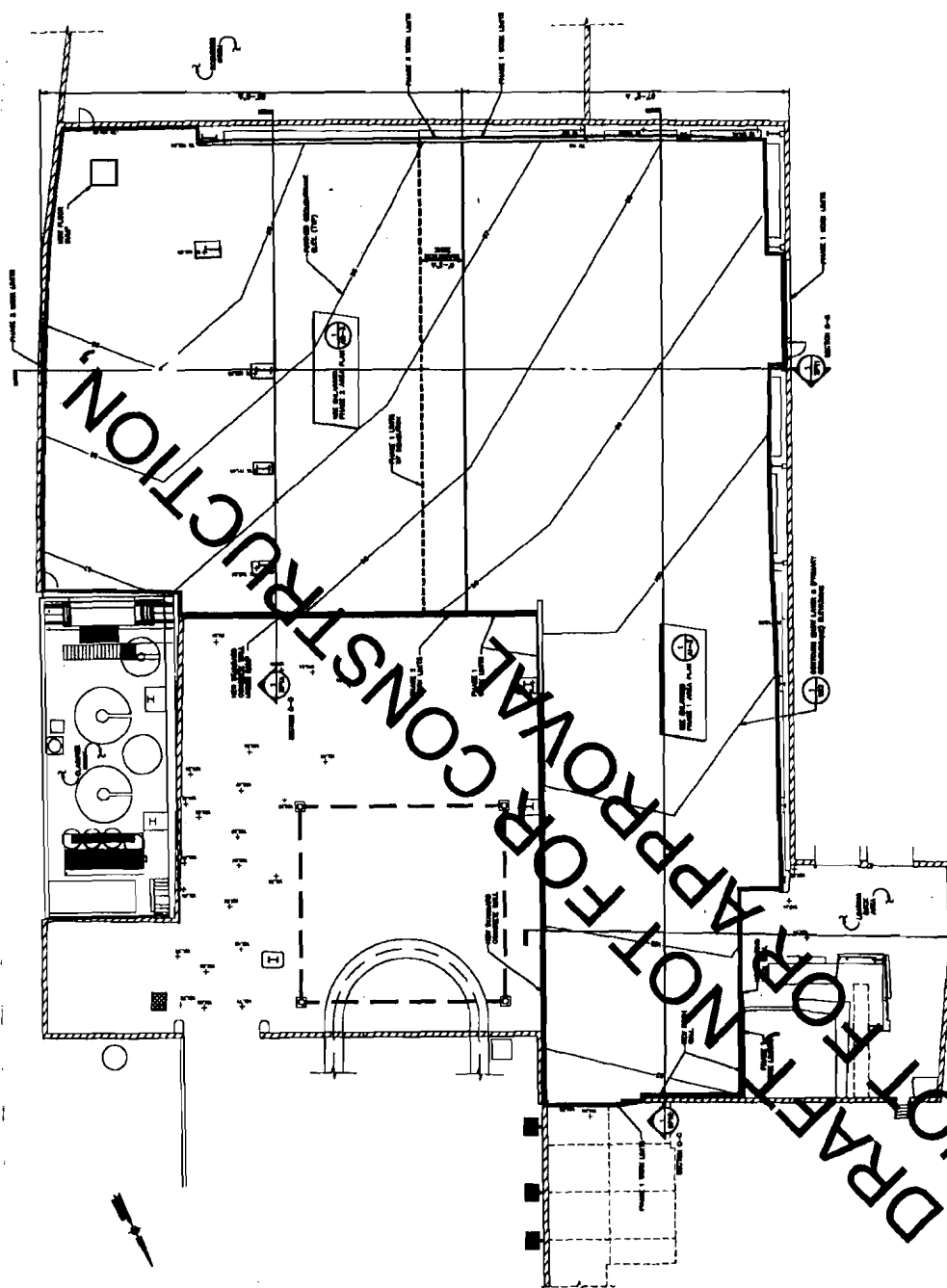
THE  
**CLARKSON**  
 COMPANIES  
 LANDSCAPE ARCHITECTS  
 1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM

LANDSCAPE ARCHITECT  
 1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM

1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM

1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM

1000 N. 10TH AVE., SUITE 100  
 DENVER, CO 80202  
 TEL: 303.733.1111  
 FAX: 303.733.1112  
 WWW.CLARKSONENGINEERING.COM



PROGRAMS PRINT 10-11-10 - NOT FOR CONSTRUCTION

Green	MAK	checked	JL
Date	06/17/08	made	3/08/08
Project #		40618.02	
Project Name		SPT	

**REPAIR COMPONENT SYSTEM REPLACEMENT**

**GEOMEMBRANE PRIMARY LAYER  
INSTALLATION AND GRADING KEY PLAN**

SYSTEM OF NATIONAL COMPASS ROBERT, NEW YORK

[illegible]

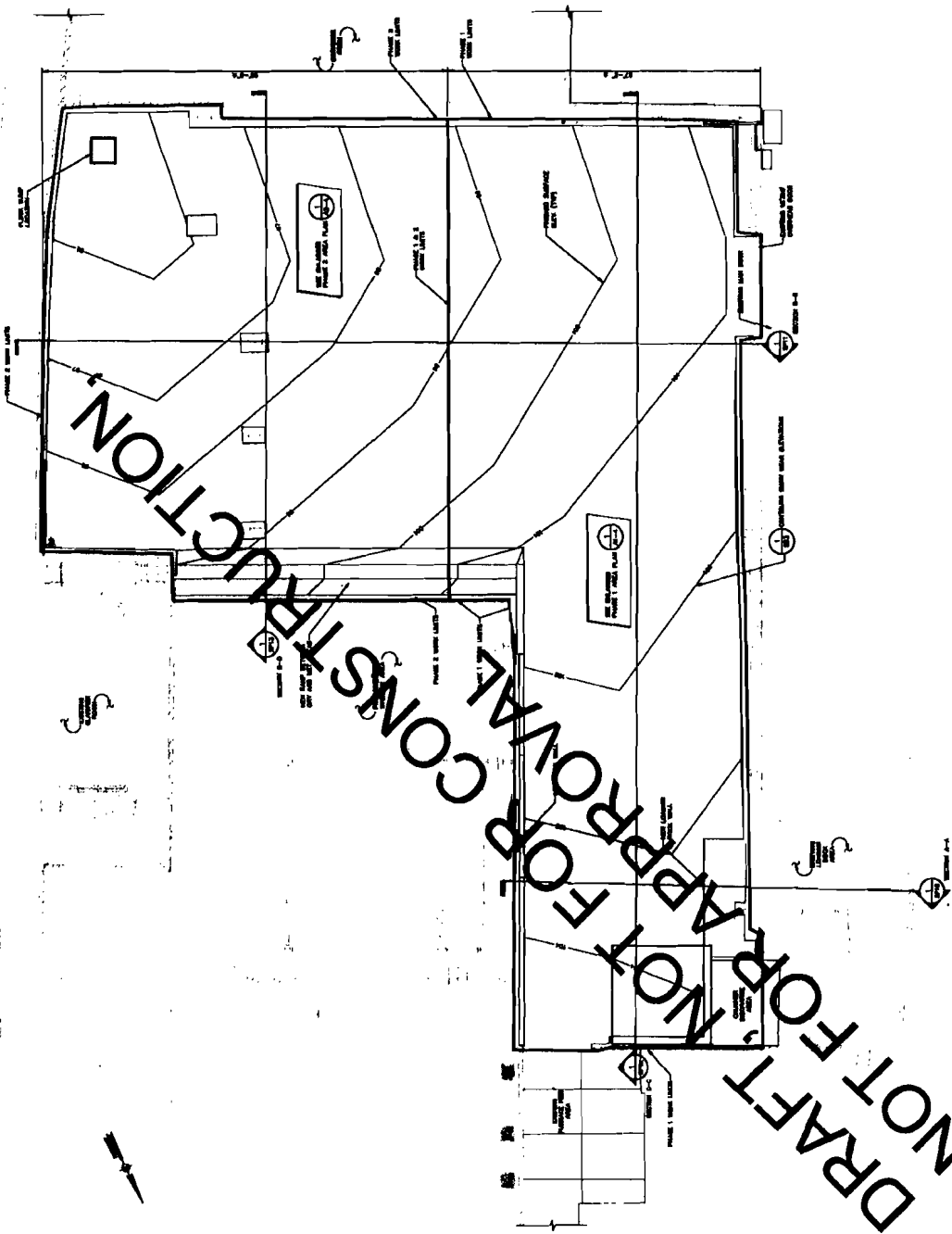
**CHAZEN ENGINEERING, LAND SURVEYING**  
LANDSCAPE ARCHITECTURE CO., P.C.

THE *Chazen* COMPANIES  
 Investment Management  
 Financial Planning  
 Retirement Services  
 Life Insurance Services

**THE UNIVERSITY OF CHICAGO PRESS**







DRAFT, NOT FOR CONSTRUCTION

PROCESS PRINT 10-11-10 - NOT FOR CONSTRUCTION

DATE	10-11-10
BY	10-11-10
CHECKED	10-11-10
PROJECT	10-11-10
SCALE	10-11-10
DATE	10-11-10

**LAYOUT AND FINISHED FLOOR  
INSTALLATION AND GRADING KEY PLAN**

DATE	10-11-10
BY	10-11-10
CHECKED	10-11-10
PROJECT	10-11-10
SCALE	10-11-10
DATE	10-11-10

CHADEN ENGINEERING, LAND SURVEYING  
LANDSCAPE ARCHITECTURE CO., P.C.

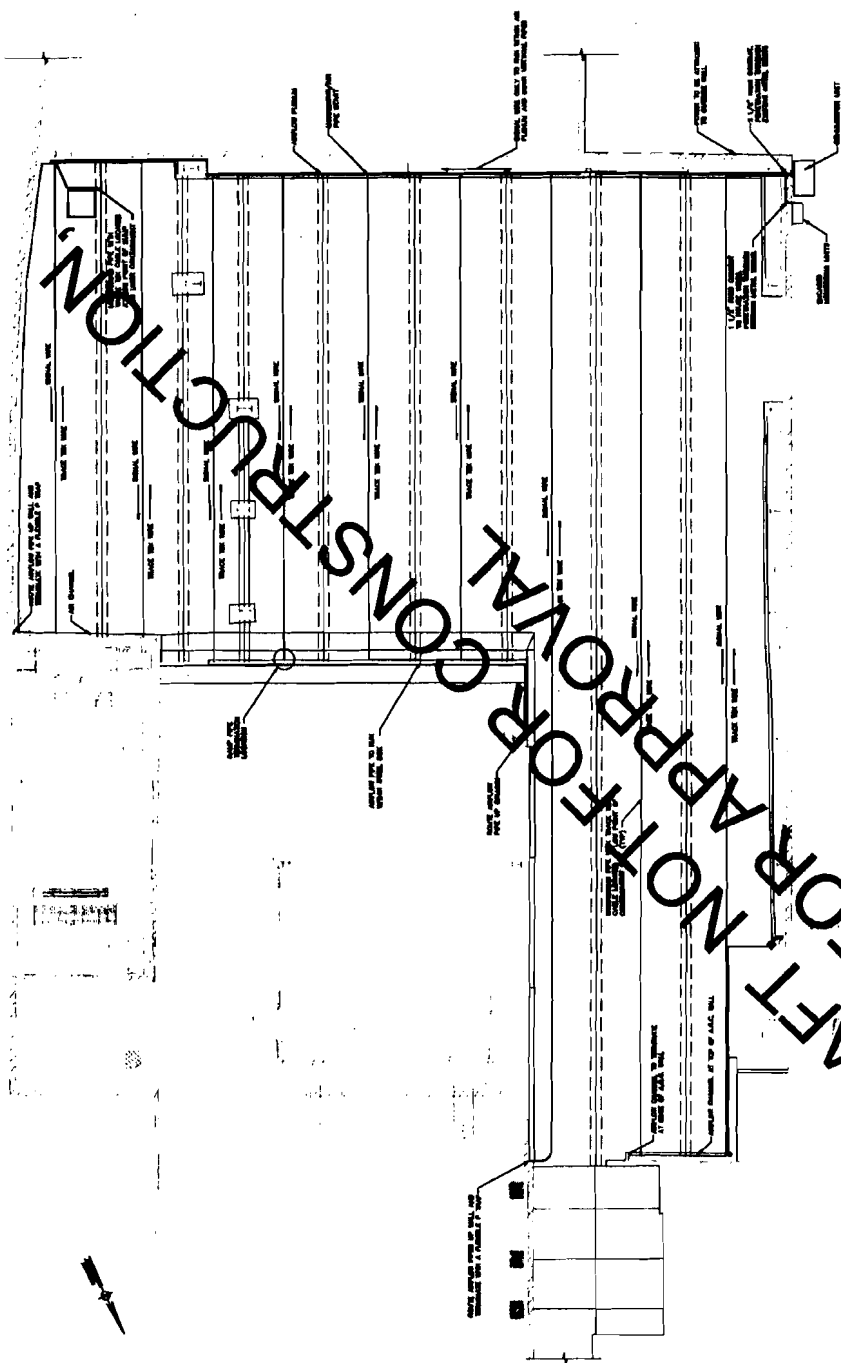
**CHADEN  
ENGINEERING  
LANDSCAPE  
ARCHITECTURE  
CO., P.C.**

2225 W. 10TH AVE. SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1234  
FAX: 303.733.1235  
WWW.CHADEN-ENGINEERING.COM

10-11-10

10-11-10

10-11-10



**PROCESSING PERIOD 10-11-10 - NOT FOR CONSTRUCTION**

### Memorandum for the Record

## MONITORING SYSTEM DIAGRAM

TOWN OF WALLACE, OSAGE COUNTY, NEW YORK

DATE		DESCRIPTION	AMOUNT	BALANCE
1954				
1955				
1956				
1957				
1958				
1959				
1960				
1961				
1962				
1963				
1964				
1965				
1966				
1967				
1968				
1969				
1970				
1971				
1972				
1973				
1974				
1975				
1976				
1977				
1978				
1979				
1980				
1981				
1982				
1983				
1984				
1985				
1986				
1987				
1988				
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				
2023				
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				
2038				
2039				
2040				
2041				
2042				
2043				
2044				
2045				
2046				
2047				
2048				
2049				
2050				
2051				
2052				
2053				
2054				
2055				
2056				
2057				
2058				
2059				
2060				
2061				
2062				
2063				
2064				
2065				
2066				
2067				
2068				
2069				
2070				
2071				
2072				
2073				
2074				
2075				
2076				
2077				
2078				
2079				
2080				

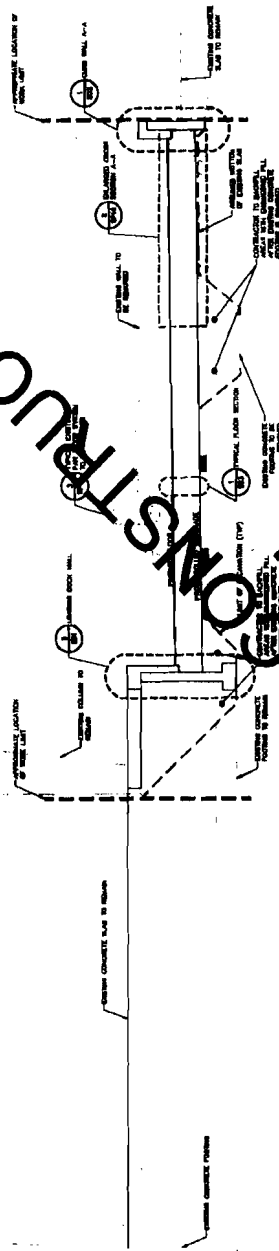
FILE #	NAME	DATE	TIME	LOCATION
100-1000000000	100-1000000000	100-1000000000	100-1000000000	100-1000000000

THE *Chazen* COMPANIES

1996-1997



1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525



NOTE: MEASUREMENTS OF THE PLANT USED MUST BE REPRODUCED EXACTLY. ONLY

4. Further advise that the above mentioned plane will be used to transport the above mentioned person to the airport.
5. Transportation plane will not use any aircraft equipment in its operation.
6. The person being transported will be accompanied by two persons.
7. The person being transported will be accompanied by two persons.
8. The person being transported will be accompanied by two persons.

**PROGRESS PANT 10-11-40 - NOT FOR CONSTRUCTION**

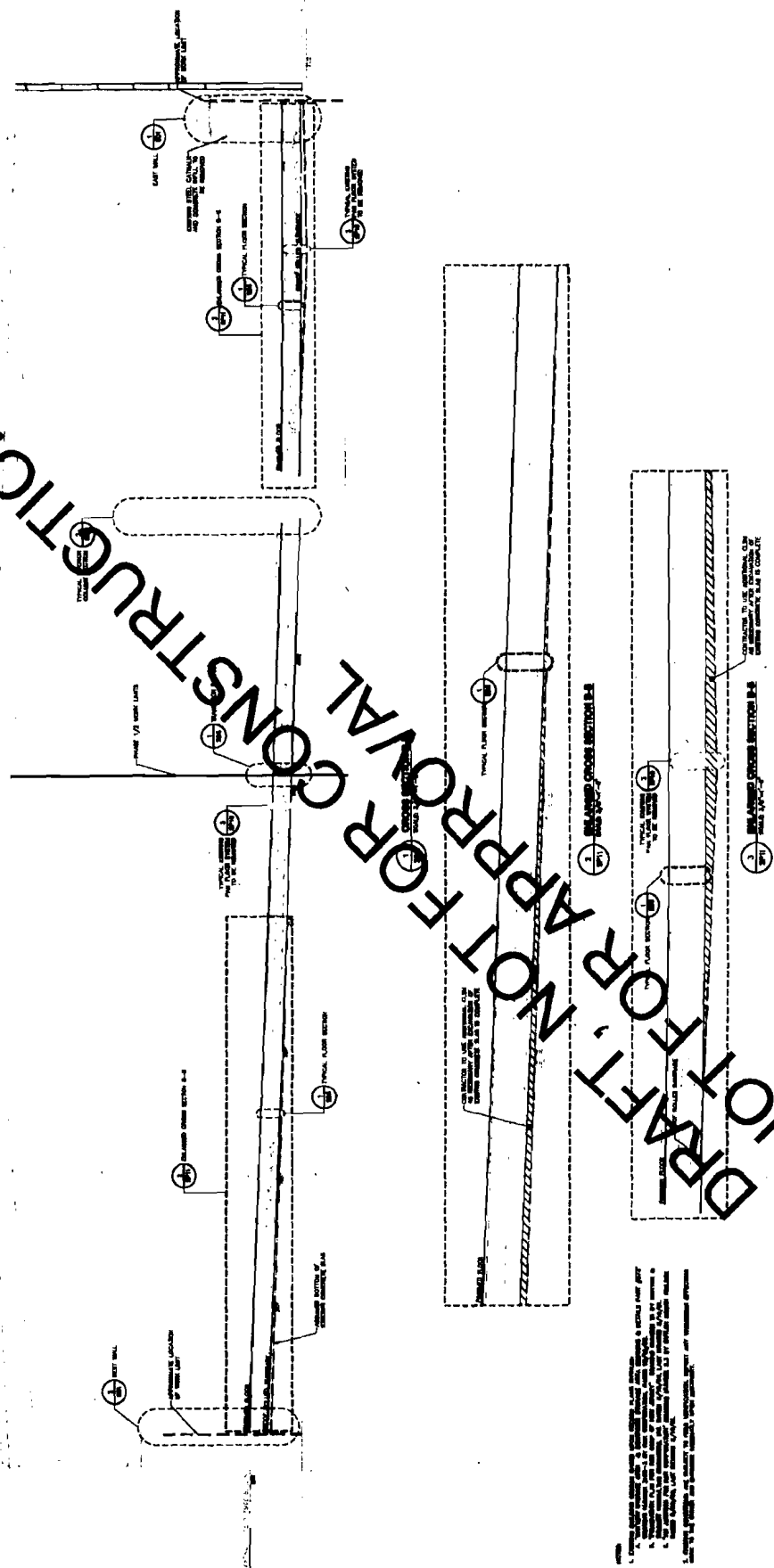
**BUILDING CROSS SECTION A-A**

CHAIKEN ENGINEERING, LAND SURVEYING  
LANDSCAPE ARCHITECTURE CO., P.C.

**THE *Chubb* COMPANIES**

**THE UNIVERSITY OF CHICAGO PRESS**

**THE NEW YORK PUBLIC LIBRARY**  
**ASTOR LENOX TILDEN FOUNDATION**  
**455 FIFTH AVENUE, NEW YORK, N. Y.**



NAME LAST, FIRST	DATE
TECHNICAL SKILLS	
EDUCATION	
EMPLOYMENT HISTORY	
REFERENCES	
COMMENTS	

"The fact that the [C]ongress is not going to do anything to help the [S]outh is a very serious matter," said a spokesman for the [S]outh. "The [S]outh is a very important part of the [U]nited States, and it is very important that the [U]nited States government should do something to help the [S]outh. The [U]nited States government should do something to help the [S]outh, and it should do something to help the [S]outh."

**PROCESSING PERMIT 18-11-18 - NOT FOR CONSTRUCTION**

**MOVING CONTAINMENT SYSTEM REPLACEMENT**

**BUILDING CROSS SECTION B-B**

TOWN OF WALLULL, ORANGE COUNTY, NEW YORK

CHAZEN ENGINEERING, LAND SURVEYING

**G** LANDSCAPE ARCHITECTURE CO., P.C.

五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

THE

**Wheeler**  
**COMPANIES**

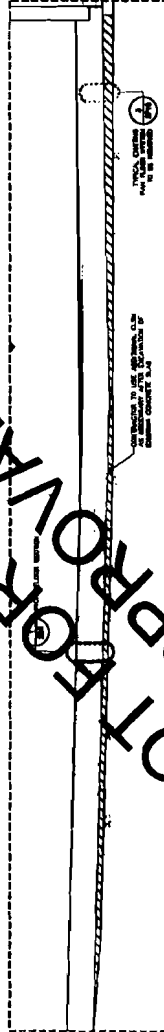
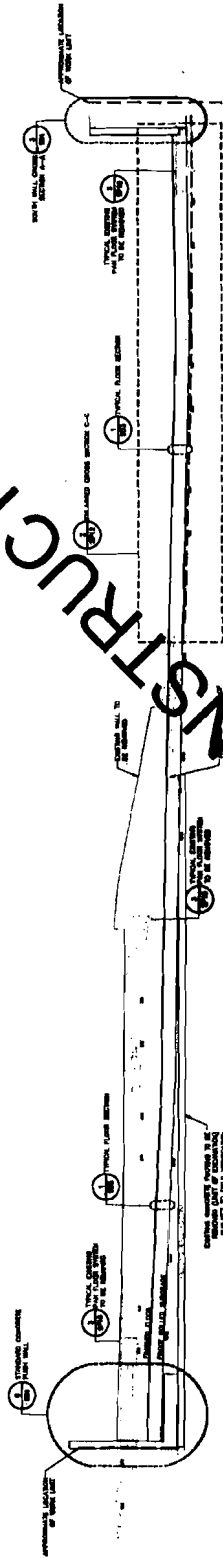
101

[

1

U

1. RESEARCH OBJECTIVE  
 2. RESEARCH QUESTIONS  
 3. RESEARCH DESIGN  
 4. RESEARCH METHODS  
 5. RESEARCH RESULTS  
 6. RESEARCH CONCLUSIONS  
 7. RESEARCH LIMITATIONS  
 8. RESEARCH REFERENCES  
 9. RESEARCH APPENDICES  
 10. RESEARCH BIBLIOGRAPHY  
 11. RESEARCH INDEX  
 12. RESEARCH SUMMARY  
 13. RESEARCH ABSTRACT  
 14. RESEARCH INTRODUCTION  
 15. RESEARCH BACKGROUND  
 16. RESEARCH PURPOSE  
 17. RESEARCH SCOPE  
 18. RESEARCH SIGNIFICANCE  
 19. RESEARCH RELEVANCE  
 20. RESEARCH VALIDITY  
 21. RESEARCH RELIABILITY  
 22. RESEARCH GENERALIZABILITY  
 23. RESEARCH SPECIFICITY  
 24. RESEARCH FOCUS  
 25. RESEARCH AREA  
 26. RESEARCH TOPIC  
 27. RESEARCH FIELD  
 28. RESEARCH DISCIPLINE  
 29. RESEARCH DEPARTMENT  
 30. RESEARCH INSTITUTE  
 31. RESEARCH CENTER  
 32. RESEARCH GROUP  
 33. RESEARCH TEAM  
 34. RESEARCH LEADER  
 35. RESEARCH COORDINATOR  
 36. RESEARCH MANAGER  
 37. RESEARCH SUPERVISOR  
 38. RESEARCH MENTOR  
 39. RESEARCH ADVISOR  
 40. RESEARCH CONSULTANT  
 41. RESEARCH COLLABORATOR  
 42. RESEARCH PARTNER  
 43. RESEARCH ALLY  
 44. RESEARCH SUPPORTER  
 45. RESEARCH BACKER  
 46. RESEARCH SPONSOR  
 47. RESEARCH FUNDING  
 48. RESEARCH BUDGET  
 49. RESEARCH COSTS  
 50. RESEARCH EXPENSES  
 51. RESEARCH REVENUE  
 52. RESEARCH PROFITS  
 53. RESEARCH LOSSES  
 54. RESEARCH BREAK-EVEN  
 55. RESEARCH RISK  
 56. RESEARCH UNCERTAINTY  
 57. RESEARCH AMBIGUITY  
 58. RESEARCH VAGUENESS  
 59. RESEARCH OBSCURITY  
 60. RESEARCH INVISIBILITY  
 61. RESEARCH NEGLECT  
 62. RESEARCH OVERLOOK  
 63. RESEARCH IGNORE  
 64. RESEARCH DISMISS  
 65. RESEARCH REJECT  
 66. RESEARCH REUSE  
 67. RESEARCH RECYCLE  
 68. RESEARCH REPAIR  
 69. RESEARCH RESTORE  
 70. RESEARCH REBUILD  
 71. RESEARCH RECONSTRUCT  
 72. RESEARCH REFORM  
 73. RESEARCH REORGANIZE  
 74. RESEARCH REDESIGN  
 75. RESEARCH REENGINEER  
 76. RESEARCH REINVENT  
 77. RESEARCH REIMAGINE  
 78. RESEARCH RECONSTRUCT  
 79. RESEARCH RECONSTRUCT  
 80. RESEARCH RECONSTRUCT  
 81. RESEARCH RECONSTRUCT  
 82. RESEARCH RECONSTRUCT  
 83. RESEARCH RECONSTRUCT  
 84. RESEARCH RECONSTRUCT  
 85. RESEARCH RECONSTRUCT  
 86. RESEARCH RECONSTRUCT  
 87. RESEARCH RECONSTRUCT  
 88. RESEARCH RECONSTRUCT  
 89. RESEARCH RECONSTRUCT  
 90. RESEARCH RECONSTRUCT  
 91. RESEARCH RECONSTRUCT  
 92. RESEARCH RECONSTRUCT  
 93. RESEARCH RECONSTRUCT  
 94. RESEARCH RECONSTRUCT  
 95. RESEARCH RECONSTRUCT  
 96. RESEARCH RECONSTRUCT  
 97. RESEARCH RECONSTRUCT  
 98. RESEARCH RECONSTRUCT  
 99. RESEARCH RECONSTRUCT  
 100. RESEARCH RECONSTRUCT



**RESEARCH CENTER**

[illegible][illegible]

**PROGRAMS TEST 10-11-10 - NOT FOR CONSTRUCTION**

**THE UNIVERSITY OF CHICAGO PRESS**

**BUILDING CROSS SECTION C-C**

**STATE OF CALIFORNIA: COUNTY OF LOS ANGELES**

**CHAZEN ENGINEERING, LAND SURVEYING**

**LANDSCAPE ARCHITECTURE CO., P.C.**

— 10 —

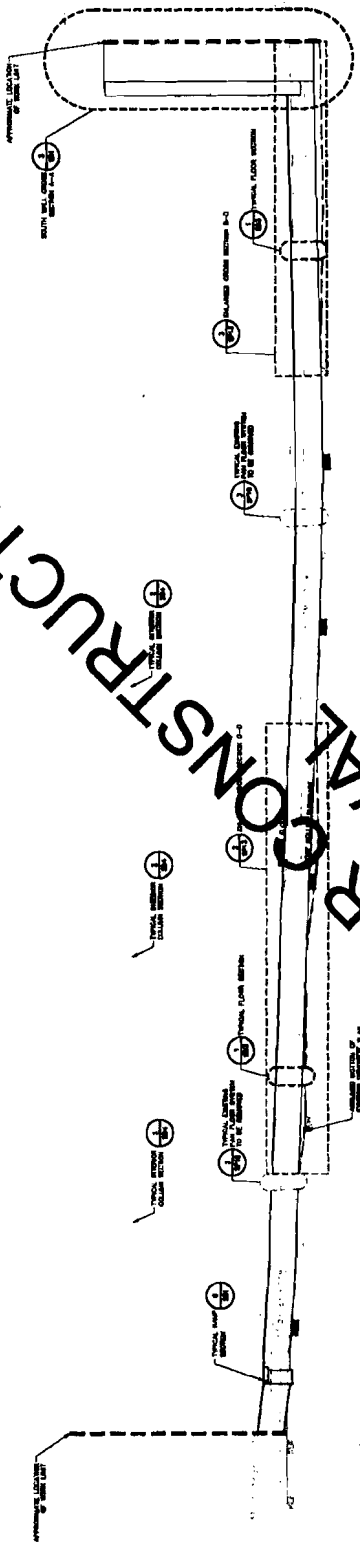
山陰縣志

THE *Chazen* COMPANIES

[illegible]

**Abstract**

DRAFT, NOT FOR CONSTRUCTION, NOT FOR APPROVAL



SECTION D-2  
SECTION D-1  
SECTION D-3  
SECTION D-4  
SECTION D-5  
SECTION D-6  
SECTION D-7  
SECTION D-8  
SECTION D-9  
SECTION D-10  
SECTION D-11  
SECTION D-12  
SECTION D-13  
SECTION D-14  
SECTION D-15  
SECTION D-16  
SECTION D-17  
SECTION D-18  
SECTION D-19  
SECTION D-20  
SECTION D-21  
SECTION D-22  
SECTION D-23  
SECTION D-24  
SECTION D-25  
SECTION D-26  
SECTION D-27  
SECTION D-28  
SECTION D-29  
SECTION D-30  
SECTION D-31  
SECTION D-32  
SECTION D-33  
SECTION D-34  
SECTION D-35  
SECTION D-36  
SECTION D-37  
SECTION D-38  
SECTION D-39  
SECTION D-40  
SECTION D-41  
SECTION D-42  
SECTION D-43  
SECTION D-44  
SECTION D-45  
SECTION D-46  
SECTION D-47  
SECTION D-48  
SECTION D-49  
SECTION D-50  
SECTION D-51  
SECTION D-52  
SECTION D-53  
SECTION D-54  
SECTION D-55  
SECTION D-56  
SECTION D-57  
SECTION D-58  
SECTION D-59  
SECTION D-60  
SECTION D-61  
SECTION D-62  
SECTION D-63  
SECTION D-64  
SECTION D-65  
SECTION D-66  
SECTION D-67  
SECTION D-68  
SECTION D-69  
SECTION D-70  
SECTION D-71  
SECTION D-72  
SECTION D-73  
SECTION D-74  
SECTION D-75  
SECTION D-76  
SECTION D-77  
SECTION D-78  
SECTION D-79  
SECTION D-80  
SECTION D-81  
SECTION D-82  
SECTION D-83  
SECTION D-84  
SECTION D-85  
SECTION D-86  
SECTION D-87  
SECTION D-88  
SECTION D-89  
SECTION D-90  
SECTION D-91  
SECTION D-92  
SECTION D-93  
SECTION D-94  
SECTION D-95  
SECTION D-96  
SECTION D-97  
SECTION D-98  
SECTION D-99  
SECTION D-100

PROCESS PART 94-11-18 - NOT FOR CONSTRUCTION

THE CHRYSLER COMPANIES

CLARK ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

BUILDING CROSS SECTION D-2

DATE: 11/18/94

BY: [Signature]

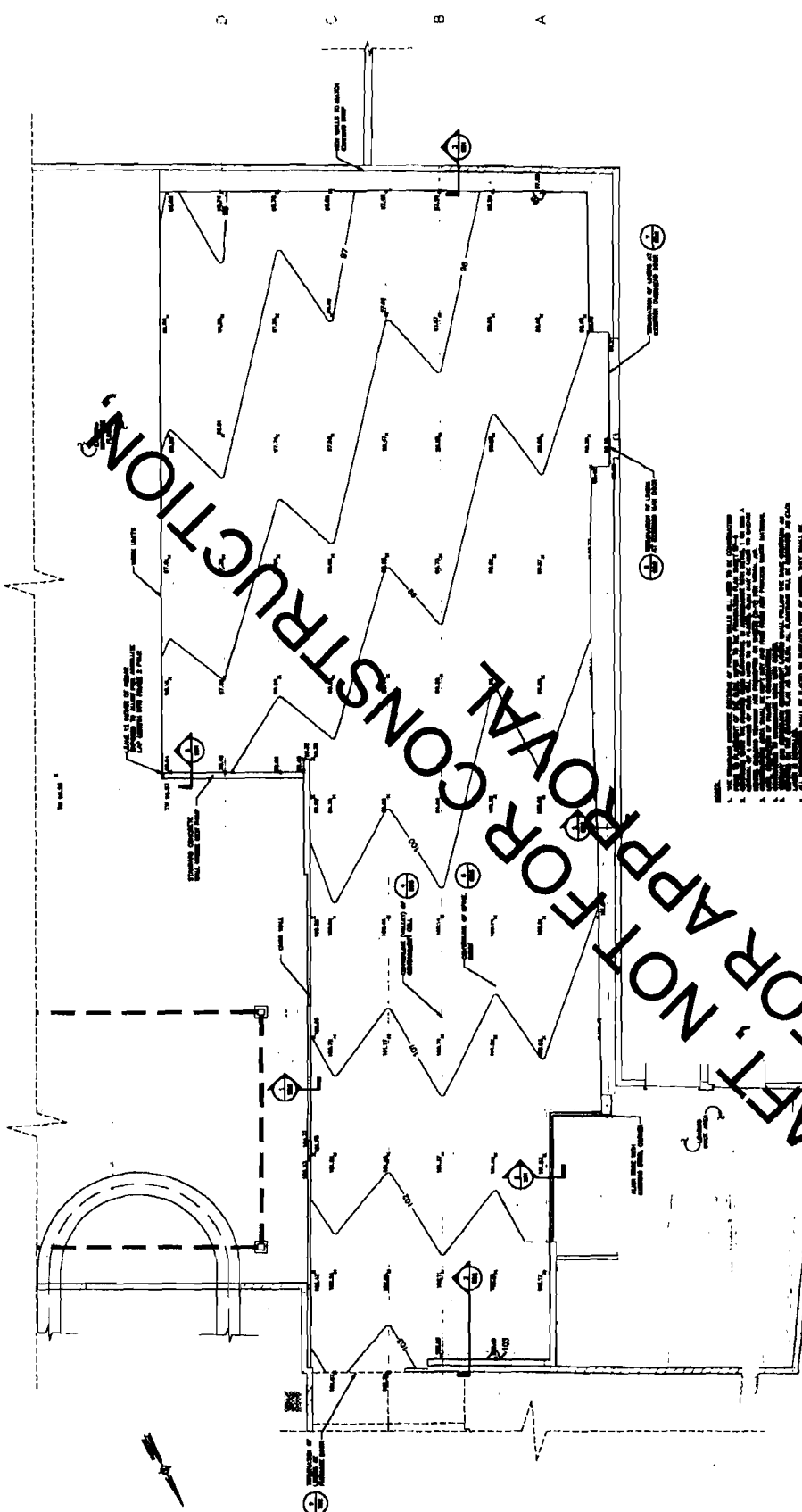
FOR: [Signature]

PROJECT: [Signature]

REVISIONS:

NO.	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	11/18/94





PROCESSING PRINT 10-11-40 - NOT FOR CONSTRUCTION

**THE GOVERNMENT OF THE DISTRICT OF COLUMBIA**

**PHASE 1 AREA CLSM GRADING PLAN**

OFFICE OF THE ATTORNEY GENERAL, STATE OF NEW YORK

	DATE	TIME	LOCATION	REMARKS
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

## CELESTIAL ENGINEERING, LAND SURVEYING

LANDSCAPE ARCHITECTURE CO., P.C.

))

**THE**

[illegible]

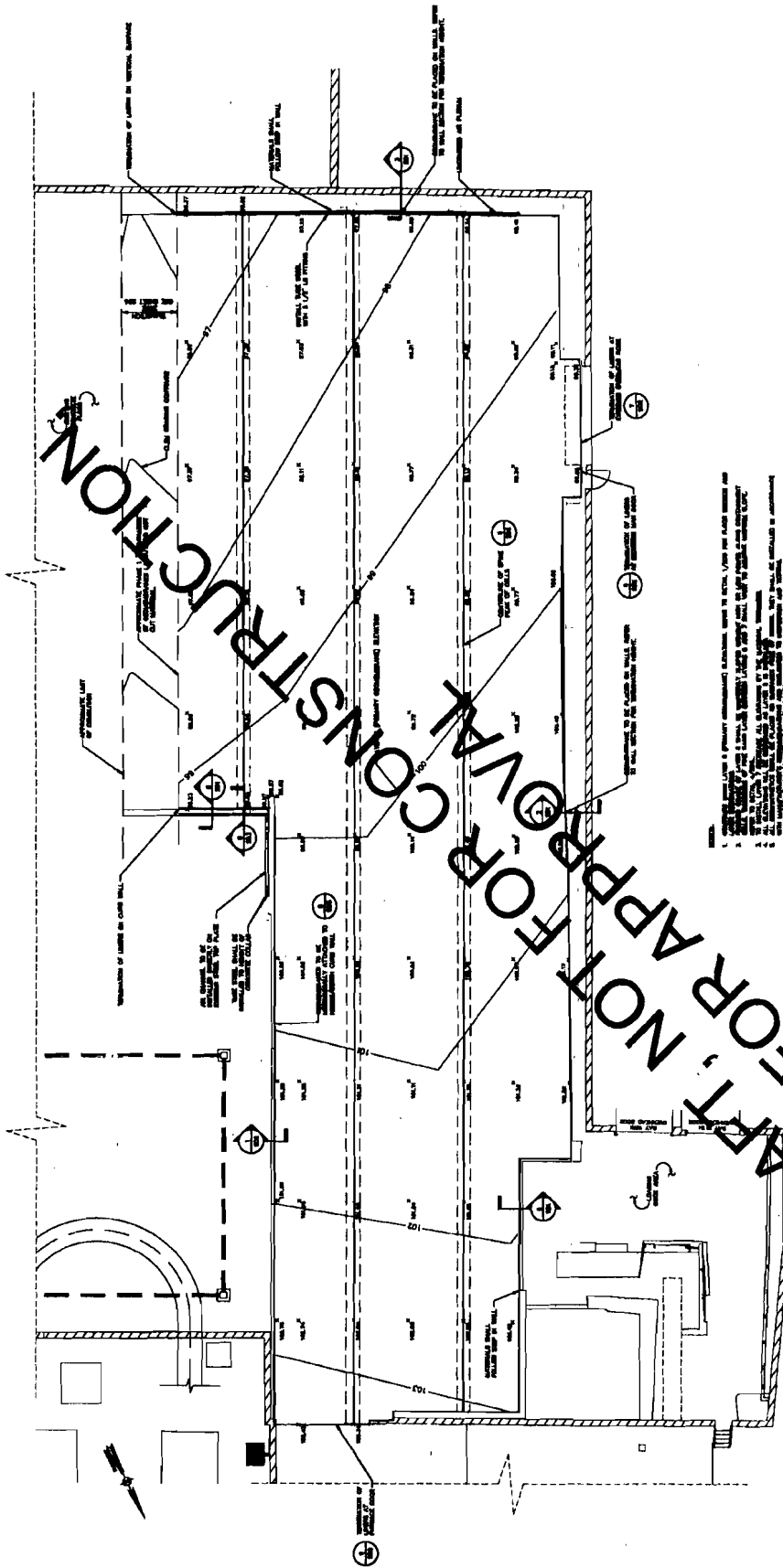
---

THE *Chapman* COMPANIES  
 1000 Broadway, New York, N.Y. 10018  
 Phone: (212) 691-1000

— 100 —

J





1. THIS PLAN IS A PRELIMINARY GRADING PLAN. IT IS NOT TO BE USED FOR CONSTRUCTION.
2. THE GRADING ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON THE PROPOSED GRADE.
3. THE EXISTING GRADE IS SHOWN BY DASHED LINES.
4. THE PROPOSED DRAINAGE IS SHOWN BY SOLID LINES.
5. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.
6. THE PROPOSED GRADE IS SHOWN BY THIN SOLID LINES.
7. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.
8. THE PROPOSED GRADE IS SHOWN BY THIN SOLID LINES.
9. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.
10. THE PROPOSED GRADE IS SHOWN BY THIN SOLID LINES.
11. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.
12. THE PROPOSED GRADE IS SHOWN BY THIN SOLID LINES.
13. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.
14. THE PROPOSED GRADE IS SHOWN BY THIN SOLID LINES.
15. THE PROPOSED CONSTRUCTION IS SHOWN BY THICK SOLID LINES.

PROPOSED PHASE 1 - NOT FOR CONSTRUCTION

DATE	10/1/19
BY	ALB
CHECKED BY	ALB
SCALE	AS SHOWN
PROJECT NO.	19-01

# PHASE 1 AREA PRIMARY GEOMEMBRANE GRADING PLAN

TOWN OF WALLA WALLA, CHANSE COUNTY, NEW YORK

DATE	10/1/19
BY	ALB
CHECKED BY	ALB
SCALE	AS SHOWN
PROJECT NO.	19-01

CHAZEN ENGINEERING, LAND SURVEYING  
LANDSCAPE ARCHITECTURE CO., P.C.

1000 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.CHAZEN.COM

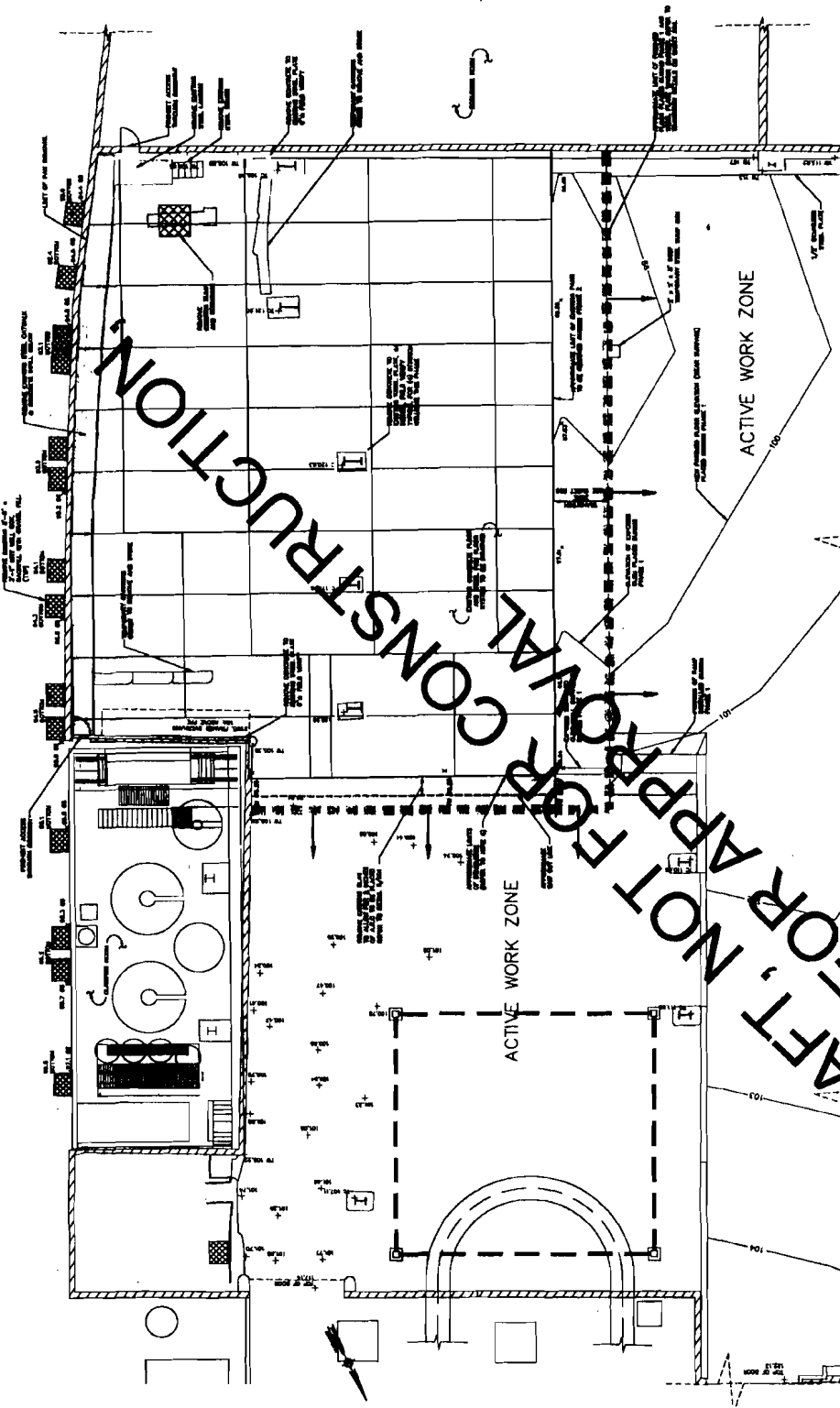
THE CHAZEN COMPANIES

1000 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.CHAZEN.COM

1000 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.CHAZEN.COM

1000 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.CHAZEN.COM





1. EXISTING BUILDING FOOTPRINT AND EXTERIOR WALLS.
2. EXISTING BUILDING INTERIOR WALLS AND PARTITION WALLS.
3. EXISTING BUILDING ROOF AND CEILING.
4. EXISTING BUILDING FLOOR SLAB.
5. EXISTING BUILDING FOUNDATION AND RETAINING WALLS.
6. EXISTING BUILDING UTILITIES AND MECHANICAL EQUIPMENT.
7. EXISTING BUILDING LANDSCAPE AND SITEWORK.

PROCESS PRINT 9-11-18 - NOT FOR CONSTRUCTION

DATE	9/11/18
BY	ADH
PROJECT	PHASE 2 AREA DEMOLITION PLAN
CLIENT	THE CHAZEN COMPANIES

# PHASE 2 AREA DEMOLITION PLAN

NO.	1
DATE	9/11/18
BY	ADH
PROJECT	PHASE 2 AREA DEMOLITION PLAN
CLIENT	THE CHAZEN COMPANIES

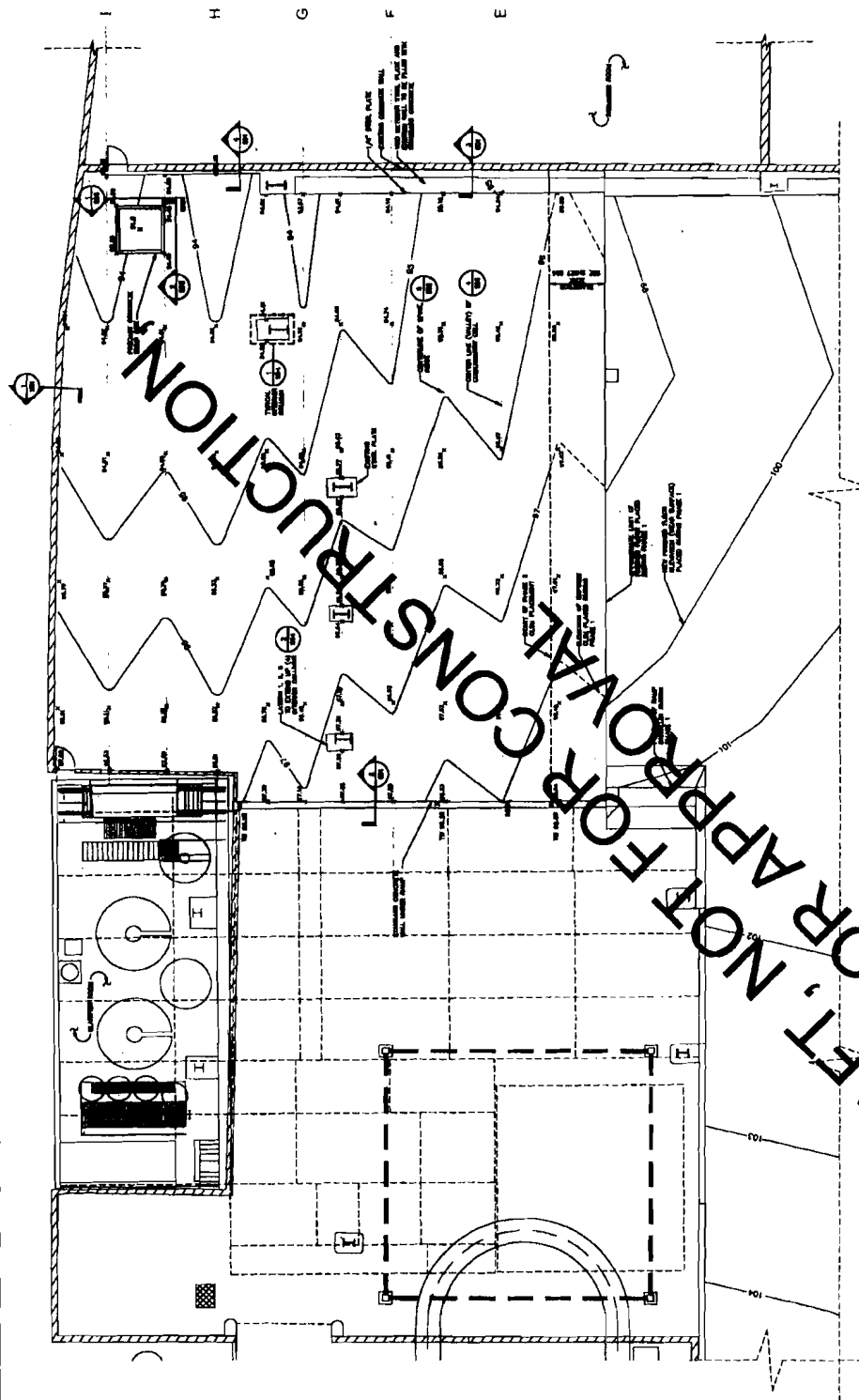
CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

THE CHAZEN COMPANIES

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

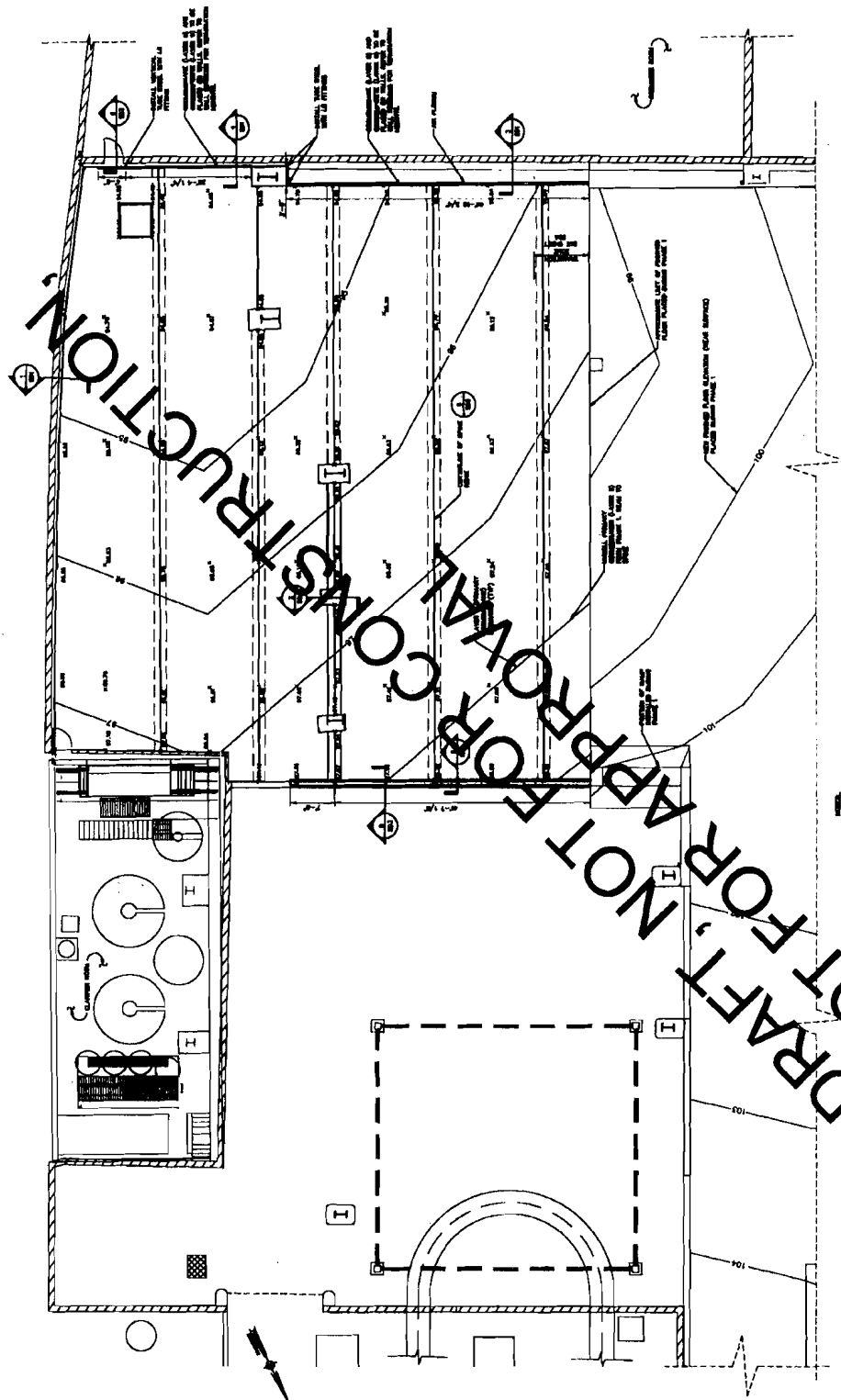
CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.



ALL ELEVATIONS ARE IN FEET AND DECIMALS THEREOF. ELEVATIONS ARE TO BE USED AS A GUIDE ONLY. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY OF THE SITE. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY OF THE SITE. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY OF THE SITE.

PROPOSED PRINT 10-11-18 - NOT FOR CONSTRUCTION

<p>THE CHUBB COMPANIES</p>	<p>CHUBB ENGINEERING, LAND SURVEYING &amp; LANDSCAPE ARCHITECTURE CO., P.C.</p> <p>1000 N. 10TH ST., SUITE 100, DENVER, CO 80202</p> <p>TEL: 303.733.1000 FAX: 303.733.1001</p>	<p>PHASE 2 AREA CLASS GRADING PLAN</p> <p>TOWN OF HALL, WARDEN COUNTY, MONTANA</p>	<p>AS-5</p>



PROCESSING PRINT 10-11-99 - NOT FOR CONSTRUCTION

**COMMITMENT: GIVING YOUR ALL**

**PHASE 2 AREA PRIMARY  
GEOMEMBRANE LAYER GRADING PLAN**

**Abstract**

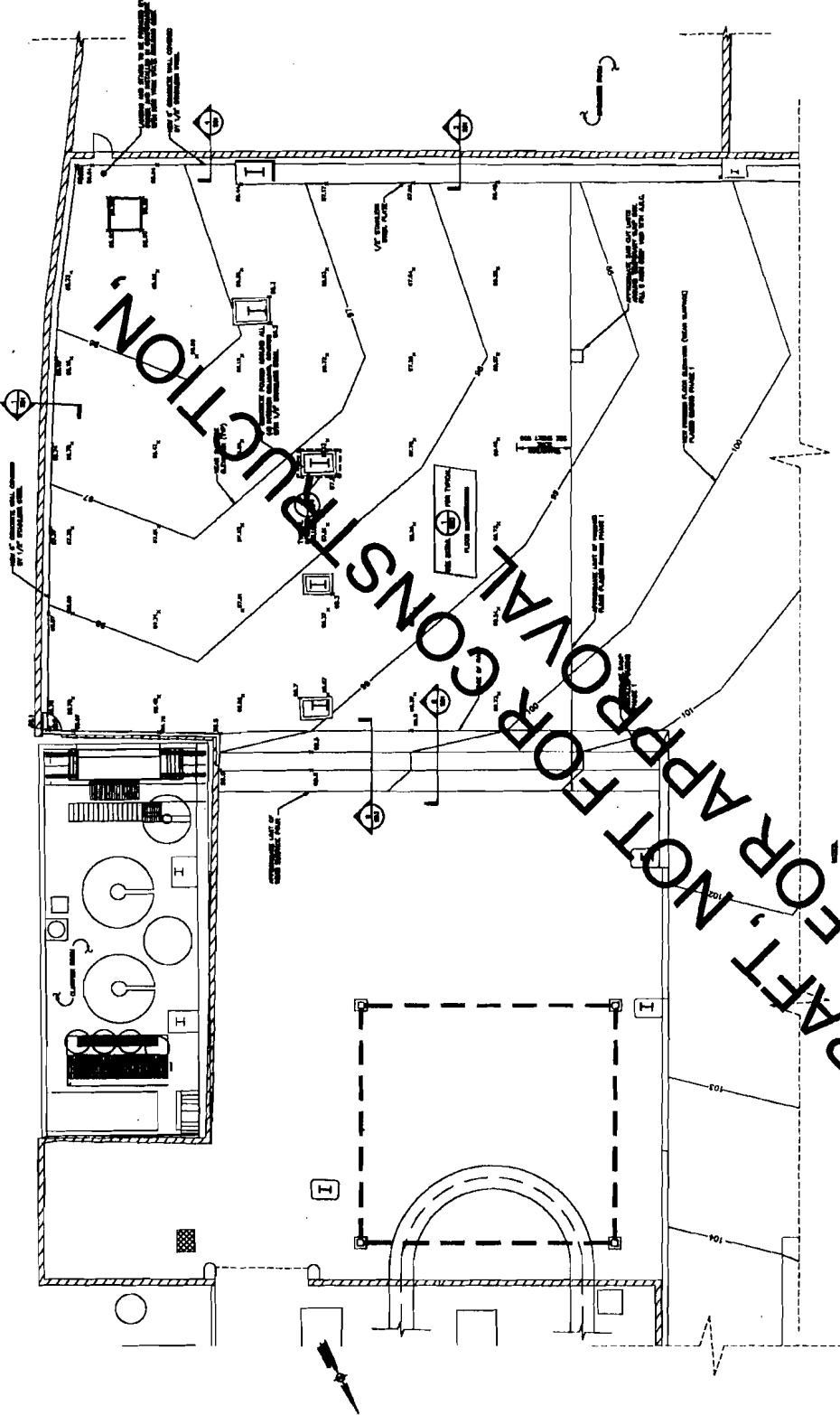
**623**

**CEAVER ENGINEERING, LAND SURVEYING**

THE *Chazen* COMPANIES

**THE**

**Product Description:** The product is a 100% cotton, long-sleeved shirt with a crew neck and a small, embroidered logo on the left chest. The shirt is white and appears to be a standard fit.



NOT TO SCALE  
 ALL DIMENSIONS ARE IN FEET AND INCHES  
 ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED  
 ALL DIMENSIONS ARE TO BE VERIFIED BY THE FIELD ENGINEER

PROFESSIONAL ENGINEER  
 GREGORY J. SMITH  
 STATE OF ILLINOIS  
 NO. 043-000000000

PHASE 2 AREA LAYOUT AND  
 FINISHED FLOOR GRADING PLAN

PROJECT NO. 19-11-18 - NOT FOR CONSTRUCTION

OWNER: [Redacted]

DESIGNER: [Redacted]

DATE: 10/11/18

SCALE: 1" = 10'-0"

PROJECT LOCATION: [Redacted]

PROJECT DESCRIPTION: [Redacted]

PROJECT ADDRESS: [Redacted]

PROJECT CITY: [Redacted]

PROJECT STATE: [Redacted]

PROJECT ZIP: [Redacted]

PROJECT PHONE: [Redacted]

PROJECT FAX: [Redacted]

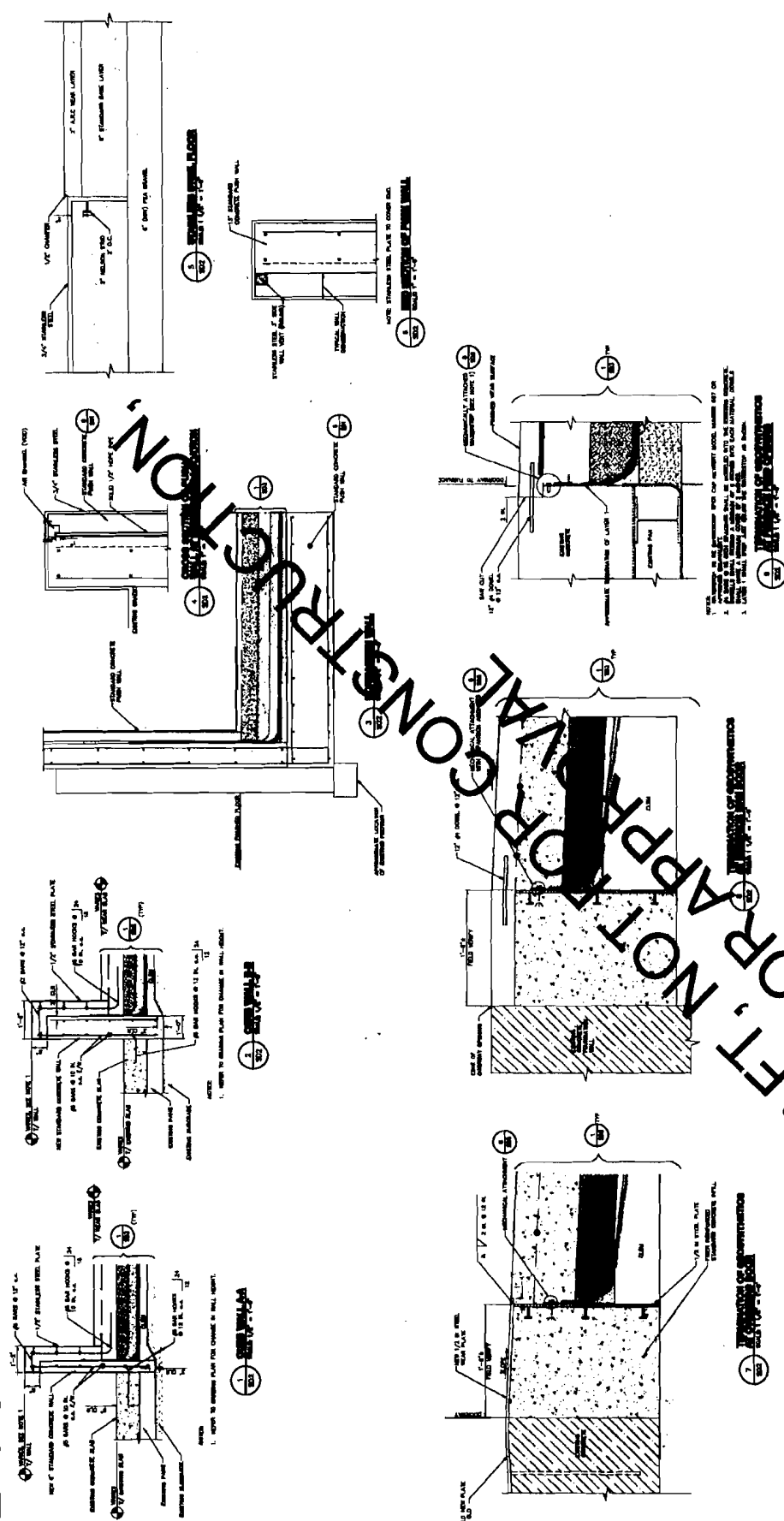
PROJECT EMAIL: [Redacted]

PROJECT WEBSITE: [Redacted]

PROJECT SOCIAL MEDIA: [Redacted]

PROJECT CONTACT: [Redacted]





**PROCEEDING FIRST 12-11-19 - NOT FOR CONSTRUCTION**

[illegible]

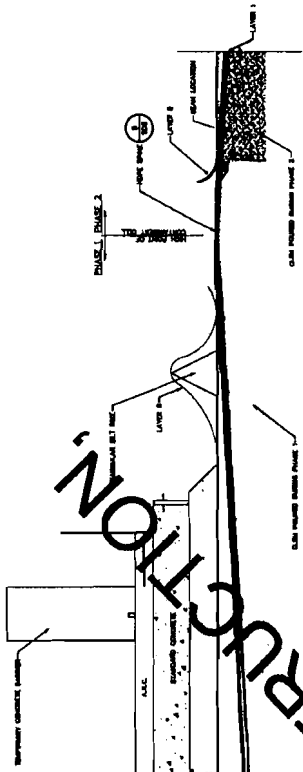






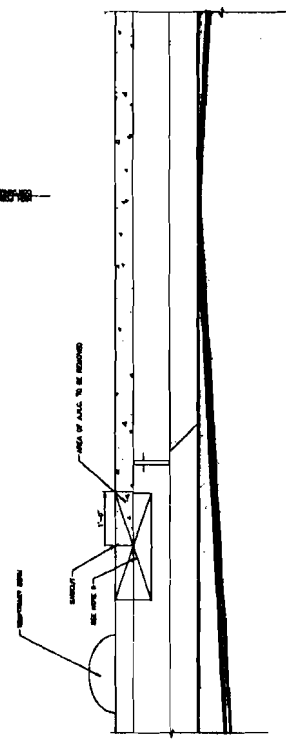






NOTES:  
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS:  
A. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, MICHIGAN DEPARTMENT OF TRANSPORTATION  
B. STANDARD SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE, LATEST EDITION, AMERICAN CONCRETE INSTITUTE  
C. STANDARD SPECIFICATIONS FOR ASPHALT PAVING, LATEST EDITION, NATIONAL ASPHALT PAVING INSTITUTE  
D. STANDARD SPECIFICATIONS FOR SOILS, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
E. STANDARD SPECIFICATIONS FOR GEOTECHNICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
F. STANDARD SPECIFICATIONS FOR EROSION CONTROL, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
G. STANDARD SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE, LATEST EDITION, LANDSCAPE ARCHITECTURE ASSOCIATION OF AMERICA  
H. STANDARD SPECIFICATIONS FOR PLANTING, LATEST EDITION, NATIONAL ARBORICULTURAL SOCIETY  
I. STANDARD SPECIFICATIONS FOR IRRIGATION, LATEST EDITION, NATIONAL IRRIGATION ENGINEERS ASSOCIATION  
J. STANDARD SPECIFICATIONS FOR FLOOD CONTROL, LATEST EDITION, NATIONAL FLOOD CONTROL ASSOCIATION  
K. STANDARD SPECIFICATIONS FOR WIND ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
L. STANDARD SPECIFICATIONS FOR SEISMIC ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
M. STANDARD SPECIFICATIONS FOR STRUCTURAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION  
N. STANDARD SPECIFICATIONS FOR ELECTRICAL ENGINEERING, LATEST EDITION, NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION  
O. STANDARD SPECIFICATIONS FOR MECHANICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
P. STANDARD SPECIFICATIONS FOR CHEMICAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS  
Q. STANDARD SPECIFICATIONS FOR METALLURGICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF METALLURGICAL ENGINEERS  
R. STANDARD SPECIFICATIONS FOR AERONAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
S. STANDARD SPECIFICATIONS FOR NAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
T. STANDARD SPECIFICATIONS FOR AGRICULTURAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
U. STANDARD SPECIFICATIONS FOR MINING ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
V. STANDARD SPECIFICATIONS FOR PETROLEUM ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
W. STANDARD SPECIFICATIONS FOR CHEMICAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS  
X. STANDARD SPECIFICATIONS FOR METALLURGICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF METALLURGICAL ENGINEERS  
Y. STANDARD SPECIFICATIONS FOR AERONAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
Z. STANDARD SPECIFICATIONS FOR NAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

PHASE 1, CHASE 2



NOTES:  
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS:  
A. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, MICHIGAN DEPARTMENT OF TRANSPORTATION  
B. STANDARD SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE, LATEST EDITION, AMERICAN CONCRETE INSTITUTE  
C. STANDARD SPECIFICATIONS FOR ASPHALT PAVING, LATEST EDITION, NATIONAL ASPHALT PAVING INSTITUTE  
D. STANDARD SPECIFICATIONS FOR SOILS, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
E. STANDARD SPECIFICATIONS FOR GEOTECHNICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
F. STANDARD SPECIFICATIONS FOR EROSION CONTROL, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
G. STANDARD SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE, LATEST EDITION, LANDSCAPE ARCHITECTURE ASSOCIATION OF AMERICA  
H. STANDARD SPECIFICATIONS FOR PLANTING, LATEST EDITION, NATIONAL ARBORICULTURAL SOCIETY  
I. STANDARD SPECIFICATIONS FOR IRRIGATION, LATEST EDITION, NATIONAL IRRIGATION ENGINEERS ASSOCIATION  
J. STANDARD SPECIFICATIONS FOR FLOOD CONTROL, LATEST EDITION, NATIONAL FLOOD CONTROL ASSOCIATION  
K. STANDARD SPECIFICATIONS FOR WIND ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
L. STANDARD SPECIFICATIONS FOR SEISMIC ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF CIVIL ENGINEERS  
M. STANDARD SPECIFICATIONS FOR STRUCTURAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION  
N. STANDARD SPECIFICATIONS FOR ELECTRICAL ENGINEERING, LATEST EDITION, NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION  
O. STANDARD SPECIFICATIONS FOR MECHANICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
P. STANDARD SPECIFICATIONS FOR CHEMICAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS  
Q. STANDARD SPECIFICATIONS FOR METALLURGICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF METALLURGICAL ENGINEERS  
R. STANDARD SPECIFICATIONS FOR AERONAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
S. STANDARD SPECIFICATIONS FOR NAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
T. STANDARD SPECIFICATIONS FOR AGRICULTURAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
U. STANDARD SPECIFICATIONS FOR MINING ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
V. STANDARD SPECIFICATIONS FOR PETROLEUM ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
W. STANDARD SPECIFICATIONS FOR CHEMICAL ENGINEERING, LATEST EDITION, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS  
X. STANDARD SPECIFICATIONS FOR METALLURGICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF METALLURGICAL ENGINEERS  
Y. STANDARD SPECIFICATIONS FOR AERONAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
Z. STANDARD SPECIFICATIONS FOR NAUTICAL ENGINEERING, LATEST EDITION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

TRANSITION DETAILS

PROCESS PRINT 9-11-19 - NOT FOR CONSTRUCTION

DATE	9-11-19
BY	J. J. J.
CHECKED BY	J. J. J.
APPROVED BY	J. J. J.
SCALE	AS SHOWN

TRANSITION DETAILS

DATE	9-11-19
BY	J. J. J.
CHECKED BY	J. J. J.
APPROVED BY	J. J. J.
SCALE	AS SHOWN

TRANSITION DETAILS

TRANSITION DETAILS

TRANSITION DETAILS



Exhibit D

Materials and Groundwater Management Plan

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation**  
Remedial Bureau C, 11th Floor  
625 Broadway, Albany, New York 12233-7014  
Phone: (518) 402-9662 • Fax: (518) 402-9679  
Website: [www.dec.ny.gov](http://www.dec.ny.gov)



January 14, 2011

Mr. Gerry Manley  
Environmental, Health, & Safety Compliance  
RSR Corporation  
2777 Stemmons Freeway, Suite 1800  
Dallas, Texas 75207

Dear Mr. Manley:

Re: Revere Smelting and Refining  
Site No. 336053  
City Middletown, Orange County  
Material and Groundwater Management Plan, dated October 27, 2010

The New York State Department of Environmental Conservation (Department) has reviewed the Material and Groundwater Management Plan (MGMP) dated October 27, 2010. The MGMP has been approved with the following modifications:

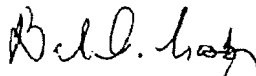
- 1) The definition of OU-1 is now defined as all environmental media, other than groundwater (OU-2), on property currently owned by Respondent Eco-Bat to the east of Ballard Road in the Town of Wallkill, Orange County, New York (Tax Parcels 41-1-70.21, 41-1-70.22, 41-1-70.23, 41-1-71.22, 41-1-73.1, 41-1-73.22, 41-1-74.82, and 41-1-76), except for the Facility (OU-4), and all environmental media, other than groundwater, not owned by Respondent Eco-Bat in the Town of Wallkill, Orange County, New York within Tax Parcels 60-1-120 and 41-1-72.2. OU-2 remains all on-Site groundwater. OU-3 is all off-Site media impacted by Respondents' activities, except environmental media other than groundwater on property not owned by Respondent Eco-Bat that is included in OU-1. Finally, OU-4 remains the Facility.
- 2) The last sentence of Section 4.2 should be removed.
- 3) The definition of OU-3 needs to be deleted.
- 4) In sections 4.1 and 4.5, reports generated from the MGMP must be sent to me, David Crosby, Section Chief, Remedial Section B, Bureau C, Division of Environmental Remediation in both electronic and hard (paper) formats.
- 5) In sections 4.3.1 and 4.4 the Protection of Groundwater SCOs (450 ppm for lead) should be cited as criteria for backfilling excavations. OU-4 is part of a Class 2 site; therefore any backfill should meet the protection of groundwater SCOs.
- 6) In section 4.4 add the word "Only" to the beginning of the first sentence. "Only material confirmed to be non-hazardous . . ."



Nothing contained herein constitutes a waiver by the Department of any rights held pursuant to the Order on Consent or any applicable State and/or federal law or a waiver for any party from any obligation held under these same laws or the 373 Permit and Order on Consent.

If you have any questions, please feel free to contact me or William Bennett of my Staff at (518) 402-9662.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Crosby", with a stylized flourish at the end.

David Crosby, Section Chief  
Remedial Section B  
Remedial Bureau C  
Division of Environmental Remediation

cc: J. Walsh, RSR

ecc: W. Bennett



**October 27, 2010**

WSP Engineering of New York, P.C.  
300 Trade Center  
Suite 4690  
Woburn, MA 01801

Tel: +1 781 933 7340  
Fax: +1 781 933 7369



---

# Contents

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
<b>2</b>	<b>Background.....</b>	<b>2</b>
2.1	Property Location and Description .....	2
2.2	Environmental Concerns Identified at the Site.....	2
<b>3</b>	<b>Purpose, Scope, and Applicability .....</b>	<b>4</b>
<b>4</b>	<b>Material Management .....</b>	<b>5</b>
4.1	Notice of Excavation/Demolition Activities.....	5
4.2	Material Characterization and Post-Excavation Sampling.....	5
4.3	Material Stockpiling and Temporary Storage Outside of the OU4 Storm Water Containment Area .....	6
4.3.1	Non-Hazardous Material and Uncontaminated Material Suitable for Reuse .....	6
4.3.2	Uncharacterized Material, Hazardous Material, and Contaminated Material Unsuitable for Reuse .....	6
4.4	Material Reuse and Disposal.....	7
4.5	Reporting Requirements.....	7
<b>5</b>	<b>Groundwater Management .....</b>	<b>8</b>
5.1	Notice of Dewatering Activities .....	8
5.2	Groundwater Discharge.....	8
5.3	Groundwater Conveyance.....	8
<b>6</b>	<b>References .....</b>	<b>9</b>

## Figures

Figure 1 – Site Location

Figure 2 – Operable Unit Boundaries

---

# 1 Introduction

On behalf of Revere Smelting & Refining Corporation (Revere), WSP Engineering of New York, P.C., has prepared this Material and Groundwater Management Plan (MGMP) for the Revere facility located at 65 Ballard Road, in Middletown, New York (Figure 1). The Revere facility is a secondary lead smelter located approximately 7 miles east of Middletown, in the Town of Wallkill, Orange County, New York. Historical environmental investigations have identified impacts to environmental media as a result of operations at the site and the site has been listed in the *Registry of Inactive Hazardous Waste Disposal Sites in New York State* as Site # 3-36-053. Revere has entered into several Consent Order<sup>1</sup> agreements with the New York State Department of Environmental Conservation (NYSDEC) to investigate impacts within each of the following Operable Units (OUs), which were defined to prioritize corrective action and remediation activities on the site (Figure 2):

- OU1 – all onsite soil that is not within OU4
- OU2 – all onsite groundwater
- OU3 – offsite environmental media, including but not limited to groundwater, soils, adjacent wetlands, ecosystem and/or any environmental media impacted by onsite activities
- OU4 – the Revere smelting plant area.

Revere is in varying stages of the Remedial Investigation/Feasibility Study (RI/FS) process for OU1, OU2, and OU3 and Revere's operations within OU4 periodically require intrusive activities to address the day-to-day and long term needs of the facility.

This MGMP is intended to address the handling and management of impacted material temporarily stored onsite in locations outside of the storm water containment area in OU4 (Figure 2). For purposes of this MGMP, materials are defined as:

*any potentially contaminated material including soil, sediment, concrete, rocks, and other building or utility construction materials from OU4 generated as part of facility-related construction projects.*

---

<sup>1</sup> Operable Unit 1 and 2 Index #D3-0001-11-07; Operable Unit 3 Index #D3-0502-12-06

---

## 2 Background

### 2.1 PROPERTY LOCATION AND DESCRIPTION

The Revere facility was constructed in 1970 and acquired by Revere in 1973. Revere manufactures lead and lead alloys. The major raw material used in production is used lead acid batteries, such as the typical automotive battery. Other raw materials used in production include battery manufacturing by-products, lead-bearing baghouse dust from battery manufacturers and smelters, scrap metal from salvage yards, and virgin metal from metal brokers. In addition, Revere reclaims polypropylene from battery cases and also produces sodium sulfate.

The facility consists of several buildings, including the main smelter building, a crystallizer building, a containment building, and a wastewater treatment building, six large storm water tanks, and employee and truck parking areas. In addition, a rail spur from the adjacent Norfolk and Southern Railroad services the facility. The operational portion of the site (OU4) is surrounded by overgrown fields, mature woodlands, wetlands, and a small pond. Eco-Bat New York LLC owns the operational property and approximately 124 undeveloped acres to the north and east of the facility and an additional 11.6 undeveloped acres south of the railroad property<sup>2</sup>.

The site is located in a combined rural and industrial area of south-central New York, approximately 6,000 feet northwest of the Wallkill River. North of the site are open, overgrown fields, wetlands, and mature woodlands. North of the woodlands is an automobile service station. The former Wakefern Warehouse, which was used as a storage and distribution center for prepackaged foodstuffs, is located approximately 0.25 mile southeast of the site and is now owned by Ballard Road Holdings, LLC.

Interstate Highway 84 is located approximately 0.6 mile south of the site. A Ball Aluminum can manufacturing facility is located west of the site across Ballard Road, and additional industrial development is located further west and south.

### 2.2 ENVIRONMENTAL CONCERNS IDENTIFIED AT THE SITE

As mentioned previously, the site has been divided into four separate OUs for the purpose of assessing impacts and evaluating remedial alternatives:

The RI conducted for OU1 by O'Brien & Gere Engineers, Inc., indicated lead-impacted soils in many areas of OU1 (O'Brien & Gere 2007). OU1 also includes soil stockpiles located east of the facility that were staged onsite after the discontinuation of corrective action work in 1999. Air dispersion of wind blown particles, as well as the transport of sediment within streams that cross the property, are also environmental concerns identified in OU1. ENTACT, on behalf of Revere, submitted a FS in October 2009 to address lead impacted soil and sediment in OU1 (ENTACT 2009).

Historical groundwater monitoring data indicate that onsite groundwater (OU2) is impacted by lead, pH, and sulfate in some areas (GWI 2009). The depth to groundwater in monitoring wells and piezometers installed in OU4 generally ranges from 5 feet to 10 feet below ground surface (bgs). Although not anticipated, shallow excavations in OU4 may require some amount of dewatering and groundwater management.

---

<sup>2</sup> Orange County New York Property tax records for 2010 indicate the railroad property is owned by Pennsylvania Lines LLC (Tax ID # 41-1-72 and 60-1-1). Property tax data was accessed using the Orange County Government Image Mate On-Line service at: <http://propertydata.orangecountygov.com/imate/search.aspx>



---

Revere is currently in the process of conducting an RI to delineate lead impacts to soil, sediment, and groundwater in OU3. The primary transport mechanism of the lead found in soils within OU3 appears to be air dispersion and sediment transport within the streams and wetlands that cross the property and go offsite south of the facility.

---

### 3 Purpose, Scope, and Applicability

The purpose of this MGMP is to ensure that lead impacted material removed from OU4 as part of routine facility operations is managed in accordance with applicable federal, state, and municipal laws and regulations. The plan presents procedures that will be followed during construction activities to ensure that impacted materials and groundwater are managed properly. The plan does not apply to:

- De minimis excavations that would not require any material management, transport, storage, or disposal, such as digging small holes for traffic signs or fence posts.
- Excavation/demolition projects within OU4 where the materials are temporarily stored wholly within the plant or the facility's storm water containment area (Figure 2). For excavations in this category, only the post-excavation sampling described in Section 4.2 will be applicable. Data from the post excavation sampling will be shared with the NYSDEC to document the nature of materials left in place.

This plan assumes that dedicated storage areas are not in place and temporary storage options will be required to manage movement of lead impacted materials. However, depending on the selected remedial action for soil and sediments in OU1, Revere may construct a fixed and dedicated storage area in the future. If this occurs, Revere would then revise the MGMP accordingly to utilize this potential dedicated storage area.

Because existing data for OU4 are insufficient to predetermine whether a generated material would be hazardous, this MGMP was conservatively prepared on the basis that soils from OU4 must first be tested before such soils are handled as not impacted by lead. As such, the provisions of this MGMP will apply to all future construction activities by Revere and its subcontractors in all areas of OU4, and are not specific to a single location or facility project.

---

## 4 Material Management

The MGMP includes a program for providing notice to the NYSDEC of proposed construction activities, general procedures for pre-excavation and post-excavation sampling, criteria for temporary storage of lead-impacted materials, and reporting requirements.

### 4.1 NOTICE OF EXCAVATION/DEMOLITION ACTIVITIES

Revere will provide a minimum of 24-hours notice to the NYSDEC for proposed construction activities requiring excavation and/or demolition of up to 10 cubic yards (CY) of material and 5 business days notice for all construction activities requiring removal of more than 10 CY of material, except where exigent circumstances require shorter notice. For a 24-hour notice project, the maximum amount of material that will be moved within that 24 hour period is 10 CY. Revere will provide prompt notice to the NYSDEC in the event that a project initially planned for 10 CY or less will necessarily expand to greater than 10 CY due to unforeseeable conditions realized during construction. The 10 CY threshold is based on the typical size of a standard roll-off container and will allow Revere to move forward quickly with routine construction activities that may require small volumes of material removal.

The notice will include a summary of the work to be conducted and a schematic showing the proposed excavation/demolition area, anticipated material volumes to be removed, and number and location of proposed samples (if necessary) in accordance with Section 4.2 below. If applicable, the notice will also include a schematic showing the location of any temporary storage areas in OU1 or in portions of OU4 outside the storm water containment area. The notice will be distributed electronically to the NYSDEC Division of Solid and Hazardous Materials Bureau of Hazardous Waste and Radiation Management and copied as a courtesy to the NYSDEC Division of Environmental Remediation Remedial Bureau C.

### 4.2 MATERIAL CHARACTERIZATION AND POST-EXCAVATION SAMPLING

For materials being disposed of offsite, the requirements of 6 NYCRR Parts 370 to 372 concerning generation, characterization, handling, storage, and disposal of waste shall be followed.

Pre-excavation/demolition sampling will not be required for projects generating less than 10 CY. One composite sample will be collected from the excavated/demolished material and analyzed for Target Analyte List (TAL) Metals using Environmental Protection Agency (EPA) Method 6010B and for lead using the Toxicity Characteristic Leaching Procedure (TCLP).

For materials temporarily stored onsite in locations outside of the storm water containment area in OU4, Revere will submit a sampling plan concurrent with the notice of excavation/demolition activities for projects requiring removal of more than 10 CY of material. Pre-excavation/demolition sampling may be proposed to confirm characterization and develop/modify appropriate health and safety procedures based on specific sampling data. At a minimum, one composite sample will be collected per 10 CY of removed material and analyzed for TAL Metals and TCLP-Lead.

Post-excavation sampling will also be conducted for all excavations (both greater and less than 10 CY) to document materials left in place. For excavations greater than 10 CY, an estimate of the number of post-excavation samples will be provided with the sampling plan submitted to the NYSDEC concurrent with the notice of excavation activities. At a minimum, one sample from the excavation floor per 900 square feet of surface area and one sample per 30 linear feet of sidewall will be collected and analyzed for TAL Metals and TCLP-Lead. The analytical data will only be utilized for documentation purposes and will not serve to dictate additional excavation for remedial purposes beyond the scope of the construction project.



---

### **4.3 MATERIAL STOCKPILING AND TEMPORARY STORAGE OUTSIDE OF THE OU4 STORM WATER CONTAINMENT AREA**

#### **4.3.1 Non-Hazardous Material and Uncontaminated Material Suitable for Reuse**

Excavated material, which has been confirmed to be non-hazardous under the Resource Conservation and Recovery Act (RCRA) based on pre-excavation TCLP analysis and determined (in consultation with the NYSDEC on a project-specific basis) to be uncontaminated and suitable for reuse based on total metals analysis, may be temporarily staged within and/or adjacent to the excavation area prior to reuse as backfill. A material reuse determination will be made by the NYSDEC on a project-specific basis based on the analytical data provided by Revere in its notice of excavation activities and/or weekly project status reports.

#### **4.3.2 Uncharacterized Material, Hazardous Material, and Contaminated Material Unsuitable for Reuse**

Temporary stockpile and storage locations will be selected based on field conditions, project sequencing, and site logistics for uncharacterized material, material confirmed to be RCRA hazardous by pre-excavation/demolition TCLP analysis, and non-hazardous but contaminated material deemed unsuitable for reuse by the NYSDEC. These materials will be retained in OU4 or within select areas of OU1. In order of preference, such materials will be:

1. Placed directly into covered and lined leak-proof roll-off containers and temporarily stored adjacent to the area of excavation.
2. Transported to a pre-selected and pre-approved area within OU1 or OU4 and placed into covered leak-proof roll-off containers.
3. Temporarily stockpiled adjacent to the area of excavation.
4. Transported to a pre-selected and pre-approved area within OU1 or OU4 and temporarily stockpiled<sup>3</sup>.

All material from projects generating less than 10 CY will be managed following option 1 above. If the materials cannot be managed in a lined roll-off near the area of excavation/demolition (due to access constraints or other project-specific constraints), then Revere will provide the NYSDEC a detailed notification of the storage plan as described in Section 4.1. The notice shall be submitted to the NYSDEC at least 5 business days before commencing excavation activities, unless exigent circumstances require a shorter notification period.

Containers used for excavated/demolished material characterized as hazardous will be suitable for over-the-road transport of hazardous materials in accordance with federal and state transportation regulations.

Material stockpiled prior to disposal will be placed within an engineered berm lined with polyethylene sheeting as containment, and covered to prevent infiltration of storm water. Engineered berms will be designed by appropriate personnel and may consist of straw bale barriers, gravel bag barriers, sand bag barriers, and fiber rolls as appropriate based on the existing grade material (pavement, asphalt, or soil) and slope of the temporary storage area. Natural soil berms constructed of native materials will not be used based on an assumption that most surface soils in OU1 and OU4 contain some detectable concentration of lead. Stockpiles will be actively managed by Revere or its subcontractor to prevent run-off.

---

<sup>3</sup> Revere reserves the right to utilize CAMU 3 in OU1 as a temporary stockpile location. CAMU 3 has been utilized in the past, with NYSDEC approval, for soils excavated as part of the installation of the Phase I groundwater extraction system (ESC Engineering 2007).

Material characterized as RCRA hazardous may be temporarily stored for up to 90 days before being transported offsite for appropriate disposal or treatment. Material to be disposed offsite may require additional sampling and analysis to meet disposal facility requirements, and Revere will conduct the necessary sampling and analysis.

Appropriate signage and other barriers (temporary fencing) to restrict access to material will be installed and maintained by Revere and/or its subcontractor.

#### **4.4 MATERIAL REUSE AND DISPOSAL**

Material confirmed to be non-hazardous under RCRA by TCLP analysis of either pre- or post-excavation samples and determined to be uncontaminated by the NYSDEC based on total metals analysis may be reused as backfill within the same excavation or another excavation in OU4 containing similar contaminants under the predetermined beneficial use determination (BUD) in 6 NYCRR 360.1.15(b)(8). Any excess non-hazardous material will be transported offsite to a facility permitted to accept and treat or landfill the material.

Material found to be characteristically RCRA hazardous by TCLP analysis will be disposed of at a licensed hazardous waste treatment or disposal facility within 90 days of excavation. Hazardous material will be transported to a permitted facility under appropriate manifests, applicable permits, and applicable state and federal laws and regulations.

#### **4.5 REPORTING REQUIREMENTS**

At the conclusion of each project, a brief report will be submitted to the NYSDEC Division of Solid and Hazardous Materials Bureau of Hazardous Waste and Radiation Management and copied as a courtesy to the NYSDEC Division of Environmental Remediation Remedial Bureau C. The report will include all sampling results generated during the project.

For projects that exceed a week of construction activity, a weekly status report will be distributed electronically to the designated project manager within the NYSDEC Division of Solid and Hazardous Materials Bureau of Hazardous Waste and Radiation Management. At a minimum, the report will include all available analytical data from the project for the previous week's work and an anticipated schedule of completion.

---

## 5 Groundwater Management

The depth to groundwater from monitoring wells and piezometers installed in OU4 (Figure 2) generally range from 5-feet to 10-feet bgs. Although not anticipated, shallow excavations in OU4 may require some amount of localized dewatering to control groundwater infiltration into the open excavation. The MGMP includes a program for providing notice to the NYSDEC of potential dewatering and general procedures for discharge of groundwater into Revere's existing recycled process water system.

### 5.1 NOTICE OF DEWATERING ACTIVITIES

Revere will provide notice to the NYSDEC of the potential for dewatering activities associated with any excavation conducted under the provisions of this MGMP. The notice will include an estimate of the anticipated dewatering volume, method of conveyance to discharge location, and duration of proposed activities.

### 5.2 GROUNDWATER DISCHARGE

Extracted water will be discharged into Revere's storm water sump located south of the scrubber building on the southern portion of the facility. The sump receives storm water runoff from the roofs and paved areas of the facility as well as extracted groundwater from the Phase I groundwater extraction system (EW-1, EW-8, EW-9, and EW-10; Figure 2) installed around the perimeter of the containment building.

Water is pumped from the sump to a recycle water storage tank. Water from the recycle tank is then pumped through sand filters, utilized in facility operations, treated by the facility's wastewater treatment system, and discharged under permit to the Town of Wallkill sanitary sewer.

### 5.3 GROUNDWATER CONVEYANCE

Groundwater may be pumped directly from the open excavation to the storm water sump. Alternatively, Revere may utilize temporary fractionation (frac) tanks if high volumes of water are anticipated and/or the location of the excavation is not conducive to direct pumping. Pre-treatment of discharged water will not be required; however, Revere may elect to filter the water to remove solids if necessary.



---

## 6 References

ENTACT. October 2009. *Feasibility Study. Revision 1.0*. Revere Smelting and Refining Site, Operable Unit 1.

ESC Engineering of New York, P.C. 2007. *Construction Completion Report, Phase I Groundwater Extraction System*, Revere Smelting & Refining Facility, 65 Ballard Road, Middletown, New York. November 16.

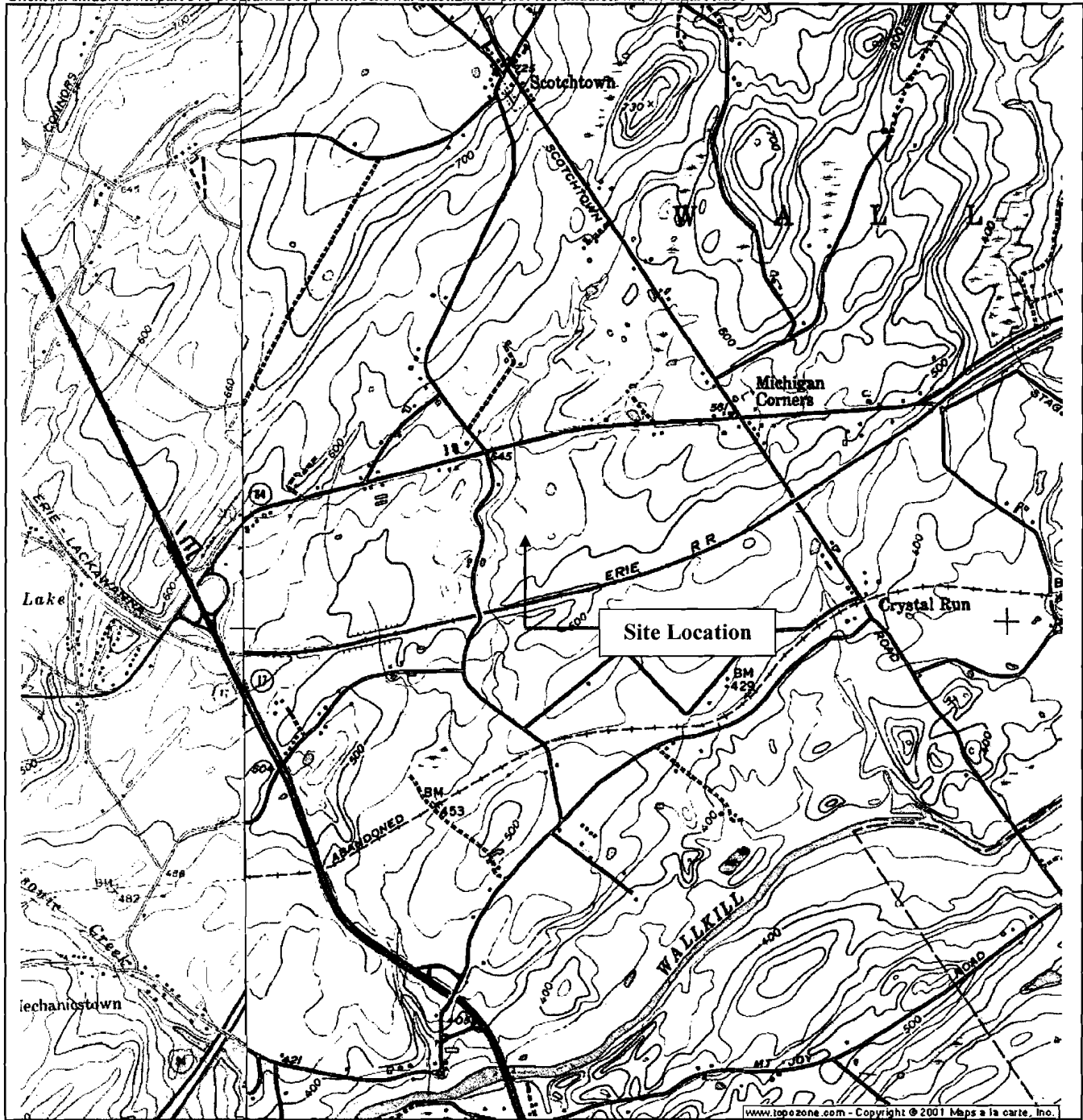
Ground Water Investigations, Inc. November 2009. *Quarterly Monitoring Report – September 2009*. Revere Smelting and Refining Corporation, Middletown, New York.

O'Brien & Gere. May 2007. *Remedial Investigation*. Revere Smelting & Refining Site. Middletown, New York. (Site #3-36-053). Final Report.



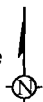
---

## Figures



#### Reference

7.5 Minute Series Topographic Quadrangle  
Goshen, New York  
Photorevised 1957 Scale 1:24,000



Quadrangle Location



Scale in Feet



**WSP**  
Engineering of  
New York, P.C.

**WSP ENGINEERING OF NEW YORK P.C.**  
300 TRADE CENTER  
SUITE 4960  
WOBURN, MASSACHUSETTS 01801  
781-933-7340

**Figure 1**  
**Site Location**  
**Revere Smelting & Refining Facility**  
**65 Ballard Road**  
**Middletown, New York**



WSP  
Engineering of  
New York, P.C.

FIGURE 2

OPERABLE UNIT BOUNDARIES

REVERE SMELTING & REFINING CORPORATION  
MIDDLETOWN, NEW YORK

PREPARED FOR  
RSR CORPORATION  
DALLAS, TEXAS

**Exhibit E**

**Draft Remedial Plan for OU-1**



**Exhibit E**  
**Revere Smelting & Refining**  
**Remedy Summary OU-1**  
**January 2011**

*Assumptions:*

- Source material is considered any soil/waste which is above 5 mg/L TCLP for lead. All source material must be treated via in-situ or ex-situ stabilization to be rendered non-hazardous prior to disposal.
- The site specific Contaminants of Concern for surface soil are lead and arsenic.
- OU-1 is now defined as all environmental media, other than groundwater (OU-2), on property currently owned by Respondent Eco-Bat to the east of Ballard Road in the Town of Wallkill, Orange County, New York (Tax Parcels 41-1-70.21, 41-1-70.22, 41-1-70.23, 41-1-71.22, 41-1-73.1, 41-1-73.22, 41-1-74.82, and 41-1-76), except for the Facility (OU-4), and all environmental media, other than groundwater, not owned by Respondent Eco-Bat in the Town of Wallkill, Orange County, New York within Tax Parcels 60-1-120 and 41-1-72.2. OU-2 remains all on-Site groundwater. OU-3 is all off-Site media impacted by Respondents' activities, except environmental media other than groundwater on property not owned by Respondent Eco-Bat that is included in OU-1. Finally, OU-4 remains the Facility.
- The site will be divided into several areas of interest for the Proposed Remedial Action Plan (PRAP). The Eastern Fill Area, the Consolidation Area, Commercial Areas, Industrial Areas, Sediment Areas, Ecological Areas, and Ecological Buffers.
- The Eastern Fill Area is the area of the previous RCRA Corrective Action that was not completed. It contains the present CAMUs. It is an area of historical waste disposal. The southern end of the Eastern Fill Area is considered an open excavation and not a wetland. Following the removal of all source material, the Eastern Fill Area may be utilized for consolidation of non-source material soils above the groundwater table and beneath a site cover meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).
- The Consolidation Area will be sited during the remedial design and is proposed to be located in the northeast corner of the area within the registry site boundary (3-36-053) illustrated in Exhibit A. The Consolidation Area will consist of a containment cell meeting the substantive requirements of 6 NYCRR Part 360 unless modified. All soil excavated at the site as part of the remedy will be characterized to determine if it is source material. Source material will be treated via in-situ or ex-situ stabilization to be rendered non-hazardous then placed in the containment cell. The size and configuration of the Consolidation Area will be determined in the remedial design and will be sufficient so that the containment cell meets all applicable regulations. Non-source material will be tested and managed in accordance with the approved remedial design and either placed

directly in the containment cell or reused at the site as fill in the Eastern Fill Area in accordance with Part 375. Revere also retains the right to dispose of either source or non-source material at permitted offsite disposal facilities in accordance with all federal, state, and local regulations.

- The Commercial Areas consist of the portion of the Front Lawn Area which is located west of the Western Stream and is not considered Ecological Areas or Ecological Buffers. Land use for the Front Lawn Area is defined as commercial because the Front Lawn Area is a green lawn and landscaped area adjacent to Ballard Road, separated from the main facility by the Western Stream, and adjacent to commercial off-site properties on the other side of Ballard Road. The land use for the Commercial Areas of OU-1 is considered commercial and cleanup will be to the commercial SCOs for lead and arsenic.
- The Industrial Areas are all areas within the registry site boundary (3-36-053) illustrated in Exhibit A excluding the Commercial Areas outlined above, Sediment Areas, Ecological Areas, and Ecological Buffers. The Eastern Fill Area and Consolidation Area (including the containment cell) are considered industrial areas. These areas are generally fenced or densely vegetated, have limited access, and are in close proximity to industrial activities. The land use for the Industrial Areas of OU-1 is considered industrial and cleanup will be to the industrial SCOs for lead and arsenic.
- Sediment Areas of OU-1 will be defined as permanent or nearly permanent water bodies and streams (for example: Western Stream, Railroad Pond, other ponded areas and streams), which are impacted by Revere's operations to the east of Ballard Road. Soils underlying Sediment Areas to a depth of two feet are considered sediments and shall be remediated based on Department Standards, Criteria, and Guidelines (SCGs) for sediment and properly restored based on Department regulations. Soils underlying Sediment Areas from a depth of two to three feet will be remediated based on the site specific remedial objective for Ecological Areas.
- Ecological Areas shall include areas within the registry site boundary (3-36-053) illustrated in Exhibit A which are delineated as wetlands in the proximity of the Western Stream and Railroad Pond, northern areas within the registry site boundary (3-36-053) illustrated in Exhibit A that are indicated on Figure 1, and all areas outside of the registry site boundary (3-36-053) and within OU-1 as illustrated in Exhibit A to the east of Ballard Road. Any wetlands delineated within Commercial or Industrial Areas will be considered Ecological Areas as well. The final extent of Ecological Areas will be determined based in part on a wetland delineation approved by the Department during the design.
- Ecological Areas will be subjected to site specific remedial objectives for soil of 400 ppm for lead and 13 ppm for arsenic. The site specific remedial objective for lead is derived from soil analytical data and biota tissue sampling as protective of ecological resources. Ecological Areas, including delineated wetlands, will be restored in accordance with Department regulations.

- Ecological Buffers will be established within Commercial/Industrial Areas on the boundary between Commercial/Industrial Areas and Ecological Areas. Ecological Buffers will extend a minimum of 25 feet into Commercial/Industrial Areas. The buffer widths will be location-specific and determined during the remedial design. Ecological Buffers are considered Ecological Areas and will be remediated consistent with Ecological Areas utilizing the site specific remedial objectives of 400 ppm for lead and 13 ppm for arsenic.
- Groundwater will be addressed under a separate PRAP for OU-2. However, a monitoring well network will be installed to monitor the Consolidation Area.
- All other areas impacted by Revere's operations to the west of Ballard Road will be considered OU-3.

## **Elements of the Proposed Remedy**

The elements of the proposed restricted use remedy are as follows:

- 1) A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. The remedial design program will include a:
  - treatability study to develop the appropriate stabilization additive and the specific design criteria for either in-situ or ex-situ stabilization. The treatability study will build on the previous treatability studies completed by Revere and the Department. Stabilization will be designed to reduce the leachability of the stabilized soil/waste, with the goal of achieving the groundwater standard. At a minimum, the soil/wastes must be treated to non-hazardous levels (less than 5 mg/L TCLP for lead) to remain on site;
  - Department approved jurisdictional wetland delineation of all areas to the east of Ballard Road which are impacted by Revere's operations, excluding the Eastern Fill Area, so that the Department may determine the extent of the Ecological Area and wetland restoration required. All wetlands delineated within Commercial or Industrial Areas of the site, excluding the Eastern Fill Area, will be considered Ecological Areas and be subject to the site specific remedial objective. The jurisdictional wetland delineation will incorporate the delineation already completed for a portion of the registry site boundary (3-36-053) illustrated in Exhibit A.
  - pre-design investigation to complete delineation of site contaminants to Department Standards, Criteria, and Guidelines (SCGs). The pre-design investigation will focus on the Front Lawn Area and Ecological Areas and will include subsurface investigation to identify all source areas; and
  - determination of the extent of the Railroad Area remediation and necessary area of wetland mitigation, based on the structural and geotechnical evaluation of the railroad and the extent of the Ecological Area remediation in relation to the railroad. The railroad evaluation will include the owner of the railroad. Any Ecological and Sediment areas which cannot be fully remediated because of any structural requirements of the railroad will be determined and appropriate areas for necessary wetland/stream mitigation identified and designed.

## **The Eastern Fill Area**

- 2) The Eastern Fill Area (EFA) is an area of historical waste disposal containing source material. All soil and/or waste material for which TCLP levels for lead exceed 5 mg/l is considered source material. The EFA includes source material located in the existing previously treated waste piles (CAMUs 1, 2, 3, 4, 5, and 6, soil piles SP-2 and SP-3, and the rock piles), as well as at the surface or in the subsurface. This source material will be treated using a stabilization methodology established by the treatability study. Stabilization will

occur by either in-situ or ex-situ methods with the introduction of the appropriate additive determined by the treatability study. Post-stabilization samples will be collected to verify the effectiveness of the stabilization and ensure the design criteria have been achieved.

Stabilization of the soil/waste will continue to a depth where the soil no longer exceeds 5 mg/l TCLP for lead. The depth of excavation is anticipated to vary from approximately two feet to twenty four feet below grade. Confirmation and documentation sampling will be conducted as appropriate. Soil with TCLP lead levels less than 5 mg/l are considered non-source soil and will not require stabilization

- 3) Stabilized material will be placed within the designated Consolidation Area within a containment cell meeting the substantive requirements of 6 NYCRR Part 360 unless modified. It is anticipated that the consolidation area will have a bottom liner. Non-source material and any material from CAMUs 1, 2, 3, 4, 5, and 6, soil piles SP-2 and SP-3, and the rock pile not requiring stabilization can be either placed within the Consolidation Area or used as EFA backfill (see #4).
- 4) The EFA excavation will be backfilled to the groundwater table with clean soil meeting the protection of groundwater SCOs. Non-source soil (does not fail TCLP) from the site excavations which are free of visible contamination may be placed as backfill in this area above the groundwater table. A site cover will be installed to allow for the industrial use of the site, consisting either of the structures such as buildings, pavement, and sidewalks comprising any site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the industrial use soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). The soil cover will be placed over a demarcation layer. The areas to be excavated or covered will be determined in the design, which will include a storm water management plan as appropriate.
- 5) The water removed to allow for excavation and stabilization may be transferred to Revere's existing on-site non-potable water recycling system or managed in a manner acceptable to the Department.
- 6) Oversize rock, concrete, lead buttons and other recyclable lead scrap materials will be segregated during excavation. Oversize materials will be decontaminated to remove any soil residuals from the surface and either placed in a designated area of the site or properly disposed of off-site. Lead buttons and other recyclable scrap materials will be recycled.

#### Consolidation Area

- 7) A Consolidation Area (CA) will be created at a location to be determined in the remedial design. It is proposed to be located in the northeast corner of the area within the registry site boundary (3-36-053) illustrated in Exhibit A. The CA will consist of a containment cell meeting the substantive requirements of 6 NYCRR Part 360 unless modified with a minimum 100 foot buffer maintained between the CA and any designated wetland edge based on the Department approved wetland delineation. The designated area will be cleared and grubbed as needed and the appropriate erosion control measures will be installed. The

construction of the proposed cell design will include a top and bottom liner acceptable to the Department. The specific design of the engineered containment cell will conform to the substantive requirements of 6 NYCRR Part 360 unless modified. All source material which is excavated and treated via stabilization to be rendered non-hazardous will be transferred to the containment cell for disposal. Soil or sediment not requiring stabilization, other than that found suitable for backfill in the EFA, will also be placed in this area. The size and configuration of the Consolidation Area will be determined in the remedial design and will be sufficient so that the containment cell meets all applicable regulations. A storm water management plan will be incorporated into the design of the disposal cell.

- 8) A groundwater monitoring well network will be placed around the consolidation area to monitor the effectiveness of the stabilization. A monitoring program will be established.

#### Industrial Areas

- 9) The Industrial Areas are those areas of the site that will be remediated to Industrial cleanup criteria, within the registry site boundary (3-36-053) illustrated in Exhibit A excluding Commercial Areas (the Front Lawn Area), Sediment Areas, Ecological Areas and Ecological Buffers. Source soils in these areas will be addressed by excavation, stabilization and on-site consolidation in the containment cell in the Consolidation Area. Non-source soils in these areas, where the industrial SCOs for lead of 3,900 ppm and/or arsenic of 16 ppm are exceeded in the upper 1 foot below grade, will be addressed by either:

(a) excavation of up to one foot of any exposed surface soil exceeding the lead and arsenic industrial SCOs and backfilling of 1 foot of clean soil meeting the backfill requirements for commercial use as set forth in 375-6.7(d), with a demarcation layer over any area which still exceeds the industrial SCOs at a depth of one foot; or

(b) a site cover will be installed to allow for the industrial use of the site. The cover will consist either of the structures such as buildings, pavement, and sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the industrial use SCOs. Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). The soil cover will be placed over a demarcation layer.

The final delineation of areas to be excavated or covered will be determined in the design. Confirmation and documentation sampling will be conducted as appropriate for the system employed.

#### Commercial Areas:

- 10) Commercial Areas are areas of the site that will be remediated to Commercial cleanup criteria and are defined as the portions of the Front Lawn Area which are located west of the Western Stream that are not identified as Ecological Areas or Ecological Buffers. Source soils in the Front Lawn Area will be addressed by excavation, stabilization and on-site consolidation in the containment cell in the Consolidation Area. Non-source soil, where the

commercial SCOs for lead of 1,000 ppm and/or arsenic of 16 ppm are exceeded in the upper one foot of the exposed surface soils, will be addressed in this area by either:

(a) excavation to achieve commercial SCOs in the upper one foot, placement of a demarcation layer and backfilling of 1 foot of clean soil meeting the backfill requirements for restricted-residential use as set forth in 375-6.7(d), with a demarcation layer over any area which still exceeds the commercial SCOs at a depth of one foot; or

(b) a site cover will be installed to allow for the commercial use of the site. The cover will consist either of the structures such as buildings, pavement, and sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the commercial use SCOs. Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). The soil cover will be placed over a demarcation layer.

The final delineation of the areas to be excavated or covered will be determined in the design. Confirmation and documentation sampling will be conducted as appropriate for the system employed.

#### Sediment Areas:

11) Sediment Areas of OU-1 will be defined as permanent or nearly permanent water bodies and streams (for example: Western Stream, Railroad Pond, other ponded areas and streams) which are impacted by Revere's operations to the east of Ballard Road. Soils underlying Sediment Areas to a depth of two feet are considered sediments. Sediment Areas will be addressed as follows:

- Sediments will be excavated to depths determined during the remedial design to a depth of two feet in all areas where sediment SCGs are exceeded.
- Soils underlying Sediment Areas will be excavated from a depth of two to three feet in exceedence of the site specific remedial objective for Ecological Areas.
- Soils underlying Sediment Areas greater than three feet in depth will be excavated if it meets the definition of source material (exceeds the hazardous waste threshold for lead of 5 mg/L TCLP). The excavated soil will be stabilized if necessary and placed in the containment cell in the Consolidation Area.
- Soils underlying Sediment Areas greater than three feet in depth which are not source material but exceed the site specific remedial objective for Ecological Areas will be capped prior to restoration.
- Confirmation and documentation sampling will be conducted as appropriate.

- Sediment areas will be backfilled with soil that meets Department SCGs for sediment and approximates the physical properties of the sediment removed (i.e., organic carbon, grain size, etc.).
- Sediment Areas will be restored and revegetated consistent with 6 NYCRR Parts 663 and 608.
- A stream, stream bank, and wetland restoration plan acceptable to the Department will be developed in the design.

#### Ecological Areas & Ecological Buffers

12) Ecological Areas shall include areas within the registry site boundary (3-36-053) illustrated in Exhibit A which are delineated as wetlands in the proximity of the Western Stream and Railroad Pond, northern areas within the registry site boundary (3-36-053) illustrated in Exhibit A that are indicated on Figure 1, and all areas outside of the registry site boundary (3-36-053) and within OU-1 as illustrated in Exhibit A to the east of Ballard Road. Any wetlands delineated within Commercial or Industrial Areas, excluding the Eastern Fill Area, will be considered Ecological Areas as well. The final extent of Ecological Areas will be determined by the Department during the design. Ecological Areas will be subjected to a site specific remedial objective for soil of 400 ppm for lead and 13 ppm for arsenic. The site specific remedial objective for lead is derived from soil analytical data and biota tissue sampling as protective of ecological resources. The remedial objective for arsenic is based on Part 375-6.8(b). Ecological Areas will be addressed as follows:

- Soil exceeding the site specific remedial objective of 400 ppm for lead and 13 ppm for arsenic will be excavated to depths determined during the remedial design of up to a maximum depth of two feet.
- Soil greater than two feet in depth will be excavated if it meets the definition of source material (exceeds the hazardous waste threshold for lead of 5 mg/L TCLP). The excavated soil will be stabilized if necessary and placed in the containment cell in the Consolidation Area.
- The final delineation of the areas to be excavated or covered will be determined in the design, however the anticipated Ecological Areas to be addressed with the site specific remedial objective are shown on Figure 1.
- A demarcation layer will be placed in excavated areas where deeper soils exceed the site specific remedial objective.
- Confirmation and documentation sampling will be conducted as appropriate.
- Excavated Ecological Areas will be backfilled with soil that meets unrestricted SCOs and approximates the physical properties of the soil removed (i.e., organic carbon, grain size, etc.).



- Ecological Areas will be restored and revegetated. A restoration plan will be developed in the design consistent with 6 NYCRR Parts 663 and 608 and will include restoration monitoring and control of invasive species.
- 13) Ecological Buffers will be established within Commercial/Industrial Areas on the boundary between Commercial/Industrial Areas and Ecological Areas. Ecological Buffers will extend a minimum of 25 feet into Commercial/Industrial Areas. Ecological Buffers are considered Ecological Areas and will be remediated (excavated, backfilled, and demarcated) and restored in the same manner as Ecological Areas as described in #12. The remedial design will include engineered controls to prevent migration of upland soil from entering the Ecological Buffers. The Ecological Buffers will be designed to prevent migration of soil from Commercial and Industrial Areas into remediated Ecological and Sediment Areas.

#### Railroad Structural Area

- 14) Remediation of portions of the Railroad Pond, Railroad Pond Stream and adjacent wetland to the northeast (referred to as the Railroad Structural Area on Figure 1) in accordance with #11-13 above (Sediment Areas, Ecological Areas, Ecological Buffers) may not be possible due to structural concerns arising from their proximity to the active railway. The Department will determine during the design if the Ecological Areas within the Railroad Structural Area cannot meet the requirements of #11-13 above. Remediation in these areas will include removal of waste material to the extent structurally feasible, with backfill using stone or structural fill material in a manner consistent with railroad land use with grades to be determined after and will be completed in consultation with the railroad property owner. Structural fill will meet the unrestricted use SCOs. The acreage of Sediment and Ecological Areas which cannot be remediated in accordance with #11-12 above will be mitigated.

--

- 15) Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- (a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
  - (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for industrial use in designated industrial areas and commercial use in all other areas;
  - (c) prohibits agriculture or vegetable gardens on the controlled property; and
  - (d) requires compliance with the Department approved Site Management Plan; and
  - (e) restricts the use of groundwater
- 16) Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

- (a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:

Land use restrictions: An environmental easement will be implemented at the site and include the following:

- Restrict the use of the Industrial Areas of OU-1 and the Consolidation Area to industrial use.
- Restrict the use of all other areas of OU-1 to industrial or commercial use.

Engineering Controls:

- The containment cell described in #7 above.
- The Industrial Areas of OU-1 and the Commercial Areas of OU-1 cover systems described in # 4, 9, and 10.
- The ecological restoration cover systems described in # 11 and 12.

This plan includes, but may not be limited to:

- (i) an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- (ii) descriptions of the provisions of the environmental easement including any land use, groundwater, and surface water use restrictions;
- (iii) provisions for the management and inspection of the identified engineering controls;
- (iv) maintaining site access controls and Department notification; and
- (v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

- (b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but is not limited to:

- (i) monitoring of groundwater, surface water, biota, and sediment to assess the performance and effectiveness of the remedy;
- (ii) a schedule of monitoring and frequency of submittals to the Department;
- (iii) monitoring of restoration success

- 17) To maximize the net environmental benefit, green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including:

- energy efficiency and green building design
- using renewable energy sources
- reducing greenhouse gas emissions
- encouraging low carbon technologies
- foster green and healthy communities
- conserve natural resources
- increase recycling and reuse of clean materials
- preserve open space and working landscapes
- utilize native species and discourage invasive species establishment during restoration
- promote recreational use of natural resources
- design cover systems to be usable for habitat or recreation
- design storm water management systems to recharge aquifers

