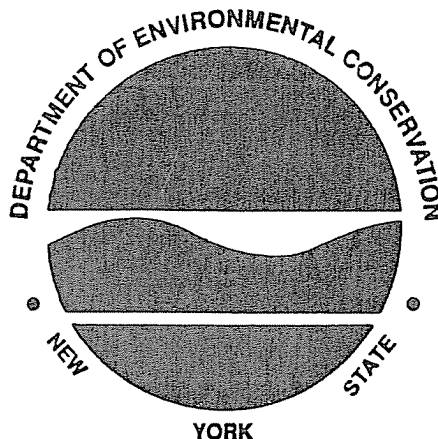


FINAL

*Draft Remedial Investigation Report
Volume III Part A
Appendices*

Pfohl Brothers Landfill

*Cheektowaga, New York
Site Number 9-15-043*



E-FILED

Prepared For:

*New York State
Department Of Environmental Conservation
50 Wolf Road, Albany, New York 12233*

*Thomas C. Jorling
Commissioner*

Division Of Hazardous Waste Remediation

*Michael J. O'Toole, Jr., P.E.
Director*

*Camp Dresser & McKee
New York, New York*

January, 1991

PFOHL BROTHERS LANDFILL

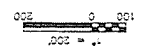
APPENDICES

VOLUME IIIa

- PLATE 11 AROMATICS
- PLATE 12 PHENOLS
- PLATE 13 POLYCYCLIC AROMATIC HYDROCARBONS
- PLATE 14 HALOGENATED HYDROCARBONS
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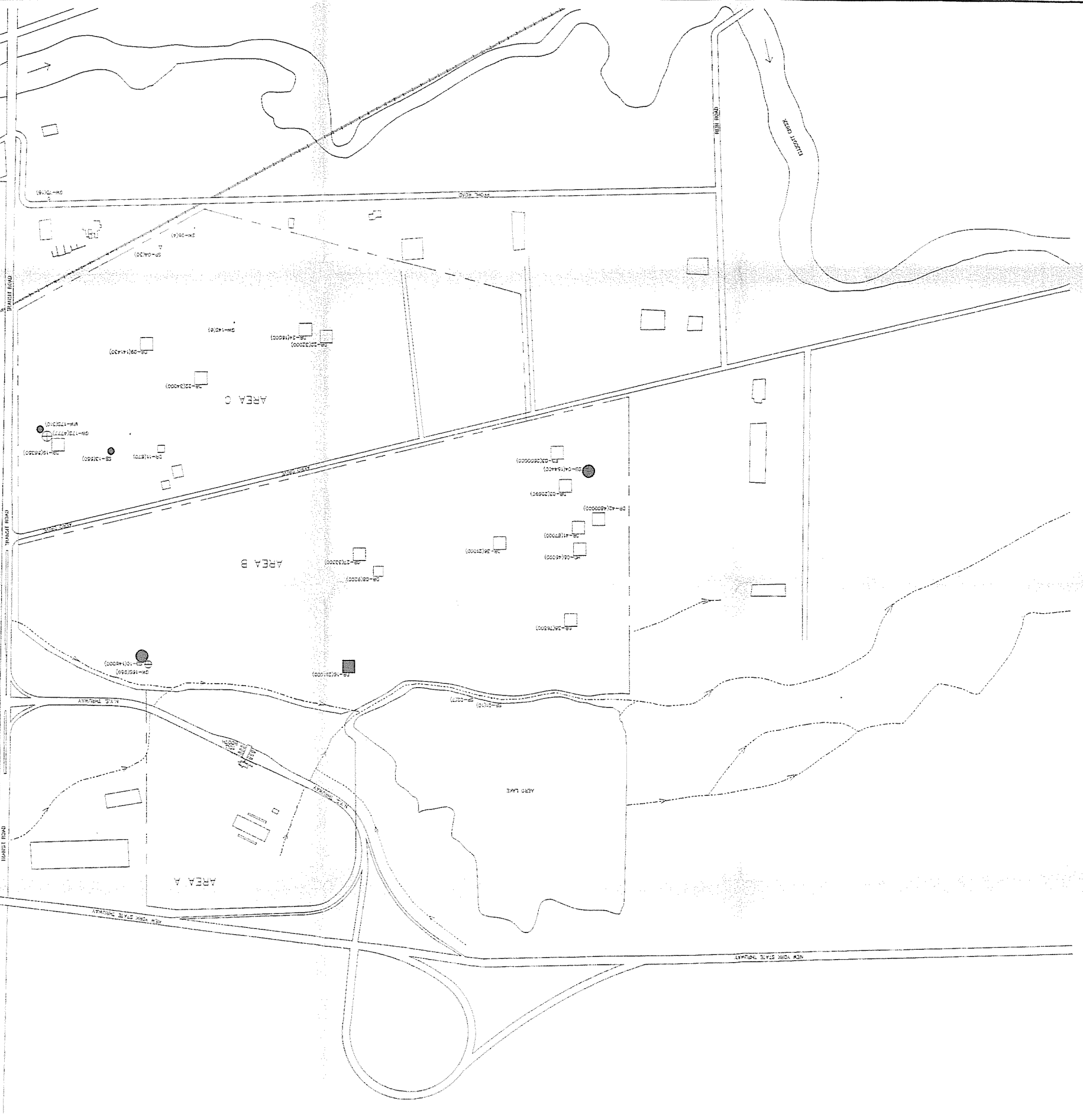
(pblf5/19)

| | |
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| Approved by: | Date: |
| Checked by: | Date: |
| Designed by: | Date: |
| Drawn by: | Date: |
| Reviewed by: | Date: |
| Scale: | 1" = 200' |
| Date: | CH 2/1 |
| Revision: | |

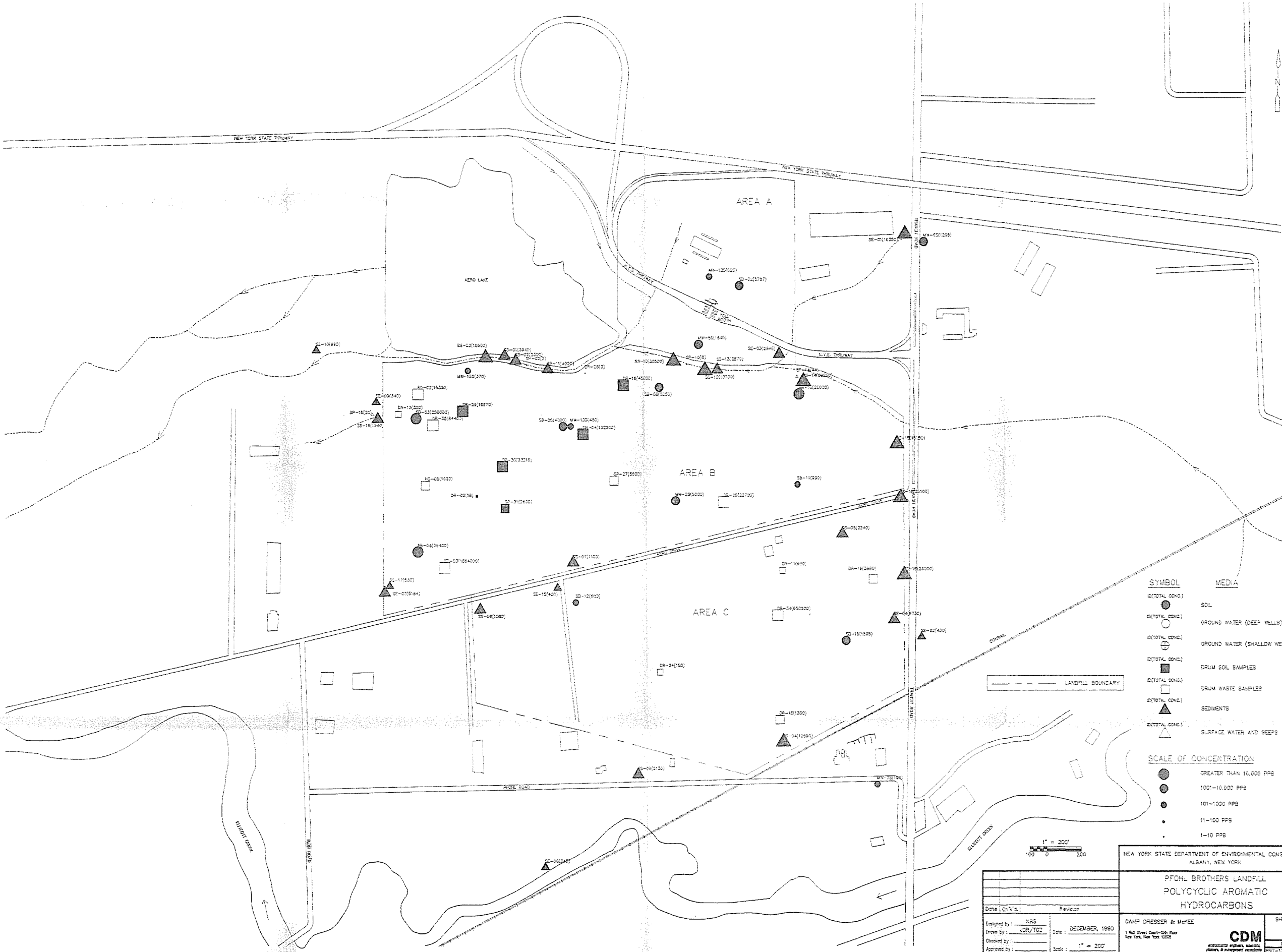


- SYMBOL**
- (circle with dot) SOIL
 - (circle) GROUND WATER (DEEP WELLS)
 - ⊕ (circle with cross) GROUND WATER (SHALLOW WELLS)
 - (square) DRUM SOL. SAMPLES
 - (square) DRUM WASTE SAMPLES
 - ▽ (inverted triangle) SEDIMENTS
 - △ (triangle) SURFACE WATER AND SEEPS
- SCALE OF CONCENTRATION**
- (small solid circle) GREATER THAN 10,000 PPB
 - (medium solid circle) 101-10,000 PPB
 - (large solid circle) 101-1,000 PPB
 - (very large solid circle) 1-10 PPB
- MEDIA**
- (circle) OPTICAL CONC.
 - (square) OPTICAL CONC.
 - ▽ (inverted triangle) OPTICAL CONC.
 - △ (triangle) OPTICAL CONC.
 - ⊕ (circle with cross) OPTICAL CONC.
 - (circle) OPTICAL CONC.
 - (circle with dot) OPTICAL CONC.

LANDFILL BOUNDARY



APPROVED BY: _____ DATE: _____
 PROJECT ENGINEER: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 PLUMBING: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 HVAC: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 REFRIGERATION: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 ELECTRICAL: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 MECHANICAL: _____ DATE: _____
 APPROVED BY: _____ DATE: _____



| SYMBOL | MEDIA |
|-----------------|------------------------------|
| ● (TOTAL COND.) | SOIL |
| ○ (TOTAL COND.) | GROUND WATER (DEEP WELLS) |
| ⊖ (TOTAL COND.) | GROUND WATER (SHALLOW WELLS) |
| ■ (TOTAL COND.) | DRUM SOIL SAMPLES |
| □ (TOTAL COND.) | DRUM WASTE SAMPLES |
| ▲ (TOTAL COND.) | SEDIMENTS |
| △ (TOTAL COND.) | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|-------------------------|
| ● | GREATER THAN 10,000 PPB |
| ● | 1001-10,000 PPB |
| ● | 101-1000 PPB |
| ● | 11-100 PPB |
| ● | 1-10 PPB |

1" = 200'
 100 0 200

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 ALBANY, NEW YORK

**PFOHL BROTHERS LANDFILL
 POLYCYCLIC AROMATIC
 HYDROCARBONS**

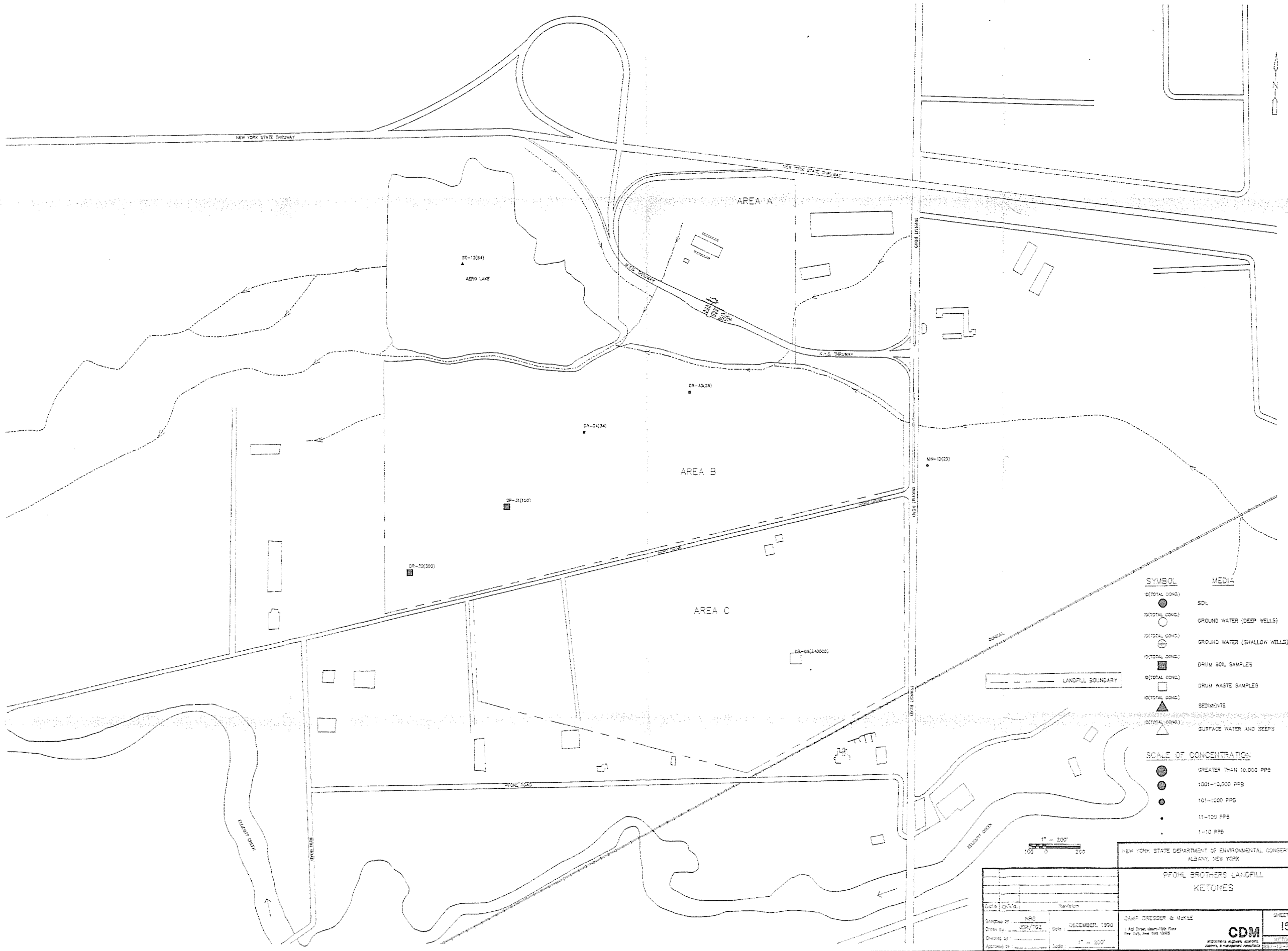
| | |
|-------------------|----------------------|
| Designed by: NRS | Revised: |
| Drawn by: JDR/TGZ | Date: DECEMBER, 1990 |
| Checked by: | Scale: 1" = 200' |
| Approved by: | |

CAMP DRESSER & MCKEE
 1 Red Stone Court-10th Floor
 New York, New York 10002

CDM
 CONSULTANTS AND ENGINEERS

SHEET NO. **13**
 PAHS
 897-12-REV-B-1474

PROJECT MANAGER: _____ Approved by: _____ Date: _____
 PROJECT ENGINEER: _____ Approved by: _____ Date: _____
 PLUMBING: _____ Approved by: _____ Date: _____
 HVAC: _____ Approved by: _____ Date: _____
 MECHANICAL/ELECTRICAL: _____ Approved by: _____ Date: _____
 ELECTRICAL: _____ Approved by: _____ Date: _____
 STRUCTURAL: _____ Approved by: _____ Date: _____
 ARCHITECTURAL: _____ Approved by: _____ Date: _____



- SYMBOL MEDIA**
- (TOTAL CONC) ○ SOIL
 - (TOTAL CONC) ○ GROUND WATER (DEEP WELLS)
 - (TOTAL CONC) ⊖ GROUND WATER (SHALLOW WELLS)
 - (TOTAL CONC) ■ DRUM SOIL SAMPLES
 - (TOTAL CONC) □ DRUM WASTE SAMPLES
 - (TOTAL CONC) ▲ SEDIMENTS
 - (TOTAL CONC) △ SURFACE WATER AND SEEPS

- SCALE OF CONCENTRATION**
- (Largest) GREATER THAN 10,000 PPB
 - 1001-10,000 PPB
 - 101-1000 PPB
 - 11-100 PPB
 - (Smallest) 1-10 PPB

1" = 200'

100' 0 200'

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK

**PFOHL BROTHERS LANDFILL
KETONES**

| | | | |
|------------------|-----------------------|---|---|
| Checked by: NRE | Date: SEPTEMBER, 1990 | DAMP DRESSER & MOYSE 140 Third Street - 15th Floor New York, New York 10003 | SHEET NO. 15 |
| Drawn by: DR/102 | Date: SEPTEMBER, 1990 | | |
| Checked by: | Date: | CDM CONSTRUCTION DOCUMENTS MANAGEMENT | CDM CONSTRUCTION DOCUMENTS MANAGEMENT |

PROJECT: FURANS
 PROJECT MANAGER: Approved by: _____ Date: _____
 PLUMBING: Approved by: _____ Date: _____
 HVAC: Approved by: _____ Date: _____
 INSTRUMENTATION: Approved by: _____ Date: _____
 ELECTRICAL: Approved by: _____ Date: _____
 ARCHITECTURAL: Approved by: _____ Date: _____



- SYMBOL MEDIA**
- (TOTAL CONC.) ● SOL
 - (TOTAL CONC.) ○ GROUND WATER (DEEP WELLS)
 - (TOTAL CONC.) ⊕ GROUND WATER (SHALLOW WELLS)
 - (TOTAL CONC.) ■ DRUM SOIL SAMPLES
 - (TOTAL CONC.) □ DRUM WASTE SAMPLES
 - (TOTAL CONC.) ▲ SEDIMENTS
 - (TOTAL CONC.) △ SURFACE WATER AND SEEPS

- SCALE OF CONCENTRATION**
- GREATER THAN 10,000 PPB
 - 1001-10,000 PPB
 - 101-1000 PPB
 - 11-100 PPB
 - 1-10 PPB

1" = 200'

100 0 200

| Date | CHK'D | Revision |
|------|-------|----------|
| | | |
| | | |
| | | |

Designed by: NRS
 Drawn by: JSP/TICZ Date: DECEMBER, 1990
 Checked by: _____
 Approved by: _____ Date: 11/11/2007

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK

**PROHL BROTHERS LANDFILL
FURANS**

CAMP DRESSER & MCKEE
145 State Street - 10th Floor
New York, New York 10038

CDM
PARSONS
Environmental & Infrastructure
Solutions

SHEET NO. 16

PROJECT MANAGER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 PROJECT ENGINEER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 PLUMBING: _____ Date: _____
 APPROVED BY: _____ Date: _____
 HVAC: _____ Date: _____
 APPROVED BY: _____ Date: _____
 MECHANICAL/ELECTRICAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ELECTRICAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 STRUCTURAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ARCHITECTURAL: _____ Date: _____



| SYMBOL | MEDIA |
|-----------------|------------------------------|
| ● (TOTAL COND.) | SOIL |
| ○ (TOTAL COND.) | GROUND WATER (DEEP WELLS) |
| ⊕ (TOTAL COND.) | GROUND WATER (SHALLOW WELLS) |
| ■ (TOTAL COND.) | DRUM SOIL SAMPLES |
| □ (TOTAL COND.) | DRUM WASTE SAMPLES |
| ▲ (TOTAL COND.) | SEDIMENTS |
| △ (TOTAL COND.) | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|-------------------------|
| ● | GREATER THAN 10,000 PPB |
| ● | 1001-10,000 PPB |
| ● | 101-1000 PPB |
| ● | 11-100 PPB |
| ● | 1-10 PPB |



| | | |
|-------------------|----------------------|--|
| Date | Checked | Revision |
| Designed by: NRS | Date: DECEMBER, 1990 | CAMP DRESSER & MCKEE |
| Drawn by: JDR/TBZ | Scale: 1" = 200' | 1 Mt Street, 10th Floor, New York, New York, 10022 |
| Checked by: | | |
| Approved by: | | |

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 ALBANY, NEW YORK
**PFOHL BROTHERS LANDFILL
 PHTHALATES**
 SHEET NO. **17**
CDM
 Environmental systems, planning, & construction services
 837-112-RL-DATA

Approved by: ARCHITECTURAL Date: _____ Approved by: ELECTRICAL Date: _____ Approved by: MECHANICAL Date: _____ Approved by: PLUMBING Date: _____ Approved by: PROJECT ENGINEER Date: _____ Approved by: PROJECT MANAGER Date: _____



| SYMBOL | MEDIA |
|---------------|------------------------------|
| (TOTAL COND.) | SOIL |
| (TOTAL COND.) | GROUND WATER (DEEP WELLS) |
| (TOTAL COND.) | GROUND WATER (SHALLOW WELLS) |
| (TOTAL COND.) | DRUM SOIL SAMPLES |
| (TOTAL COND.) | DRUM WASTE SAMPLES |
| (TOTAL COND.) | BEDIMENTS |
| (TOTAL COND.) | SURFACE WATER AND SEDIM. |

| SCALE OF CONCENTRATION | |
|------------------------|-------------------------|
| (Large Circle) | GREATER THAN 10,000 PPB |
| (Medium Circle) | 1001-10,000 PPB |
| (Small Circle) | 101-1000 PPB |
| (Dot) | 11-100 PPB |
| (Dot) | 1-10 PPB |

| | |
|-------------------|----------------------|
| Date: 01/03/90 | Revision: |
| Designed by: NPS | Date: DECEMBER, 1990 |
| Drawn by: JGR/TOL | Checked by: |
| Approved by: | Scale: 1" = 200' |

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 ALBANY, NEW YORK

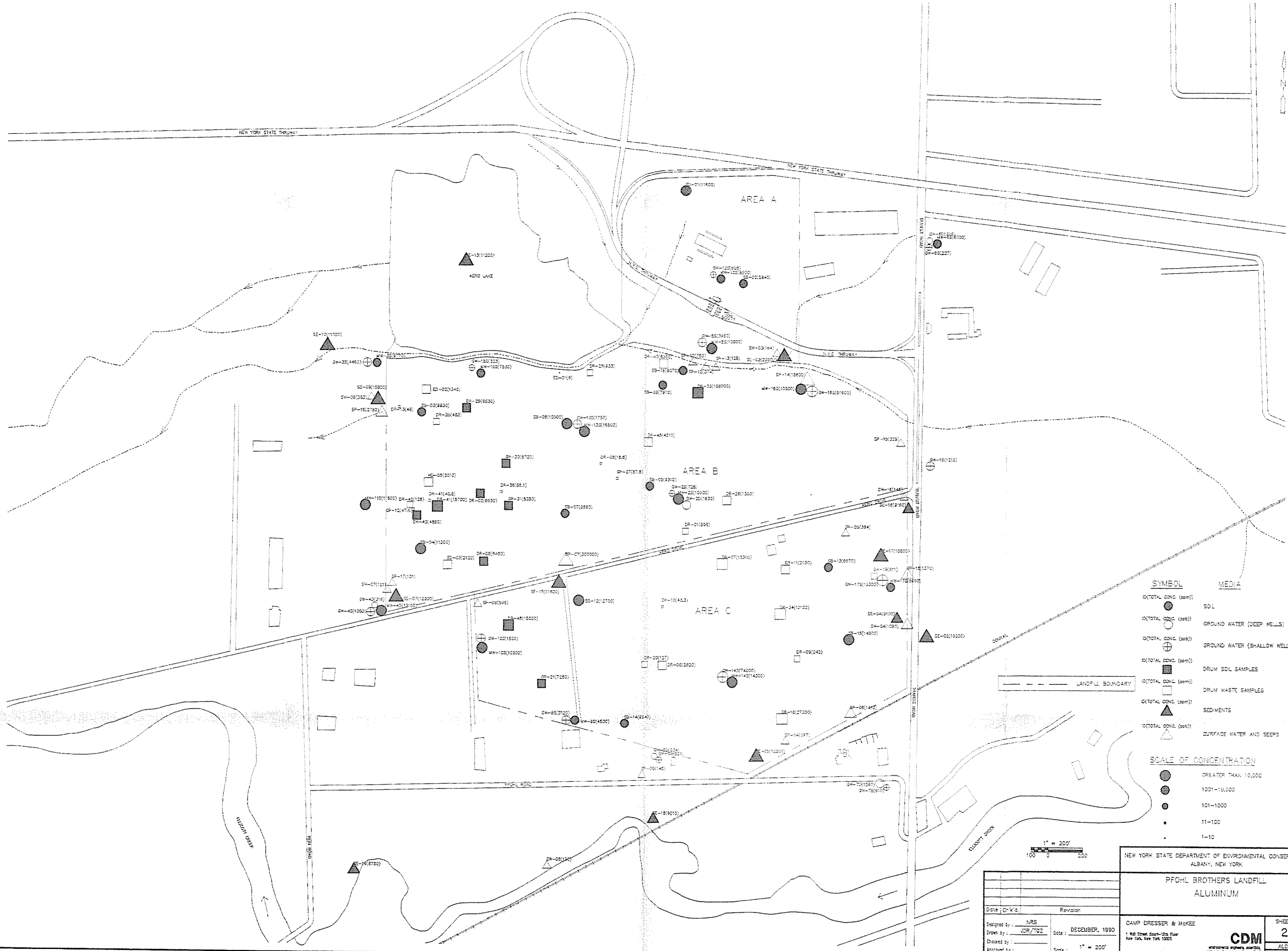
PFOHL BROTHERS LANDFILL
PCBS

CAMP DRESSER & MAKEE
 140 Street East-100 Floor
 New York, New York 10001

CDM
CONSULTANTS IN DESIGN, ENGINEERING, ARCHITECTURE & ENVIRONMENTAL SCIENCE

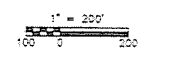
SHEET NO. **20**
 OF 20

PROJECT MANAGER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 PROJECT ENGINEER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 PLUMBING: _____ Date: _____
 APPROVED BY: _____ Date: _____
 HVAC: _____ Date: _____
 APPROVED BY: _____ Date: _____
 MECHANICAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ELECTRICAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 STRUCTURAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ARCHITECTURAL: _____ Date: _____



| SYMBOL | MEDIA |
|--------|------------------------------|
| ● | SOIL |
| ○ | GROUND WATER (DEEP WELLS) |
| ⊕ | GROUND WATER (SHALLOW WELLS) |
| ■ | DRUM SOIL SAMPLES |
| □ | DRUM WASTE SAMPLES |
| ▲ | SEDIMENTS |
| △ | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|---------------------|
| ● | GREATER THAN 10,000 |
| ● | 1001-10,000 |
| ● | 101-1000 |
| ● | 11-100 |
| ● | 1-10 |

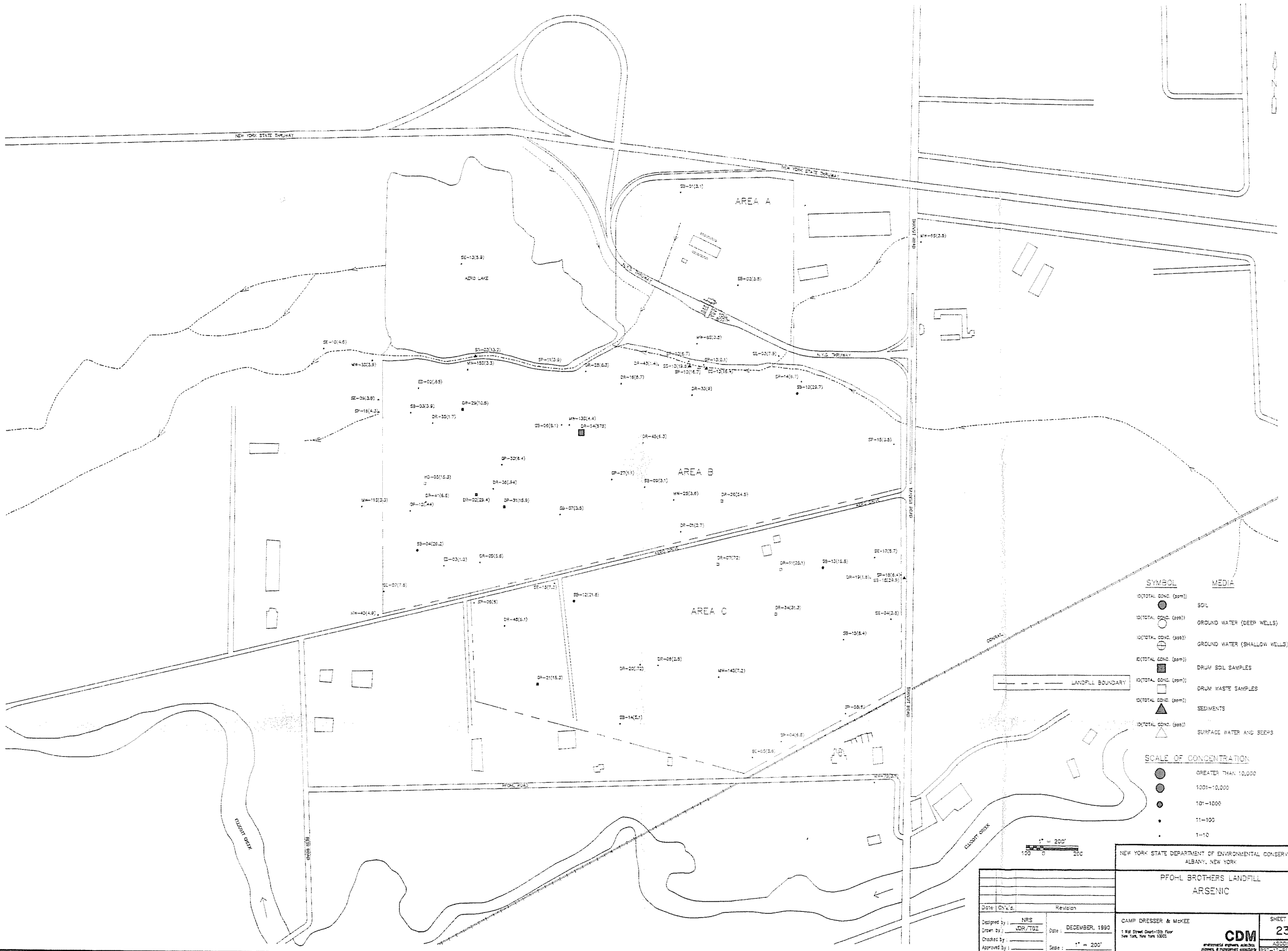


| Date | Checked | Revision |
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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK

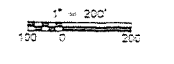
PFOHL BROTHERS LANDFILL
ALUMINUM
 CAMP DRESSER & MCKEE
 140 Street East-13th Floor
 New York, New York 10005
CDM
 environmental systems architects
 planners & management consultants
 SHEET NO. **21**
 ALUMINUM
 89-12-ED-DATA

PROJECT MANAGER: _____ Date: _____
 PROJECT ENGINEER: _____ Date: _____
 PLUMBING: _____ Date: _____
 HVAC: _____ Date: _____
 INSTRUMENTATION: _____ Date: _____
 ELECTRICAL: _____ Date: _____
 STRUCTURAL: _____ Date: _____
 ARCHITECTURAL: _____ Date: _____



| SYMBOL | | MEDIA |
|-----------------------|------------------------------|------------------------------|
| (●) TOTAL CONC. (ppm) | SOIL | SOIL |
| (○) TOTAL CONC. (ppm) | GROUND WATER (DEEP WELLS) | GROUND WATER (DEEP WELLS) |
| (⊕) TOTAL CONC. (ppm) | GROUND WATER (SHALLOW WELLS) | GROUND WATER (SHALLOW WELLS) |
| (■) TOTAL CONC. (ppm) | DRUM SOIL SAMPLES | DRUM SOIL SAMPLES |
| (□) TOTAL CONC. (ppm) | DRUM WASTE SAMPLES | DRUM WASTE SAMPLES |
| (▲) TOTAL CONC. (ppm) | SEDIMENTS | SEDIMENTS |
| (△) TOTAL CONC. (ppm) | SURFACE WATER AND SEEPS | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|---------------------|
| (●) | GREATER THAN 10,000 |
| (○) | 1001-10,000 |
| (⊕) | 101-1000 |
| (■) | 11-100 |
| (□) | 1-10 |

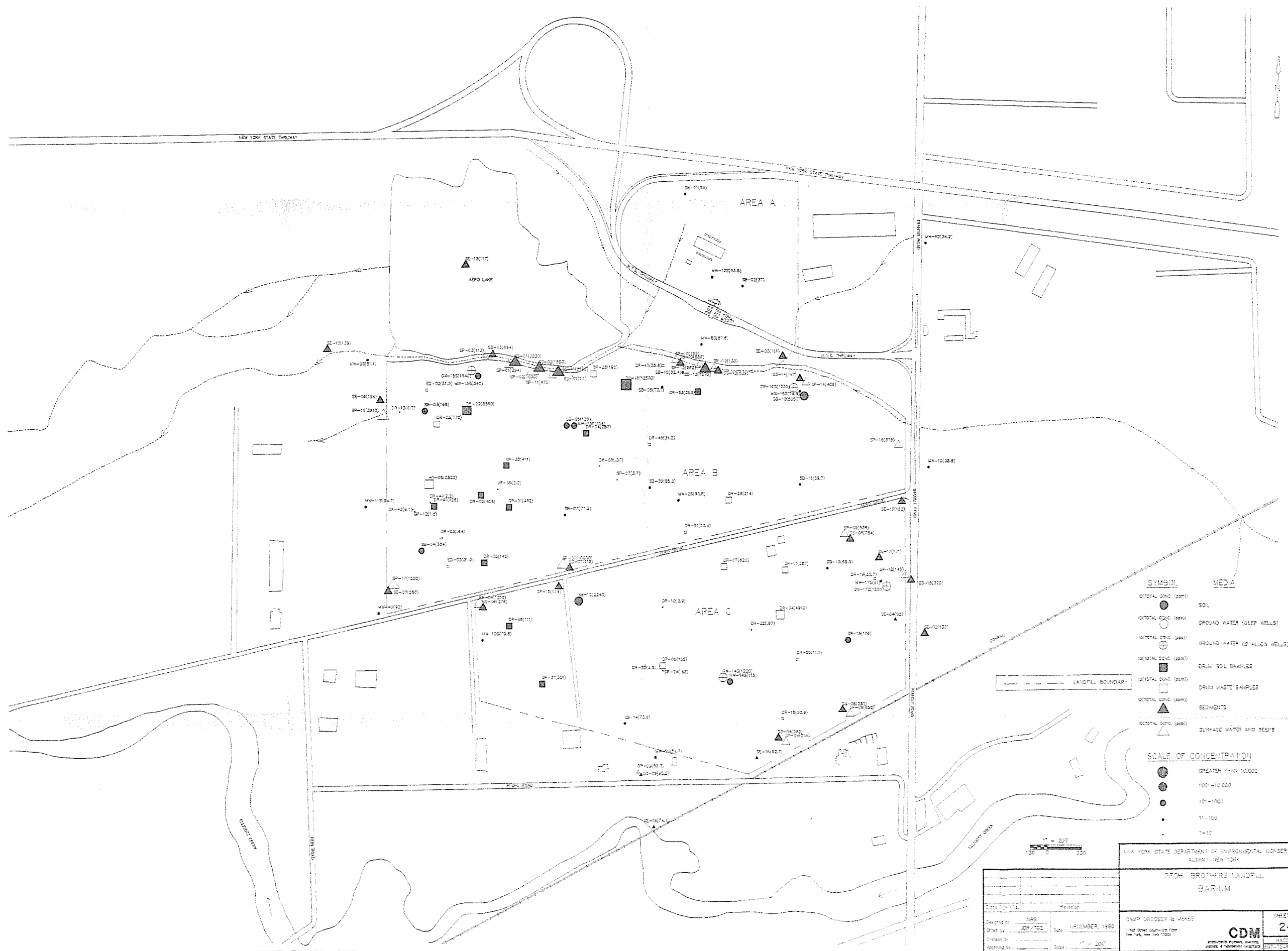


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|-------------------|----------------------|
| Date: CHG's | Revision |
| Designed by: NRS | Date: DECEMBER, 1990 |
| Drawn by: JDR/TGZ | Checked by: |
| Approved by: | Scale: 1" = 200' |

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 ALBANY, NEW YORK
PFOHL BROTHERS LANDFILL
ARSENIC

SHEET NO. **23**
 CDM
 CAMP DRESSER & McKEE
 1 Mid Street, 10th Floor
 New York, New York 10003
 887-12-80-DATA

PROJECT MANAGER Approved By: _____ Date: _____
 PROJECT ENGINEER Approved By: _____ Date: _____
 PLUMBING Approved By: _____ Date: _____
 HVAC Approved By: _____ Date: _____
 ELECTRICAL Approved By: _____ Date: _____
 MECHANICAL Approved By: _____ Date: _____
 ARCHITECTURAL Approved By: _____ Date: _____

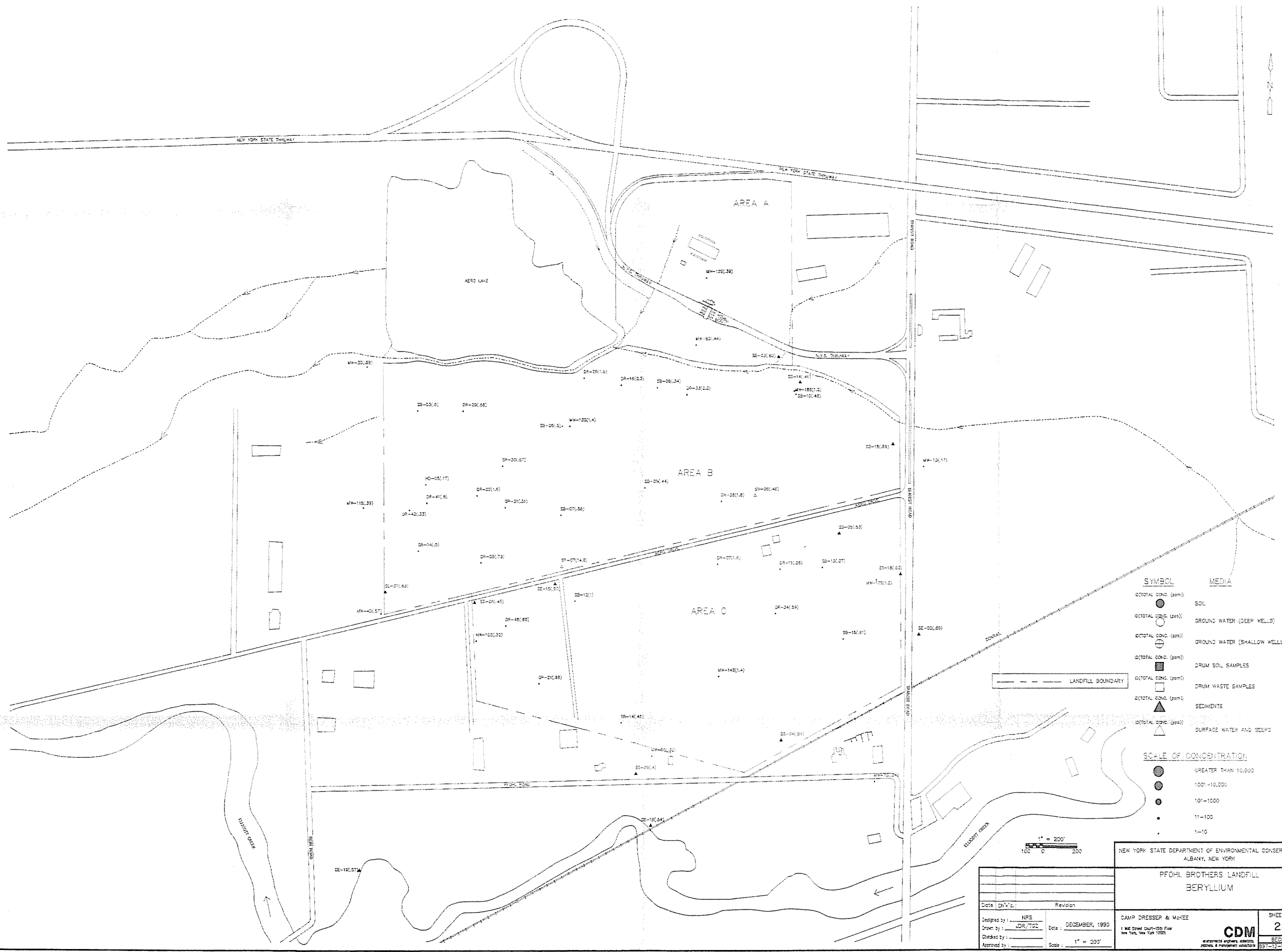


| SYMBOL | MEDIA |
|---------------------|------------------------------|
| (TOTAL CONC. (ppm)) | SOL |
| (TOTAL CONC. (ppm)) | GROUND WATER (DEEP WELLS) |
| (TOTAL CONC. (ppm)) | GROUND WATER (SHALLOW WELLS) |
| (TOTAL CONC. (ppm)) | DRUM SOL SAMPLES |
| (TOTAL CONC. (ppm)) | DRUM WASTE SAMPLES |
| (TOTAL CONC. (ppm)) | SEDIMENTS |
| (TOTAL CONC. (ppm)) | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|---------------------|
| (Largest Circle) | GREATER THAN 10,000 |
| (Medium Circle) | 1001-10,000 |
| (Small Circle) | 101-1000 |
| (Very Small Circle) | 11-100 |
| (Smallest Circle) | 1-10 |

| | |
|--|---|
| NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION ALBANY, NEW YORK | |
| PROFL BROTHERS LANDFILL BARIUM | |
| DESIGNED BY: NRS DRAWN BY: JDR/TSE CHECKED BY: _____ APPROVED BY: _____ | DATE: DECEMBER, 1990 SCALE: 1" = 200' SHEET NO. 24 |

PROJECT MANAGER: _____ Date: _____
 PROJECT ENGINEER: _____ Date: _____
 PLUMBER: _____ Date: _____
 HVAC: _____ Date: _____
 INSTRUMENTATION: _____ Date: _____
 ELECTRICAL: _____ Date: _____
 STRUCTURAL: _____ Date: _____
 ARCHITECTURAL: _____ Date: _____



- SYMBOL MEDIA**
- (TOTAL CONC. (ppm)) SOIL
 - (TOTAL CONC. (ppm)) GROUND WATER (DEEP WELLS)
 - ⊕ (TOTAL CONC. (ppm)) GROUND WATER (SHALLOW WELLS)
 - (TOTAL CONC. (ppm)) DRUM SOIL SAMPLES
 - (TOTAL CONC. (ppm)) DRUM WASTE SAMPLES
 - ▲ (TOTAL CONC. (ppm)) SEDIMENTS
 - △ (TOTAL CONC. (ppm)) SURFACE WATER AND SEEPS

- SCALE OF CONCENTRATION:**
- (Large) GREATER THAN 10,000
 - (Medium) 1001-10,000
 - (Small) 101-1000
 - (Tiny) 11-100
 - (Smallest) 1-10

1" = 200'

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK

**PFOHL BROTHERS LANDFILL
BERYLLIUM**

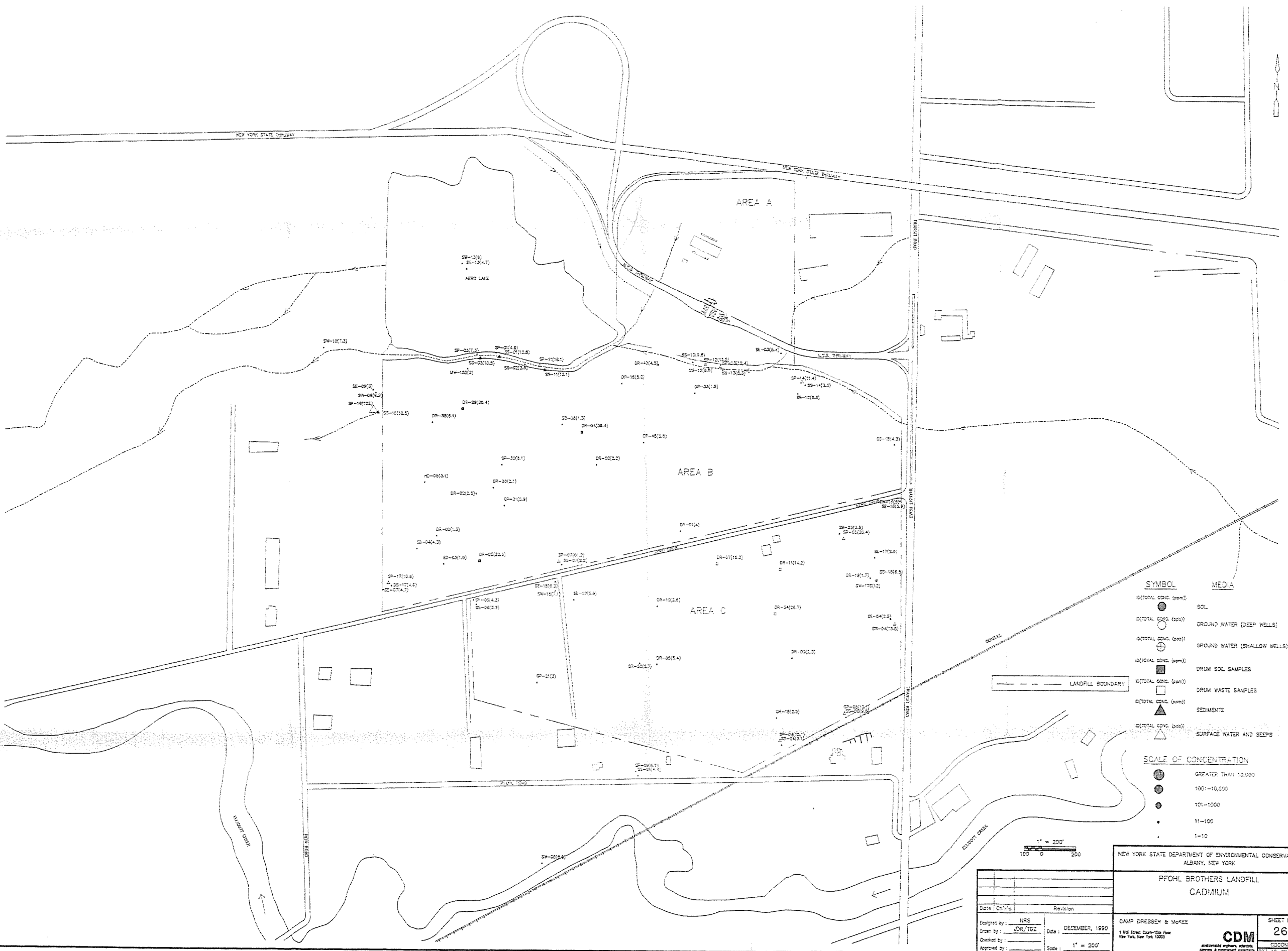
| | |
|-------------------|----------------------|
| Date: Ch'g's: | Revision: |
| Designed by: NRS | Date: DECEMBER, 1990 |
| Drawn by: GDR/TSC | Checked by: |
| Approved by: | Scale: 1" = 200' |

CAMP DRESSER & McKEE
1 Mid Street Court-15th Floor
New York, New York 10005

CDM
environmental engineers scientists
planners & management consultants

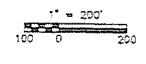
SHEET NO. **25**
BEO001
897-12-RD-DATA

PROJECT MANAGER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 PROJECT ENGINEER: _____ Date: _____
 APPROVED BY: _____ Date: _____
 INVOICING: _____ Date: _____
 APPROVED BY: _____ Date: _____
 DOCUMENTATION: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ELECTRICAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 STRUCTURAL: _____ Date: _____
 APPROVED BY: _____ Date: _____
 ARCHITECTURAL: _____ Date: _____
 APPROVED BY: _____ Date: _____



| SYMBOL | MEDIA |
|-----------------------|------------------------------|
| ● (TOTAL CONC. (ppm)) | SOIL |
| ○ (TOTAL CONC. (ppm)) | GROUND WATER (DEEP WELLS) |
| ⊕ (TOTAL CONC. (ppm)) | GROUND WATER (SHALLOW WELLS) |
| ■ (TOTAL CONC. (ppm)) | DRUM SOIL SAMPLES |
| □ (TOTAL CONC. (ppm)) | DRUM WASTE SAMPLES |
| ▲ (TOTAL CONC. (ppm)) | SEDIMENTS |
| △ (TOTAL CONC. (ppm)) | SURFACE WATER AND SEEPS |

| SCALE OF CONCENTRATION | |
|------------------------|---------------------|
| ● | GREATER THAN 10,000 |
| ● | 1001-10,000 |
| ● | 101-1000 |
| ● | 11-100 |
| ● | 1-10 |



| Date | Chg's | Revision |
|------|-------|----------|
| | | |
| | | |
| | | |
| | | |

Designed by: NRS
 Drawn by: JOR/TGZ
 Checked by: _____
 Approved by: _____
 Date: DECEMBER, 1990
 Scale: 1" = 200'

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 ALBANY, NEW YORK
PFOHL BROTHERS LANDFILL
CADMIUM

CAMP DRESSER & McKEE
 135 West Court-15th Floor
 New York, New York 10022

CDM
environmental engineers, architects, planners & geologists
 837-13470-5473

SHEET NO.
26
 CDDONT
 837-13470-5473

