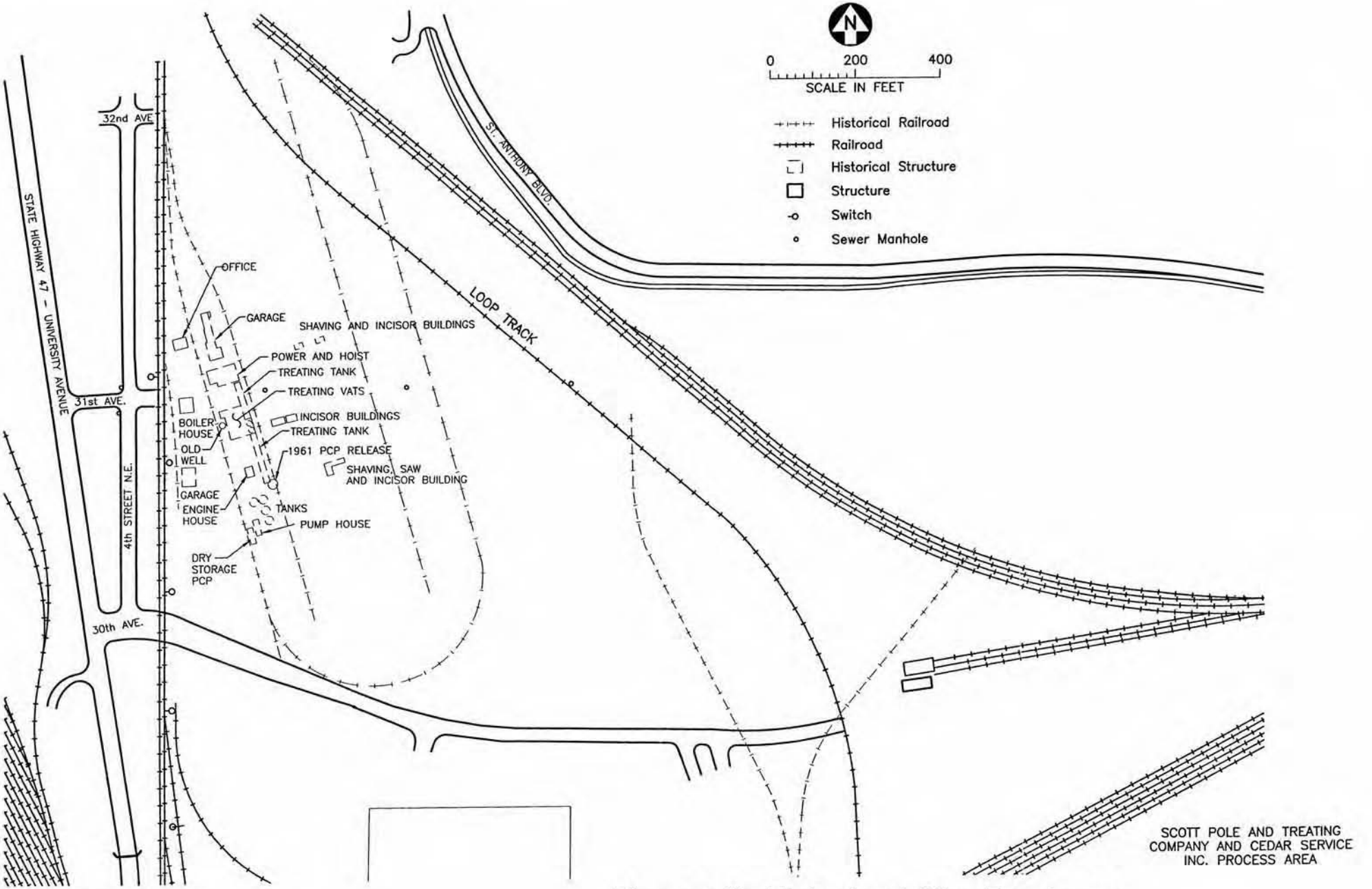
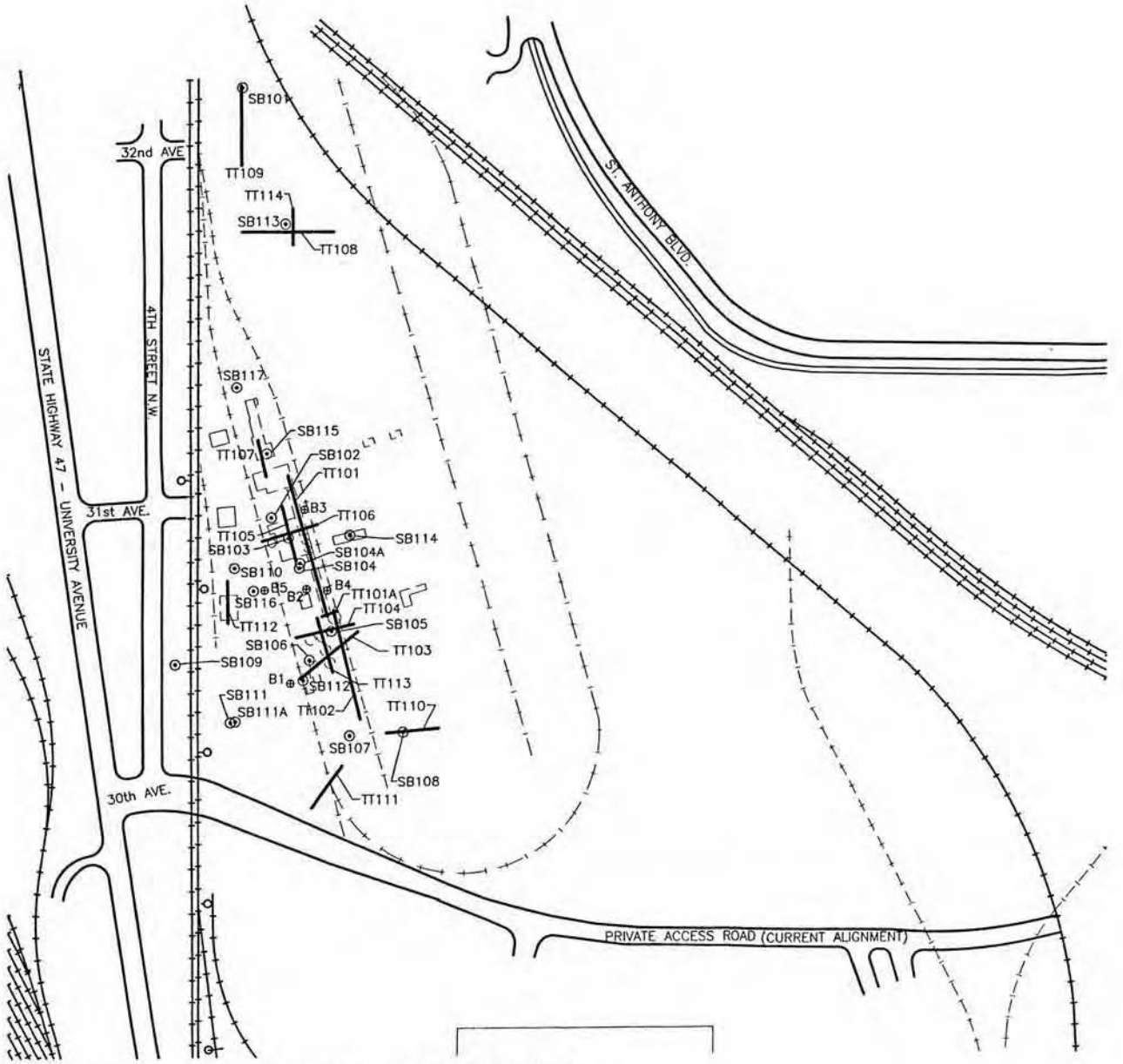
Figure 1: Cedar Service, Inc. Site
Minneapolis, MN



Source: Barr 1996

Figure 2: Historical Site Features



Source: 1970 Aerial Photography, 1993 USGS Topographic Map, Undated Lease Map.

LEGEND

- Historical Railroad
- Railroad
- Historical Structure
- Road
- Switch
- RI Soil Boring
- Test Trench
- MPCA Soil Boring

Figure 3

TEST TRENCH AND SOIL BORING LOCATIONS
Cedar Service Site

Source: Barr 1996

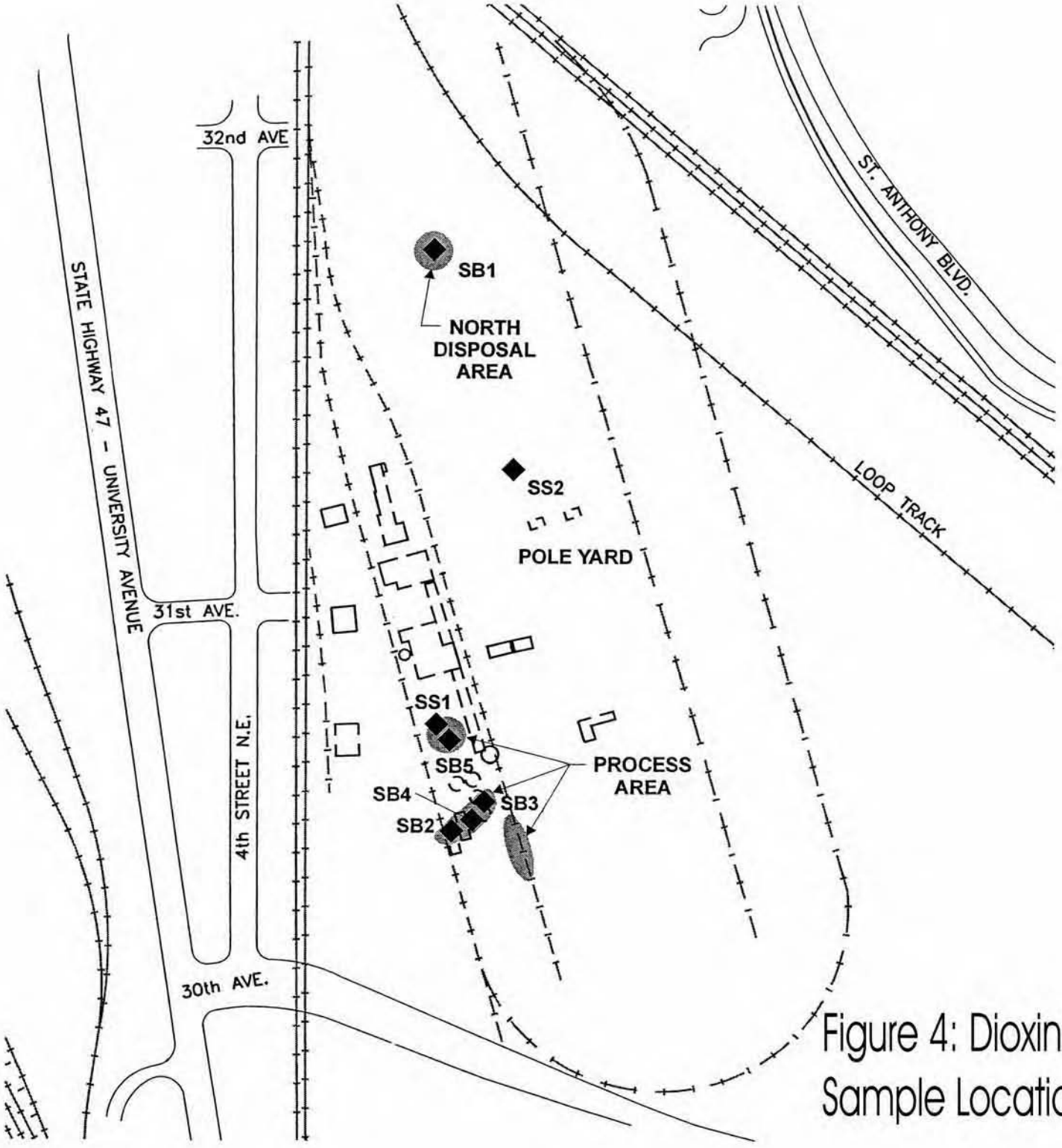


Figure 4: Dioxin Soil Sample Locations

Historical Railroad

Railroad

Historical Structure

Structure

PCP Concentrations >150 mg/kg (0-12 ft depth)

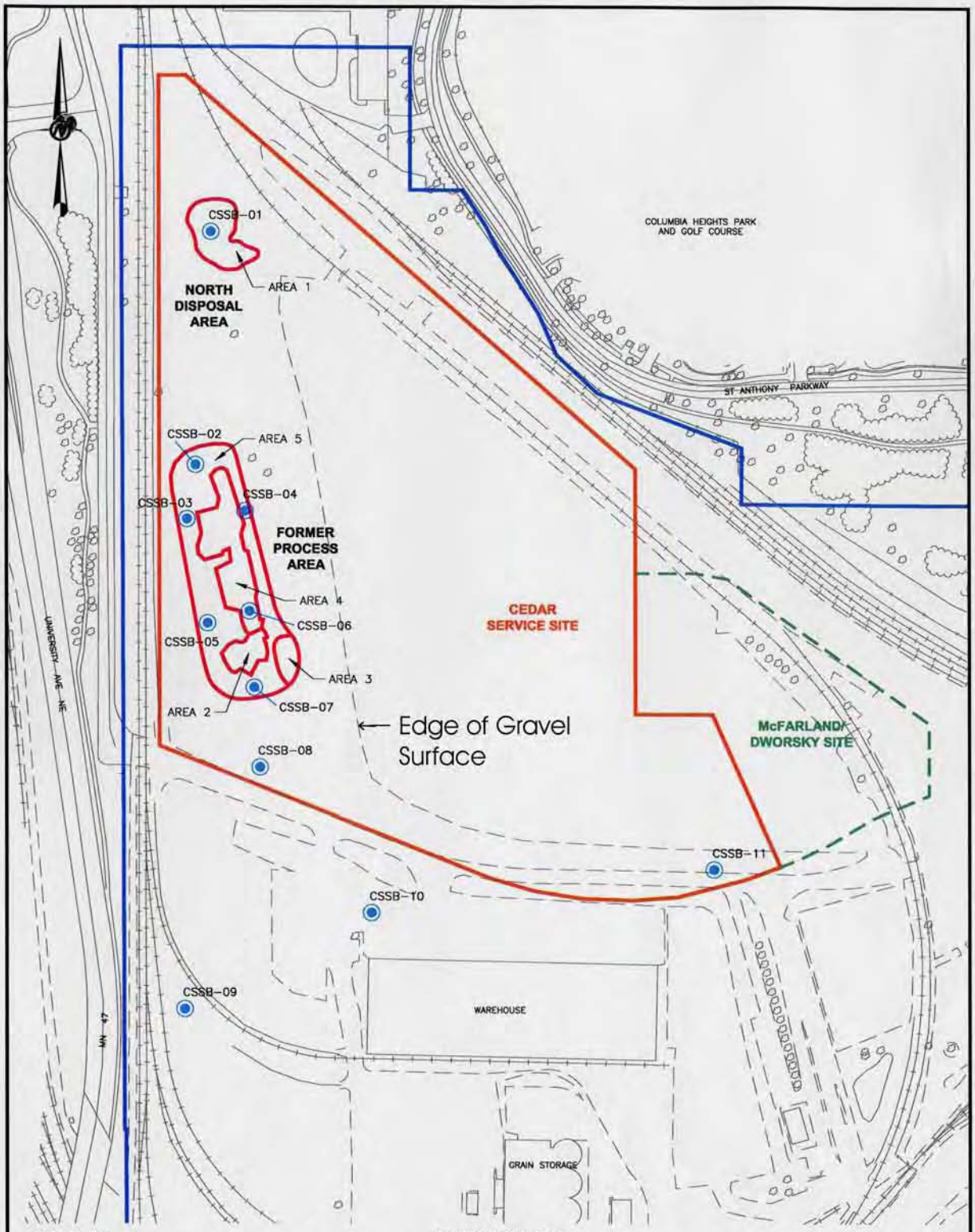
Soil Sample Locations

Source: Barr 1997

N

0 200 400

Scale in Feet



LEGEND

- FACILITY BOUNDARY
- CEDAR SERVICE SITE
- McFARLAND/DWORSKY SITE
- FORMER EXCAVATION AREA
- CSSB-01 PROPOSED SOIL BORING

REFERENCES

1.) BASE MAP NORTH OF 27th AVENUE NE FROM DIGITAL CAD FILE NEW_BASE_2_2001.dwg, TITLED "PORTIONS OF SECTIONS 2 & 11 T29N, R24W HENNEPIN CO., MN", PROVIDED BY AMEC EARTH AND ENVIRONMENTAL, INC.

2.) TOPOGRAPHY BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS TAKEN ON APRIL 4, 2000. HORIZONTAL DATUM IS NAD 83, VERTICAL DATUM IS NAVD 88.

3.) PROPERTY LINES AND ROWS FROM DIGITAL CAD FILE NEW_BASE_8_00-property line.dwg PROVIDED BY AMEC EARTH AND ENVIRONMENTAL, INC.

4.) LOCATION OF FORMER EXCAVATION AREAS FROM DIGITAL FILE PRIOR_EXCAVATION.shp, PROVIDED BY AMEC EARTH AND ENVIRONMENTAL, INC.

Figure 5: 2005 Soil Investigation

200 0 200
SCALE FEET

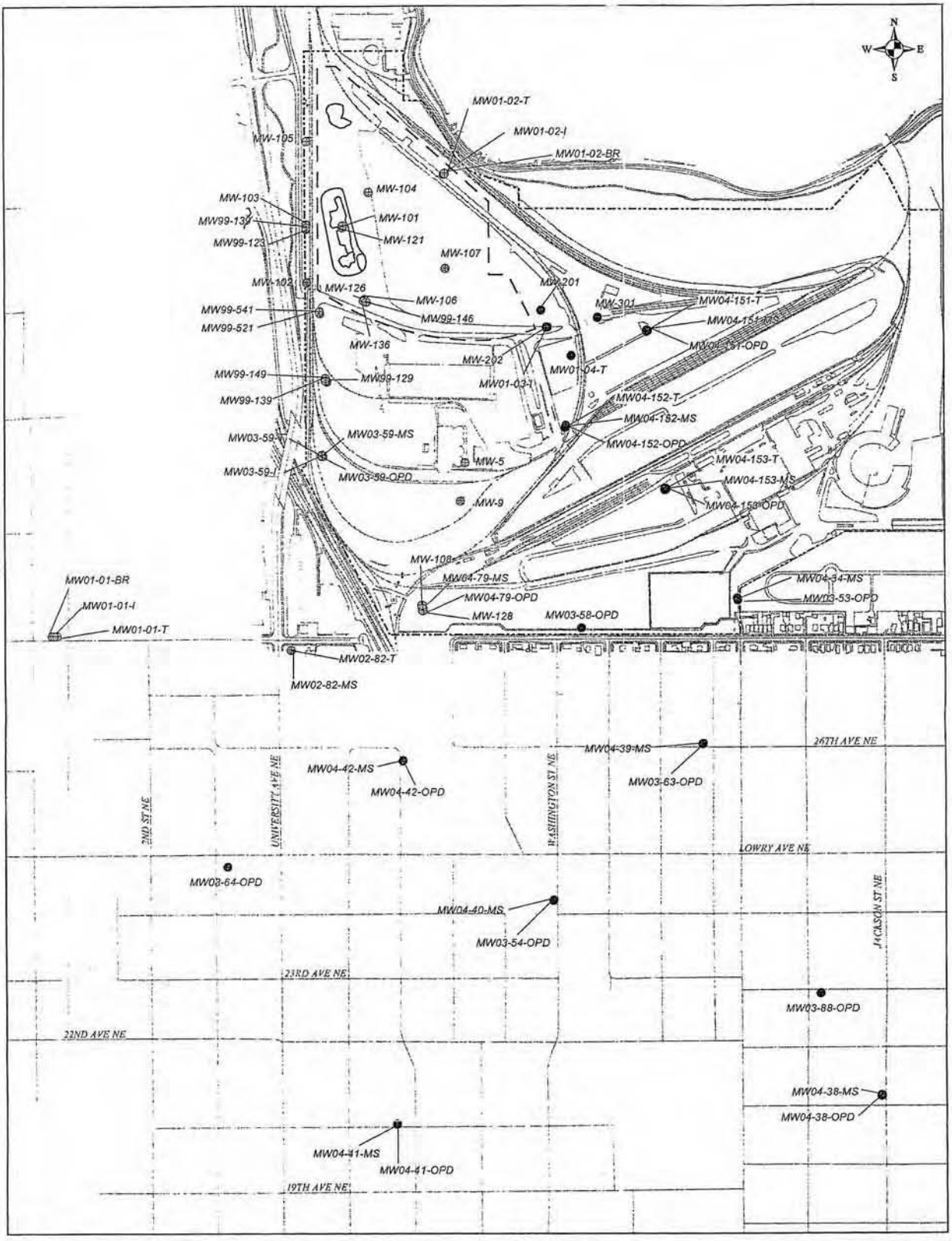
NJ Authorization #24GA28029100
Golder Associates
Philadelphia USA

FILE No.	0236105M004
PROJECT No.	023-6105 REV. 0
SCALE	AS SHOWN
DATE	05/16/05
DESIGN	MMM
CADD	RG
CHECK	MMM
REVIEW	PSF

SITE BASE MAP AND PROPOSED SOIL SAMPLING PROGRAM

SOO LINE SHOREHAM FACILITY

Drawing File: 0236105M004.dwg May 16, 2005 - 3:24pm



Source: AMEC 2005a

LEGEND

- MW99-133 Monitoring Well (Cedar Service)
- MW03-63-OPD Monitoring Well (Non-Cedar Service)
- Area of Prior Excavation
- Approximate Site Boundary
- Facility Boundary

490 0 490
Feet

Figure 6: Monitoring Well Locations

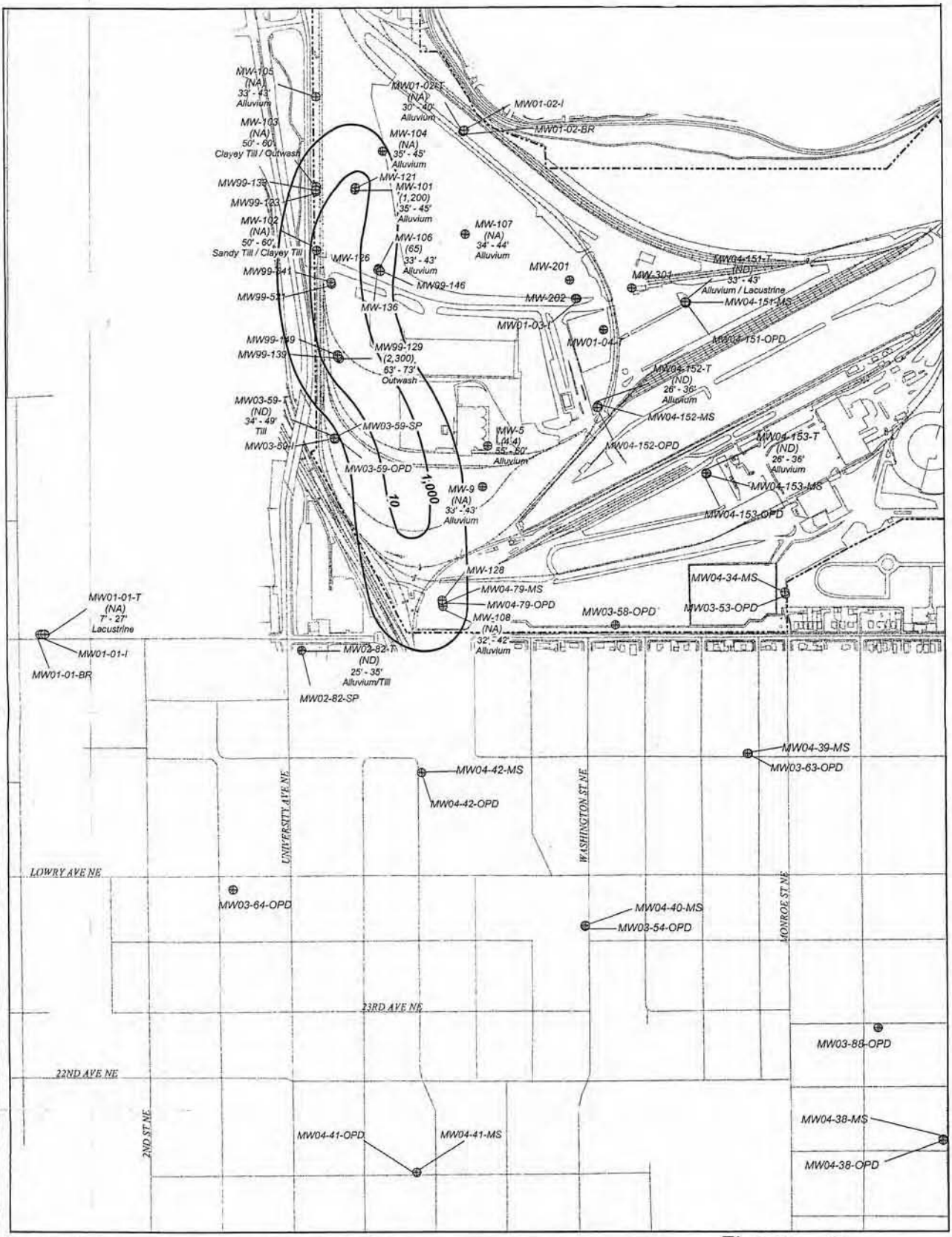
Shoreham Facility
Cedar Service Site

Prepared for

Canadian Pacific Railway
Minneapolis, Minnesota

amec

Figure 7: Off-Site Well Sampling Locations w/ Most Recent PCP Data



LEGEND

⊕	Monitoring Well *Red Font Indicates Shallow Well*
———	PCP Groundwater Isocontour (Inferred)
(12,500)	PCP Groundwater Concentration (µg/L) - October 2004
(ND)	Not Detected (October 2004)
(ND)	Not Detected (September 2004)
(NA)	Well Not Sampled or Not Analyzed for PCP
72' - 82'	Well Screen Interval (depth in feet below ground surface)
Till / Outwash	Stratigraphy over Screened Interval
-·-·-·-	Facility Boundary

Source: AMEC 2005a

N W E S

300 0 300 600

Feet

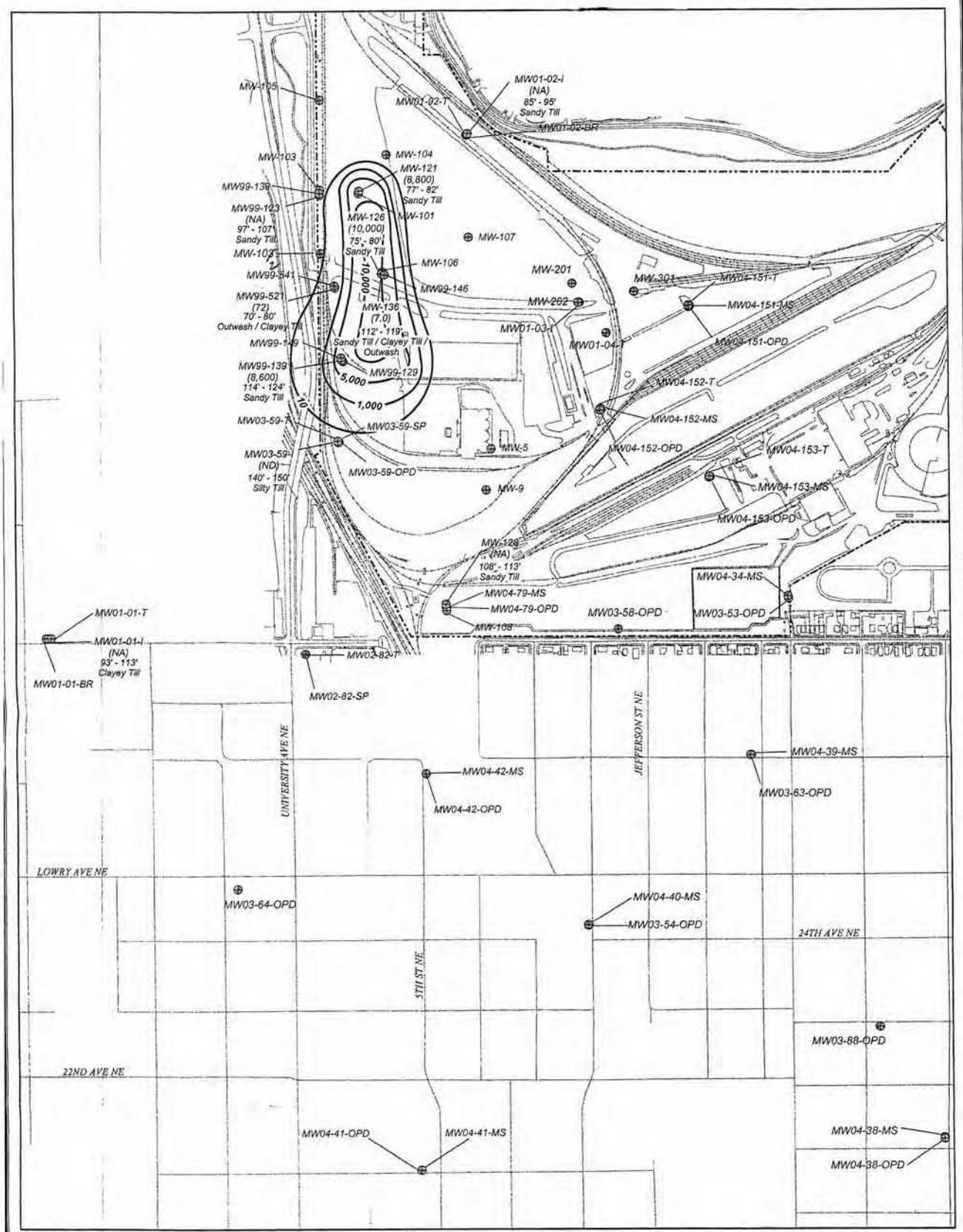
Figure 8

PCP Concentrations, Shallow Wells
September / October 2004 Sampling Event
Cedar Service Site

Prepared for

Canadian Pacific Railway
Shoreham Facility
Minneapolis, Minnesota

amec



LEGEND

⊕	Monitoring Well *Red Font Indicates Intermediate Well*
———	PCP Groundwater Isocontour (Inferred)
(12,500)	PCP Groundwater Concentration (µg/L)
(ND)	Not Detected
(NI)	Well Not Yet Installed
(NA)	Well Not Sampled or Not Analyzed for PCP
72' - 82'	Well Screen Interval (depth in feet below ground surface)
Till / Outwash	Stratigraphy over Screened Interval
-·-·-·-	Facility Boundary

Source: AMEC 2005a

N
W E
S

300 0 300 600
Feet

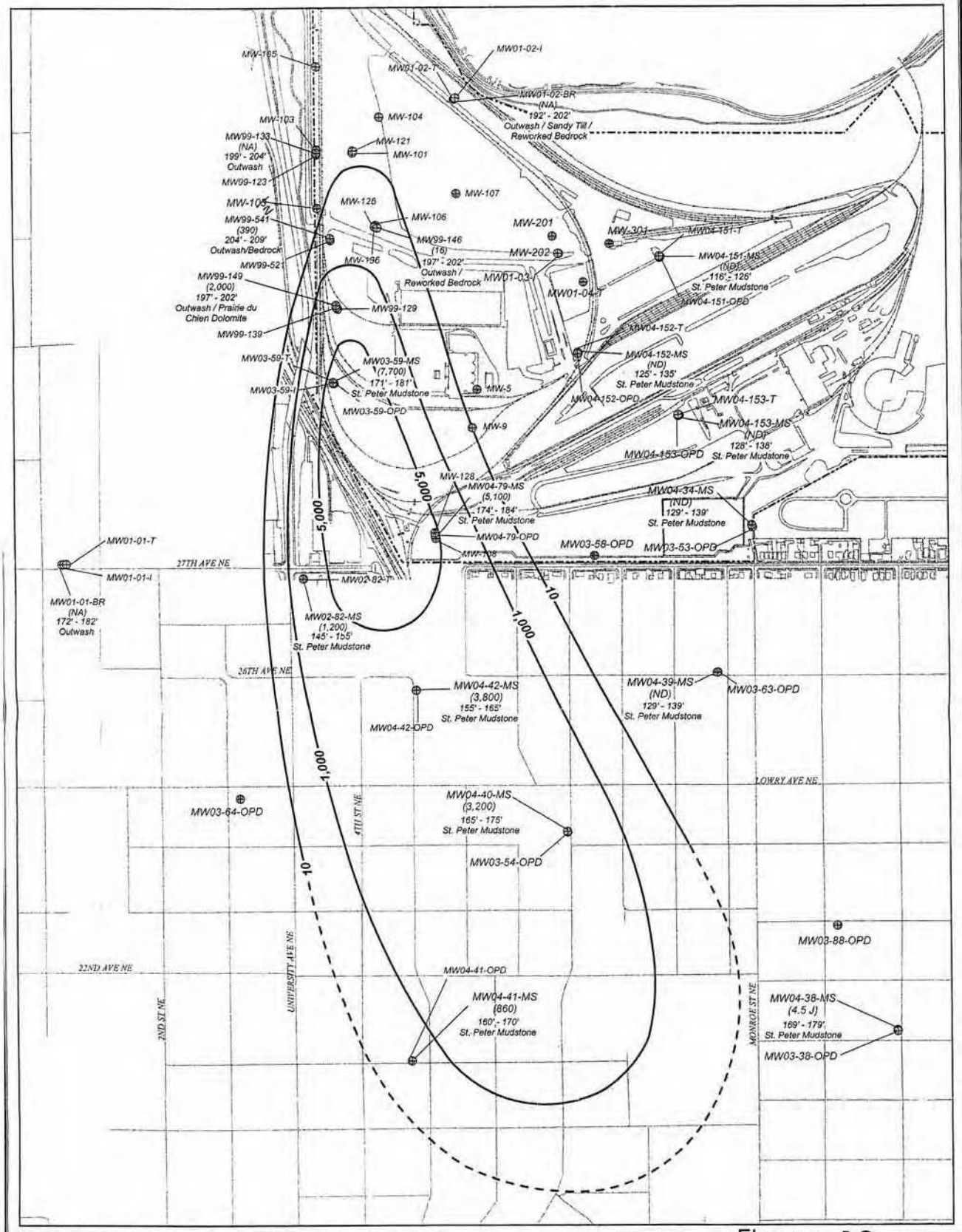
Figure 9

PCP Concentrations, Intermediate Wells
October 2004 Sampling Event
Cedar Service Site

Prepared for

Canadian Pacific Railway
Shoreham Facility
Minneapolis, Minnesota

amec



LEGEND

⊕	Monitoring Well *Red Font Indicates Deep Well*
———	PCP Groundwater Isocontour (Inferred)
(12,500)	PCP Groundwater Concentration (µg/L) - October 2004
(3,200)	PCP Groundwater Concentration (µg/L) - September 2004
(ND)	Not Detected - October 2004
(ND)	Not Detected - September 2004
(NA)	Well Not Sampled or Not Analyzed for PCP
J	Estimated Result
72' - 82'	Well Screen Interval (depth in feet below ground surface)
Till / Outwash	Stratigraphy over Screened Interval
-·-·-·-	Facility Boundary

Source: AMEC 2005a

N
W E
S

300 0 300 600
Feet

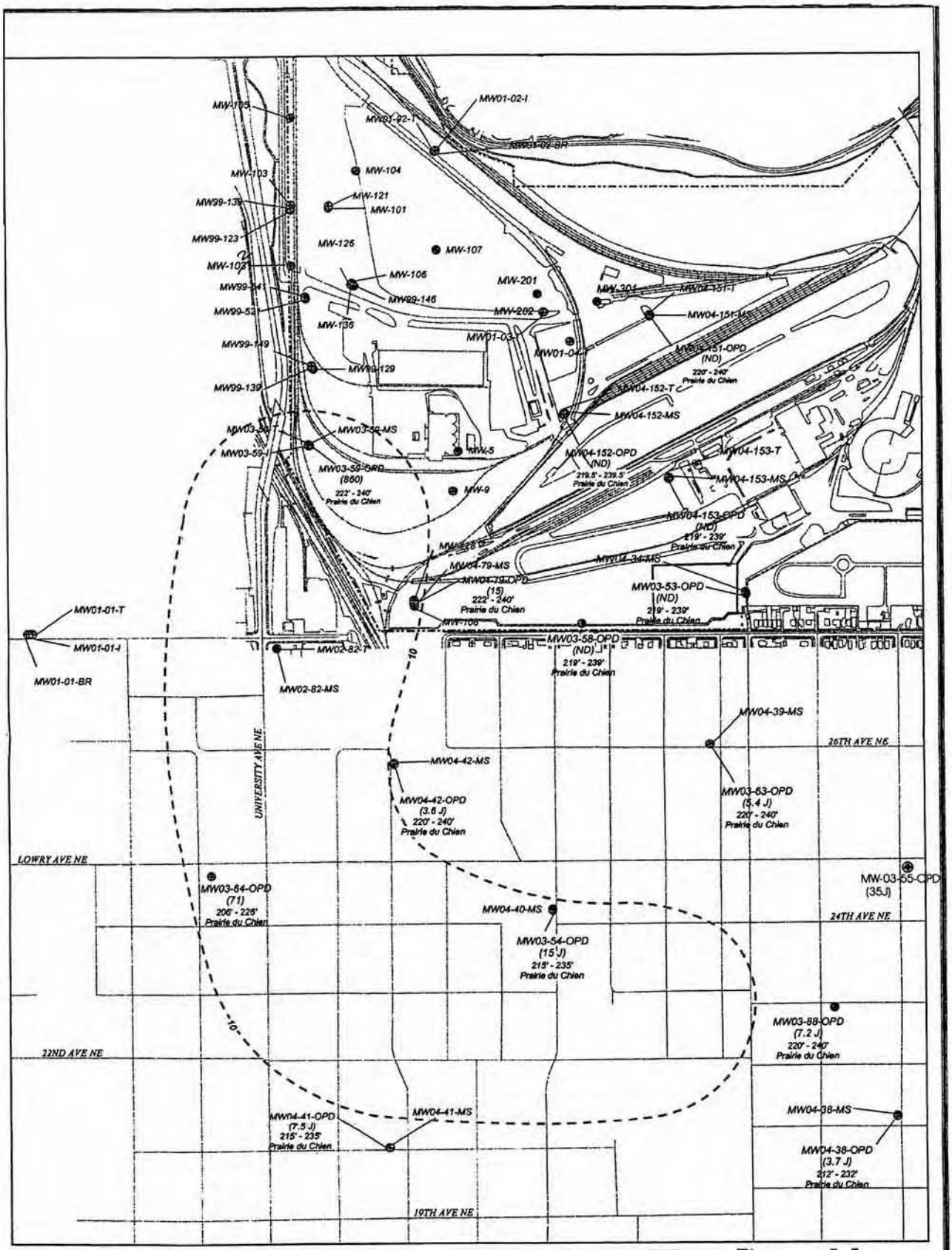
Figure 10

PCP Concentrations, Deep Wells
September / October 2004 Sampling Event
Cedar Service Site

Prepared for

Canadian Pacific Railway
Shoreham Facility
Minneapolis, Minnesota

amec



LEGEND

- Monitoring Well — *Red Font Indicates OPD Well*
- PCP Groundwater Isocontour (Inferred)
- *(860)* PCP Groundwater Concentration (µg/L) - October 2004
- *(3.6 J)* PCP Groundwater Concentration (µg/L) - September 2004
- *(ND)* Not Detected - September 2004
- *(NA)* Well Not Sampled or Not Analyzed for PCP
- *J* Estimated Result
- *72' - 82'* Well Screen Interval (depth in feet below ground surface)
- *Till / Outwash* Stratigraphy over Screened Interval
- Facility Boundary

Source: AMEC 2005a

N W E S

300 0 300 600

Feet

Figure 11

PCP Concentrations, OPD Wells
September / October 2004 Sampling Event
Cedar Service Site

Prepared for

Canadian Pacific Railway
Shoreham Facility
Minneapolis, Minnesota

amec