GIS REGISTRY INFORMATION

SITE NAME: WDOT Lake Arterial Solstice Site

BRRTS #: 02-41-000575 | FID # (if appropriate): 241501150

COMMERCE # (if appropriate):

CLOSURE DATE: 1-31-07

STREET ADDRESS: Lake Parkway (5th + 7th) at Howard Ave

CITY: St. Francis, WI 53235

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= See attached.

CONTAMINATED MEDIA: Groundwater [ ] Soil [ ] Both [✓]

OFF-SOURCE GW CONTAMINATION >ES: [ ] Yes [✓] No

IF YES, STREET ADDRESS 1:

GPS COORDINATES (meters in WTM91 projection): X= Y=

OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL): [ ] Yes [✓] No

IF YES, STREET ADDRESS 1:

GPS COORDINATES (meters in WTM91 projection): X= Y=

CONTAMINATION IN RIGHT OF WAY: [✓] Yes [ ] No

DOCUMENTS NEEDED:

- Closure Letter, and any conditional closure letter or denial letter issued [✓]
- Copy of any maintenance plan referenced in the final closure letter. [✓]
- Copy of (soil or land use) deed notice *if any required as a condition of closure* [NA]
- Copy of most recent deed, including legal description, for all affected properties [X]
- Certified survey map or relevant portion of the recorded plat map (*if referenced in the legal description*) for all affected properties [X]
- County Parcel ID number, *if used for county*, for all affected properties [X]
- **Location Map** which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site. [X]
- **Detailed Site Map(s) for all affected properties,** showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs. [X]
- Tables of Latest Groundwater Analytical Results (no shading or cross-hatching) [X]
- Tables of Latest Soil Analytical Results (no shading or cross-hatching) [X]
- Isoconcentration map(s), *if required for site investigation (SI)* (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. If not available, include the latest extent of contaminant plume map. [X]
- GW: Table of water level elevations, with sampling dates, and free product noted if present [X]
- GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees) [X]
- SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour [X]
- Geologic cross-sections, *if required for SI.* (8.5x14' if paper copy) [ ]
- RP certified statement that legal descriptions are complete and accurate [X]
- Copies of off-source notification letters (if applicable) [X]
- Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW) [X]

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8606
TTY 711

January 31, 2007

Mr. Dan Scudder
Wisconsin Dept. of Transportation
4802 Sheboygan Ave., Room 451
Madison, WI 53705

FID# 2415011050
BRRTS# 02-41-000575

Subject: Lake Arterial Solstice Property, Lake Parkway (STH 794) and Howard Ave., St. Francis

Dear Mr. Scudder:

The Wisconsin Department of Natural Resources (Department) received your request for closure of the above-referenced case on December 18, 2006. The Department reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. It is the Department's intent to conduct inspections in the future to ensure that the conditions included in this letter including compliance with referenced maintenance plans are met.

Pursuant to s. 292.12(2)(a), Wis. Stats., the geomembrane and soil cover that currently exists in the location shown on the attached map shall be maintained in compliance with the attached maintenance plan in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

The following activities are prohibited on any portion of the property where [pavement, a building foundation, soil cover, engineered cap or other barrier] is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1)

removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit http://dnr.wi.gov/org/aw/rr/gis/index.htm. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf or at the web address listed above for the GIS Registry.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Brenda Boyce at (414) 263-8366.

Sincerely,

James A. Schmidt

James A. Schmidt
Southeast Remediation & Redevelopment Team Supervisor

cc: Ken Wade – DOT
Dick Fish - RMT

STH 794 (Lake Parkway) – FID #241501150
Maintenance Plan for Barrier Cap

This document is the Maintenance Plan for the geomembrane and soil cap that existed in October 2006 on the reuse areas within the STH 794 (Lake Parkway) right-of-way at Howard Avenue in St. Francis at the locations shown on attached Exhibit 1, labeled "Reuse Areas with Residual Soil Contamination STH 794 (Lake Parkway) FID #241501150". The geomembrane and soil cap forms a barrier that must be maintained in order to minimize the infiltration of water and prevent additional groundwater contamination that would exceed the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. The existing geomembrane and soil cap shall be maintained in compliance with the Wisconsin Department of Natural Resources (WDNR) conditions of site closure as required by section NR 724.13 (2), Wis. Adm. Code (October 1999), unless another barrier cap that provides an infiltration rate equivalent to the landfill cap design requirements in s. NR 504.07, Wis. Adm. Code (March 2003) is installed and maintained in its place. Any replacement barrier cap will be subject to the same maintenance and inspection requirements that are included in this plan.

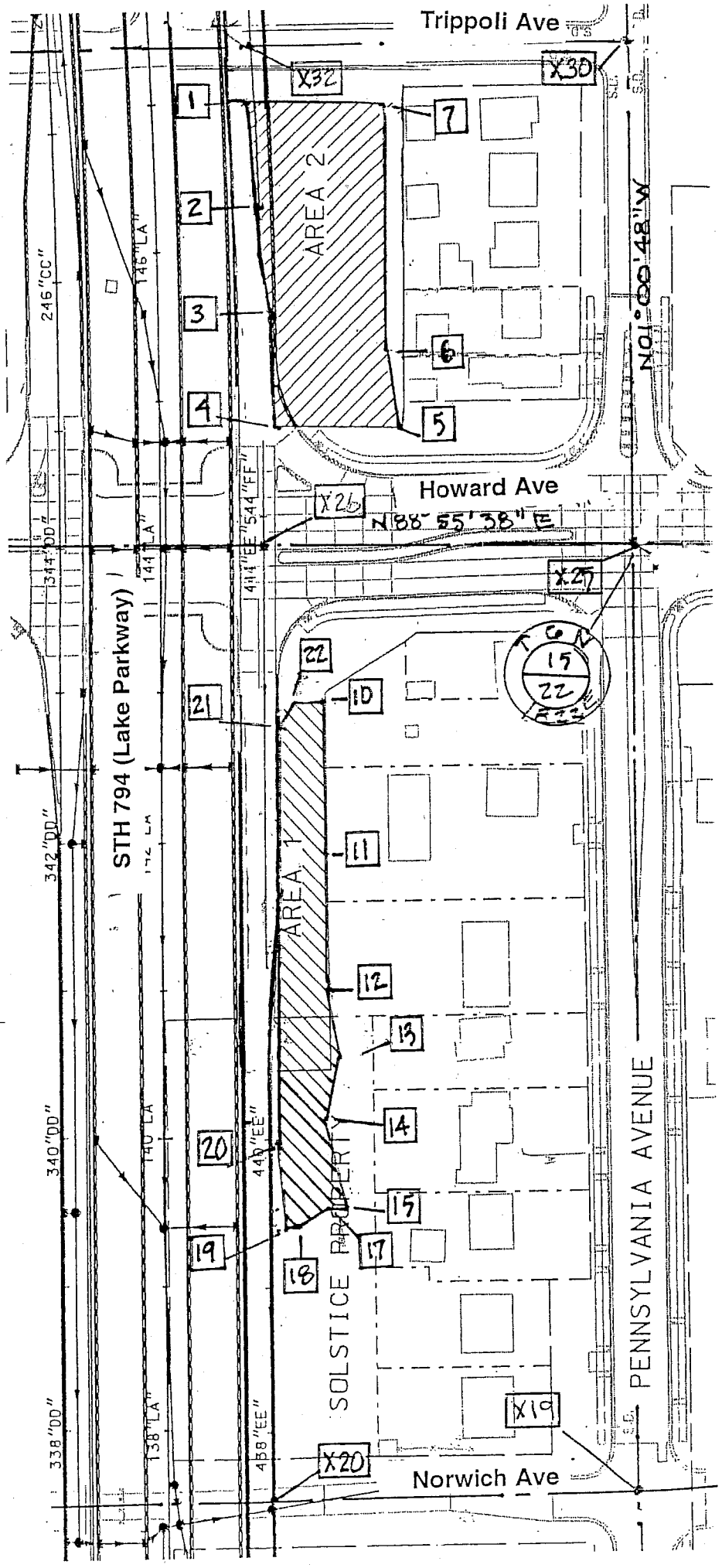
If the soil with residual contamination that remains in the reuse areas described above is excavated, that soil may be considered solid or hazardous waste and the soil must be sampled and analyzed to determine appropriate disposal requirements. If residual contamination remains, the soil must be stored, treated, and disposed in compliance with applicable statutes and rules.

The soil cap over geomembrane overlaying the residual contaminated soil in reuse areas as shown on Figure 1, will be inspected periodically, approximately once a year, for erosions and other conditions which may expose the underlying geomembrane cap or contaminated soil. Conditions where the underlying geomembrane or contaminated soils have become or are likely to become exposed will be documented and repaired. A log of inspections and any repairs (Exhibit 2) will be completed and maintained by the Wisconsin Department of Transportation Southeast Region.

This Maintenance Plan shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase, or otherwise. This restriction inures to the benefit of and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department of Natural Resources, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate the requirements of this Maintenance Plan, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this Maintenance Plan is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be attached to this Maintenance Plan to provide other interested parties notice that this Maintenance Plan or portions thereof, are no longer binding.

	Wisconsin State Plane Coordinates North	East
	Area 2	
1	362,407.87	2,567,201.62
2	362,336.90	2,567,205.32
3	362,263.15	2,567,213.36
4	362,194.34	2,567,217.59
5	362,195.09	2,567,300.67
6	362,231.70	2,567,295.78
7	362,403.89	2,567,293.96
	Area 2	
10	361,992.95	2,567,249.51
11	361,890.99	2,567,250.16
12	361,797.70	2,567,251.23
13	361,754.04	2,567,256.29
14	361,706.82	2,567,265.85
15	361,639.48	2,567,258.33
17	361,644.03	2,567,249.32
18	361,632.60	2,567,224.98
19	361,632.18	2,567,218.15
20	361,689.71	2,567,213.61
21	361,976.21	2,567,217.44
22	361,990.40	2,567,228.60
	Reference Points	
X-25	362,107.22	2,567,459.32
X-11	361,447.37	2,567,473.67
X-20	361,422.60	2,567,218.82
X26	362,102.50	2,567,207.38
X-30	362,437.36	2,567,453.48
X32	362,451.55	2,567,195.81
S 1/4 cor Sec 15	362,081 22	2,567,418.57



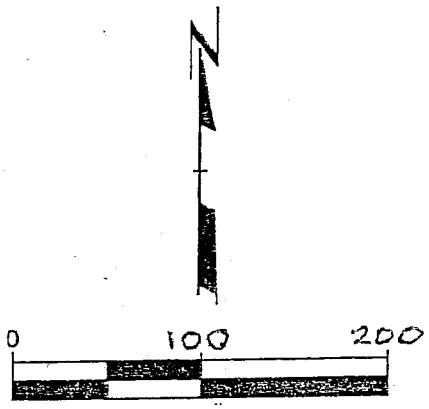


Figure 6

Reuse Areas with Residual Soil Contamination

STH 794 (Lake Parkway)
FID #241501150

Exhibit 2

WisDOT Lake Arterial (STH 794) – FID #241501150
Barrier Cap Inspection Log

Inspection Date	Inspector	Condition of Cap	Recommendations	Have recommendations from previous inspection been implemented?

STH 794 (Lake Parkway)
Reuse Areas with Residual Soil Contamination
and
Area of Groundwater Contamination
WisDOT – Solstice Property – FID #241501150
GIS Registry

Legal Description

Reuse Area 1 – Part Northeast ¼ of the Northeast ¼ Section 22, Town 6 North, Range 22 East and part of Lot 3, Certified Survey Map Number 3383, City of St. Francis, Milwaukee County, Wisconsin

Reuse Area 2 – Part Southeast ¼ of the Southeast ¼ Section 15, Town 6 North, Range 22 East, City of St. Francis, Milwaukee County, Wisconsin

Groundwater Contamination – Part lot 3, Certified Survey Map Number 3383 and part of the Northeast ¼ of the Northeast ¼ of Section 22, Town 6 North, Range 22 East, City of St. Francis, Milwaukee County, Wisconsin.

Parcel Numbers: All in the City of St. Francis

Reuse Area 1 – Part of parcel numbers 583-8012, 583-8997, 583-8998, and 583-9000

Reuse Area 2 – Part of parcel numbers 546-8918 and 546-8717

Groundwater Contamination - Part of parcel numbers 583-8012 and 583-8990-001

Geographic Position (WTM Coordinates):

Reuse Area 1: 692,840; 279,997

Reuse Area 2: 692,837; 280,127

Groundwater Contamination: 692,837; 280,127

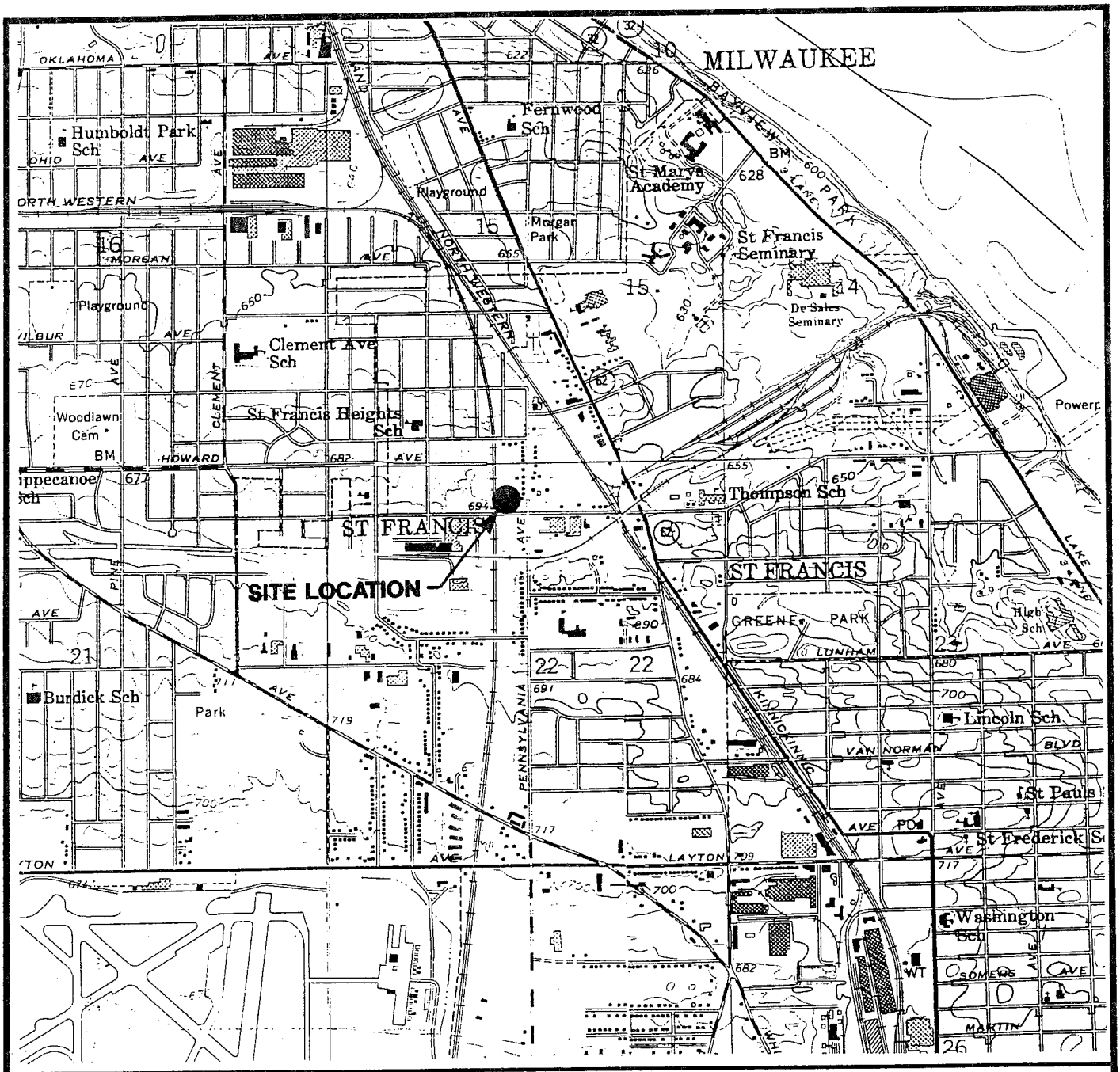
Plat Map: Attached copy of Wisconsin Department of Transportation (WisDOT) Right-of-Way Plat Map for STH 794 (Project ID #1300-04-20). Parcel #44 is WisDOT-Norwich Property and parcel #217 is WisDOT-Solstice site.

Location Map: Attached Figure 1

Certification:

I, Dan Scudder, certify that to the best of my knowledge, the above legal description and other information are complete and accurately reflect the location of the lands within the STH 794 (Lake Parkway) right-of-way where low-level impacted soils were reused and capped and where groundwater contamination remains.

Dan Scudder
Environmental Services Section Manager
Bureau of Equity and Environment
Wisconsin Department of Transportation (WisDOT)



STATE LOCATION

0 2000 4000

SCALE: 1" = 2000'

N

SITE LOCATION MAP
WisDOT - LAKE PARKWAY

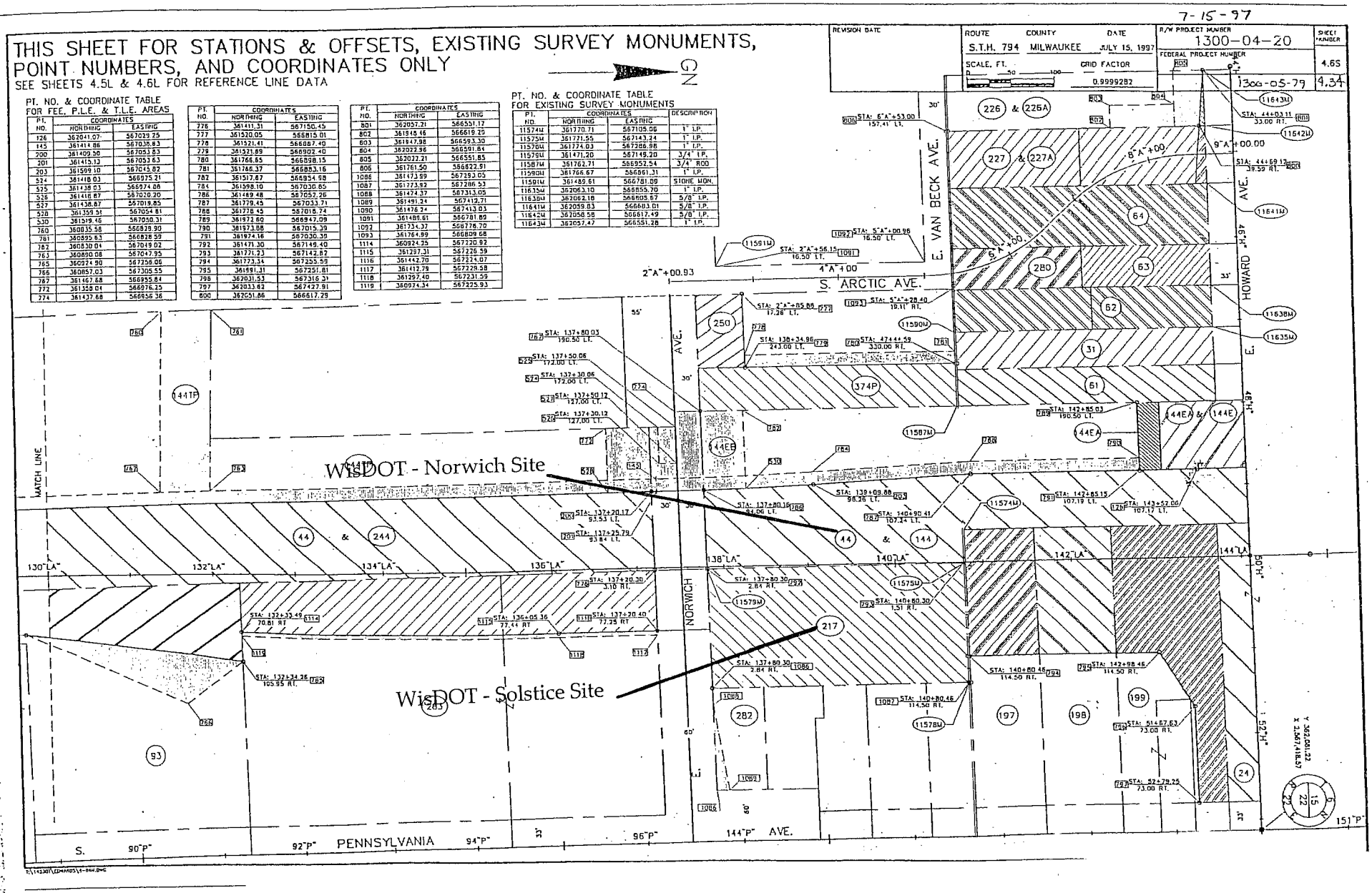
SOURCE: BASEMAP FROM GREENDALE AND SOUTH MILWAUKEE, WISCONSIN 7.5 MIN. USGS QUADRANGLE.

RMT INC.

DWN. BY:	SRC
APPROVED BY:	
DATE:	APRIL 1997
PROJ. #	10428.15
FILE #	1501.DWG

FIGURE 1

$$PRF$$
$$SCALE$$
$$DATE$$



STH 794 (Lake Parkway)
Right-of-Way Plat
Project ID# 1300-04-20

Figure 2a

7-15-97

REVISION DATE		
APRIL 14, 1995	MAY 17, 1989	FEB. 5, 1992
AUG. 22, 1996	JUNE 28, 1989	MAR. 31, 1992
JULY 18, 1997	MAR. 19, 1990	JULY 13, 1992
	APRIL 1, 1991	NOV. 16, 1992
	MAY 20, 1991	FEB. 16, 1993
	JUNE 17, 1991	MAY 17, 1993
	NOV 4, 1991	OCT. 8, 1993
		FEB. 15, 1994
		SEPT. 28, 1994

ROUTE	COUNTY	DATE
S.T.H. 794	MILWAUKEE	JULY 1, 1989

SCALE: FT. 0 50 100

GRID FACTOR 0.9999202

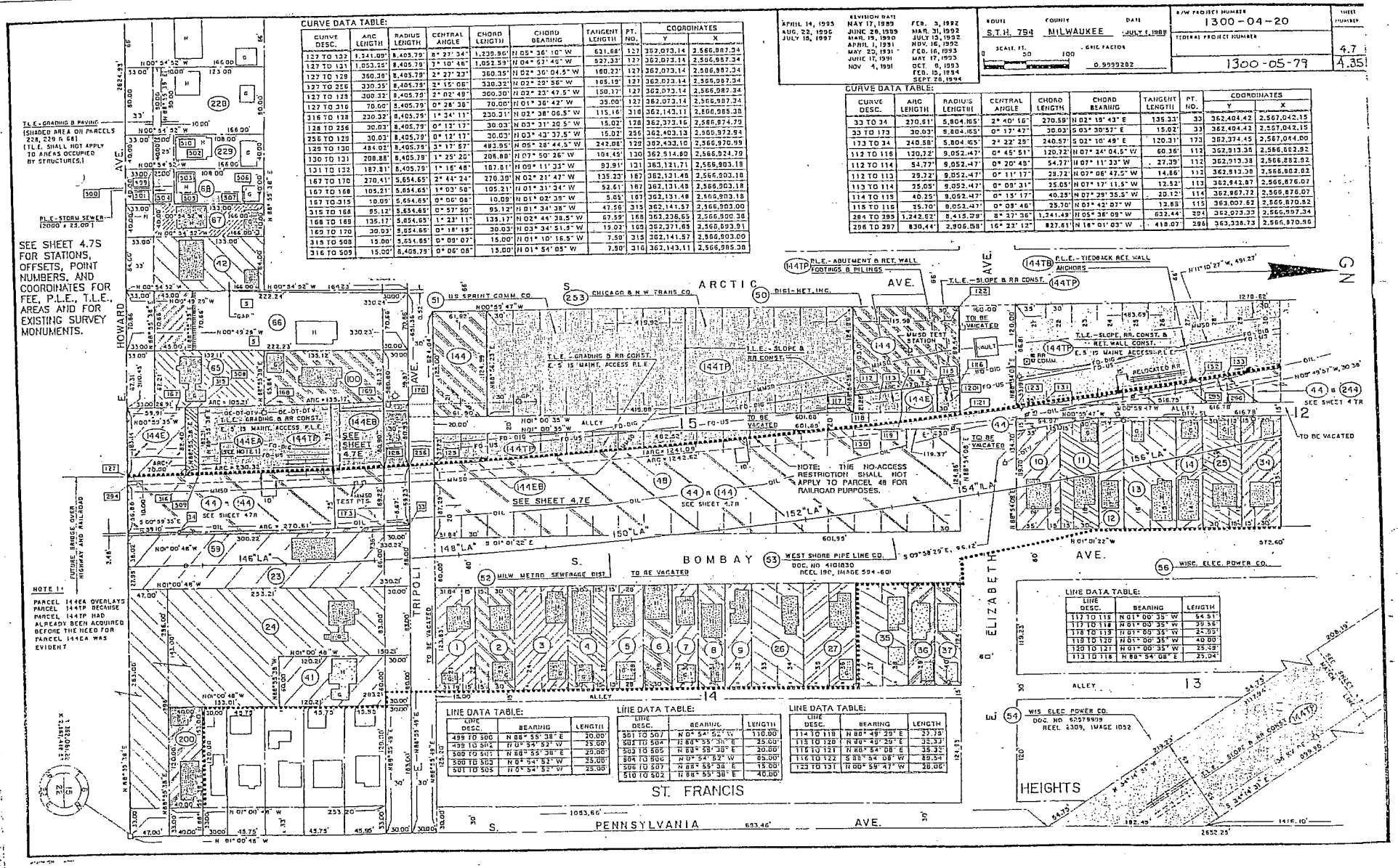
R/W PROJECT NUMBER	SHEET NUMBER
1300-04-20	4.7
FEDERAL PROJECT NUMBER	
1300-05-79	4.35

CURVE DATA TABLE:

CURVE DESC.	ARC LENGTH	RADIUS LENGTH	CENTRAL ANGLE	CHORD LENGTH	CHORD BEARING	TANGENT LENGTH	PT. NO.	COORDINATES Y	COORDINATES X
127 TO 132	1,241.09'	8,405.79'	8° 27' 34"	1,239.96'	N 05° 36' 10" W	621.68'	127	362,073.14	2,566,987.34
127 TO 131	1,053.25'	8,405.79'	7° 10' 46"	1,052.59'	N 04° 57' 49" W	527.33'	127	362,073.14	2,566,987.34
127 TO 129	360.36'	8,405.79'	2° 27' 23"	360.35'	N 02° 30' 04.5" W	180.22'	127	362,073.14	2,566,987.34
127 TO 256	330.35'	8,405.79'	2° 15' 06"	330.32'	N 02° 20' 56" W	165.19'	127	362,073.14	2,566,987.34
127 TO 128	300.32'	8,405.79'	2° 02' 49"	300.30'	N 02° 23' 47.5" W	150.17'	127	362,073.14	2,566,987.34
127 TO 316	70.00'	8,405.79'	0° 28' 38"	70.00'	N 01° 38' 42" W	35.00'	127	362,073.14	2,566,987.34
316 TO 128	230.32'	8,405.79'	1° 34' 11"	230.31'	N 02° 38' 06.5" W	115.16'	316	362,143.11	2,566,985.38
128 TO 256	30.03'	8,405.79'	0° 12' 17"	30.03'	N 03° 31' 20.5" W	15.02'	128	362,373.16	2,566,974.79
256 TO 129	30.03'	8,405.79'	0° 12' 17"	30.03'	N 03° 43' 37.5" W	15.02'	256	362,403.13	2,566,972.94
129 TO 130	484.02'	8,405.79'	3° 17' 57"	483.95'	N 05° 28' 44.5" W	242.08'	129	362,433.10	2,566,970.99
130 TO 131	208.88'	8,405.79'	1° 25' 20"	208.80'	N 07° 50' 26" W	104.45'	130	362,914.80	2,566,924.79
131 TO 132	187.81'	8,405.79'	1° 16' 48"	187.81'	N 09° 11' 33" W	93.91'	131	363,121.71	2,566,903.18
167 TO 170	270.41'	5,654.65'	2° 44' 24"	270.39'	N 02° 21' 47" W	135.23'	167	362,131.48	2,566,903.18
167 TO 168	105.21'	5,654.65'	1° 03' 50"	105.21'	N 01° 31' 34" W	52.61'	167	362,131.48	2,566,903.18
167 TO 315	10.09'	5,654.65'	0° 06' 08"	10.09'	N 01° 02' 39" W	5.05'	167	362,131.48	2,566,903.18
315 TO 168	95.12'	5,654.65'	0° 57' 50"	95.12'	N 01° 34' 38" W	47.56'	315	362,141.57	2,566,903.00
168 TO 169	135.17'	5,654.65'	1° 23' 11"	135.17'	N 02° 44' 38.5" W	67.59'	168	362,238.65	2,566,900.38
169 TO 170	30.03'	5,654.65'	0° 18' 15"	30.03'	N 03° 34' 51.5" W	15.02'	169	362,371.65	2,566,893.91
315 TO 508	15.00'	5,654.65'	0° 09' 07"	15.00'	N 01° 10' 16.5" W	7.50'	315	362,141.57	2,566,903.00
316 TO 509	15.00'	8,405.79'	0° 06' 08"	15.00'	N 01° 54' 05" W	7.50'	316	362,143.11	2,566,985.38

CURVE DATA TABLE:

CURVE DESC.	ARC LENGTH	RADIUS LENGTH	CENTRAL ANGLE	CHORD LENGTH	CHORD BEARING	TANGENT LENGTH	PT. NO.	COORDINATES Y	COORDINATES X
33 TO 34	270.61'	5,804.165'	2° 40' 16"	270.59'	N 02° 19' 43" E	135.33'	33	362,404.42	2,567,042.15
33 TO 173	30.03'	5,804.165'	0° 17' 47"	30.03'	S 03° 30'57" E	15.02'	33	362,404.42	2,567,042.15
173 TO 34	240.58'	5,804.165'	2° 22' 29"	240.57'	S 02° 10' 49" E	120.31'	173	362,374.45	2,567,044.00
112 TO 116	120.72'	9,052.47'	0° 45' 51"	120.72'	N 07° 24' 04.5" W	60.36'	112	362,913.38	2,566,882.92
112 TO 114	54.77'	9,052.47'	0° 20' 48"	54.77'	N 07° 11' 33" W	27.39'	112	362,913.38	2,566,882.92
112 TO 113	29.22'	9,052.47'	0° 11' 17"	29.22'	N 07° 06' 47.5" W	14.86'	112	362,913.38	2,566,882.92
113 TO 114	25.05'	9,052.47'	0° 09' 31"	25.05'	N 07° 17' 11.5" W	12.52'	113	362,942.87	2,566,876.07
114 TO 115	40.25'	9,052.47'	0° 15' 17"	40.25'	N 07° 29' 35.5" W	20.12'	114	362,967.72	2,566,876.07
115 TO 116	25.70'	9,052.47'	0° 09' 46"	25.70'	N 07° 42' 07" W	12.85'	115	363,007.62	2,566,870.82
284 TO 295	1,242.62'	8,415.29'	8° 27' 36"	1,241.49'	N 05° 38' 09" W	622.44'	284	363,073.33	2,566,997.34
296 TO 297	830.44'	2,906.58'	16° 23' 12"	827.61'	N 18° 01' 03" W	418.07'	296	363,338.73	2,566,870.96



STH 794 (Lake Parkway)
Right-of-Way Plat
Project ID# 1300-04-20

Figure 2b

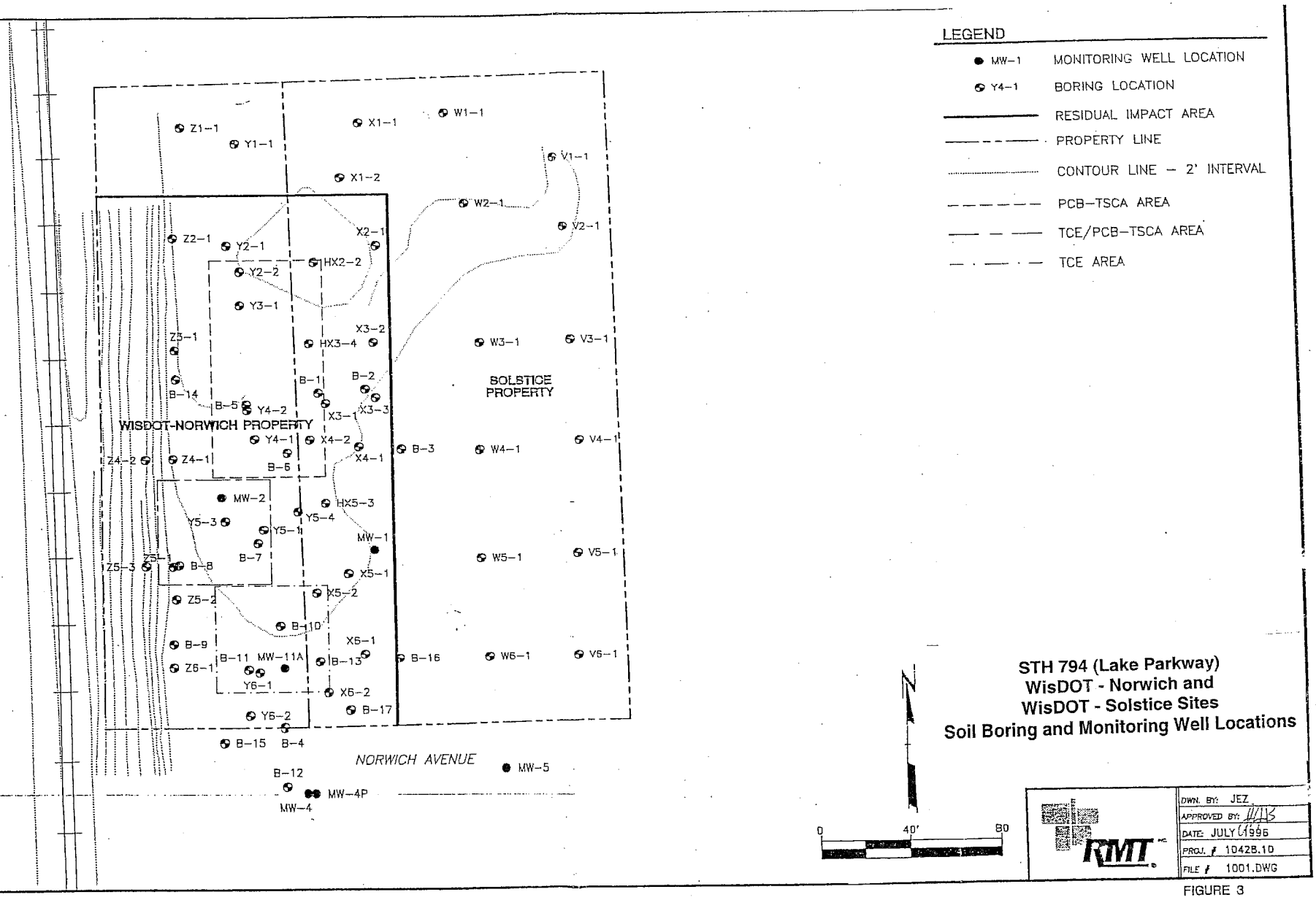


FIGURE 3

PLOT DATA
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Operator Name: JEZ
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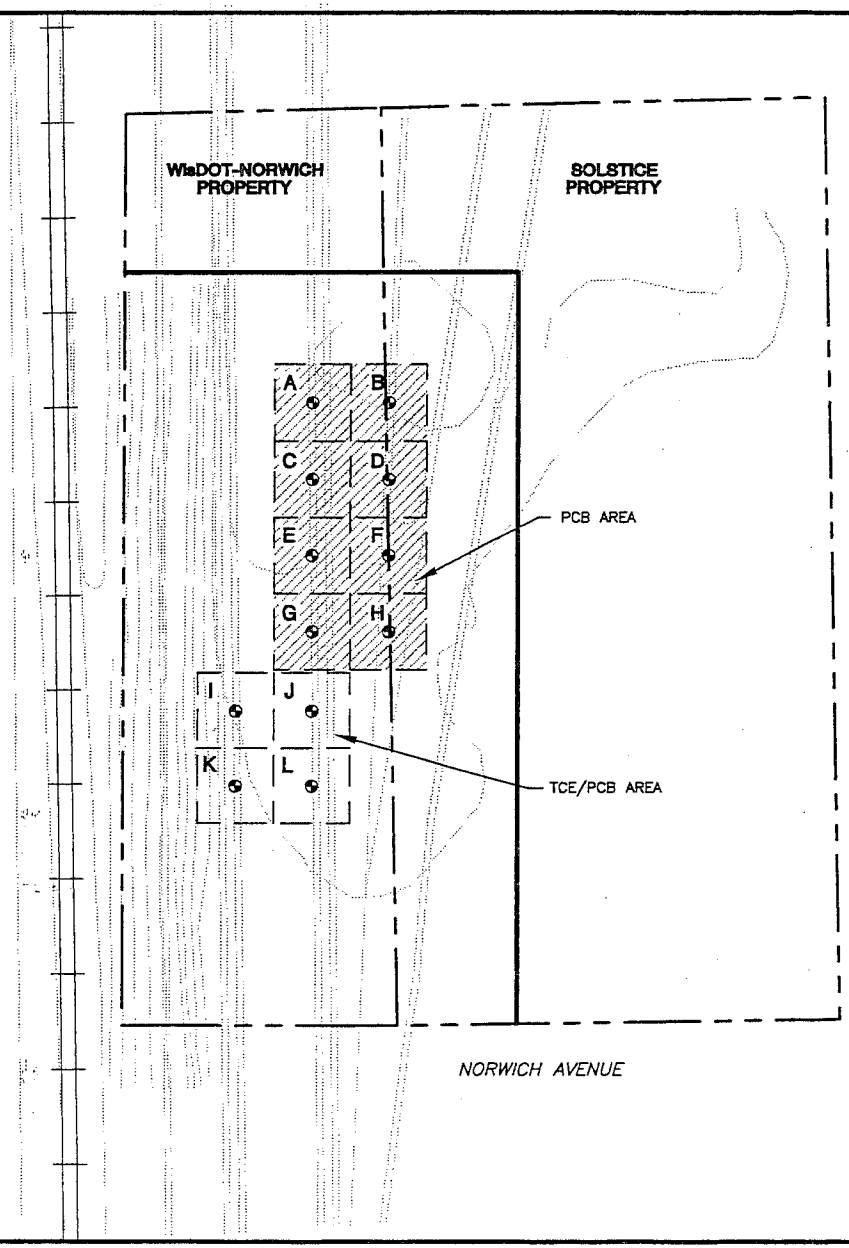
Dwg Size: 61160 Bytes
Plot Date: Friday, July 26, 1996
Plot Time: 09:47:5474 AM
Attached Xref's: No xref's Attached.



LEGEND

- RESIDUAL IMPACT AREA (SEE NOTE 3)
- PROPERTY LINE
- CONTOUR LINE – 2' INTERVAL
- A — CELL LOCATION
- C — CELL WITH ONE OR MORE SAMPLES THAT CONTAINS PCBs AT 50 mg/kg OR GREATER
- SOIL BORING LOCATION

NOTES

1. AREAS OF CONCERN BASED ON PREVIOUS INVESTIGATIONS AS DESCRIBED IN THE REMEDIAL ACTION PLAN (RMT, JUNE 1996).
2. CELLS THAT CONTAIN ONE OR MORE SAMPLES WITH PCBs AT 50 mg/kg OR GREATER IS BASED ON AUGUST 12 AND 13, 1996 SAMPLING ONLY.
3. RESIDUAL IMPACT AREA IS THE LIMIT OF FILL MATERIAL WHICH HAS BEEN IDENTIFIED TO BE IMPACTED BY PCB AND/OR TCE.

N

0 40' 80

PCB REMEDIATION PLAN
WisDOT - LAKE PARKWAY

RMT INC.

DWN. BY: SRC
APPROVED BY:
DATE: APRIL 1997
PROJ. # 10428.15
FILE # 1505.DWG

FIGURE 4

Drawing Name: J:\10428\10\1002.DWG
Operator Name: SRC
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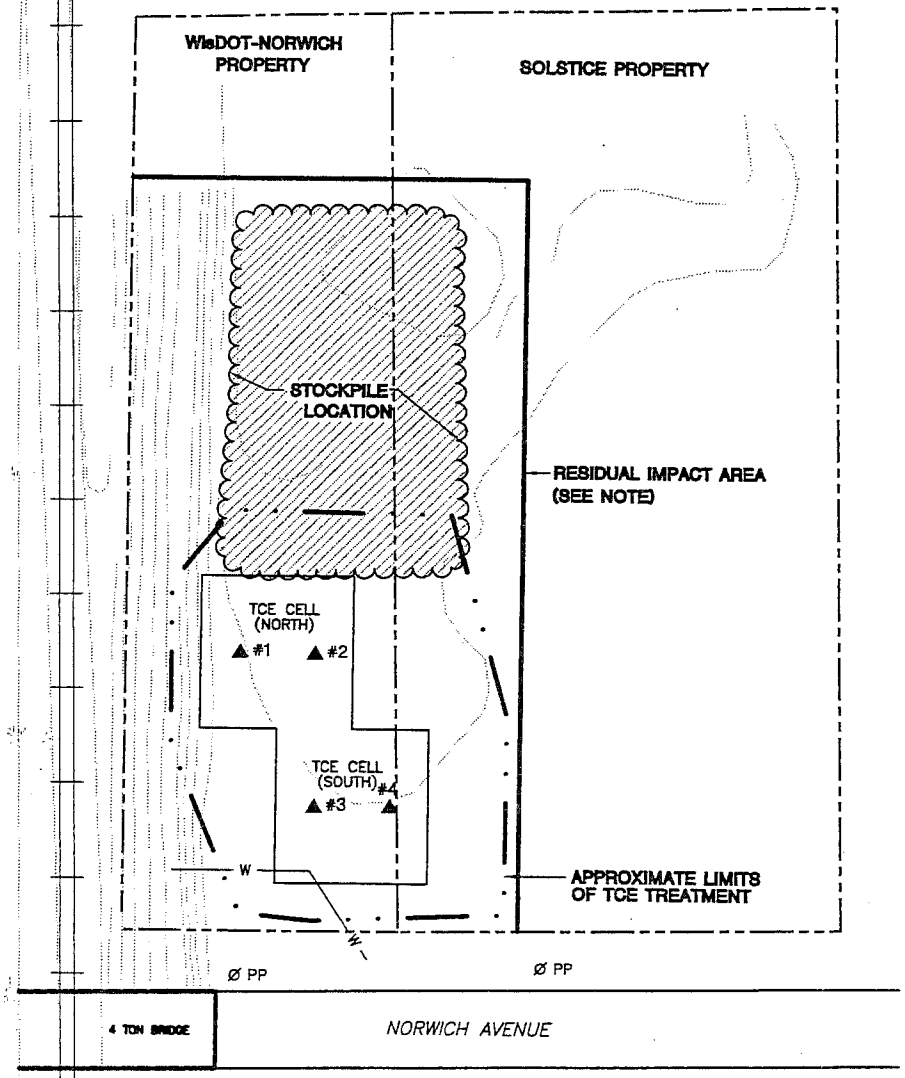
Plot Date: Wednesday, August 21, 1996
Plot Time: 2:15:47:20 PM
Attached Xref's: No xref's Attached.



LEGEND:

- PROPERTY LINE
- CONTOUR LINE – 2' INTERVAL
- GRID CELL FOR TCE TREATMENT (DEFINED BASED ON PREVIOUS INVESTIGATION)
- IMPACTED FILL STOCKPILE LOCATION
- RESIDUAL IMPACT AREA
- #2 TREATMENT CONFIRMATION SAMPLE LOCATION
- APPROXIMATE LIMITS OF TCE TREATMENT
- W FORMER LOCATION OF WATERMAIN

NOTES

1. RESIDUAL IMPACT AREA IS THE LIMIT OF FILL MATERIAL WHICH HAS BEEN IDENTIFIED TO BE IMPACTED BY PCB AND/OR TCE.

N

0 40 80

TCE REMEDIATION PLAN
WisDOT - LAKE PARKWAY

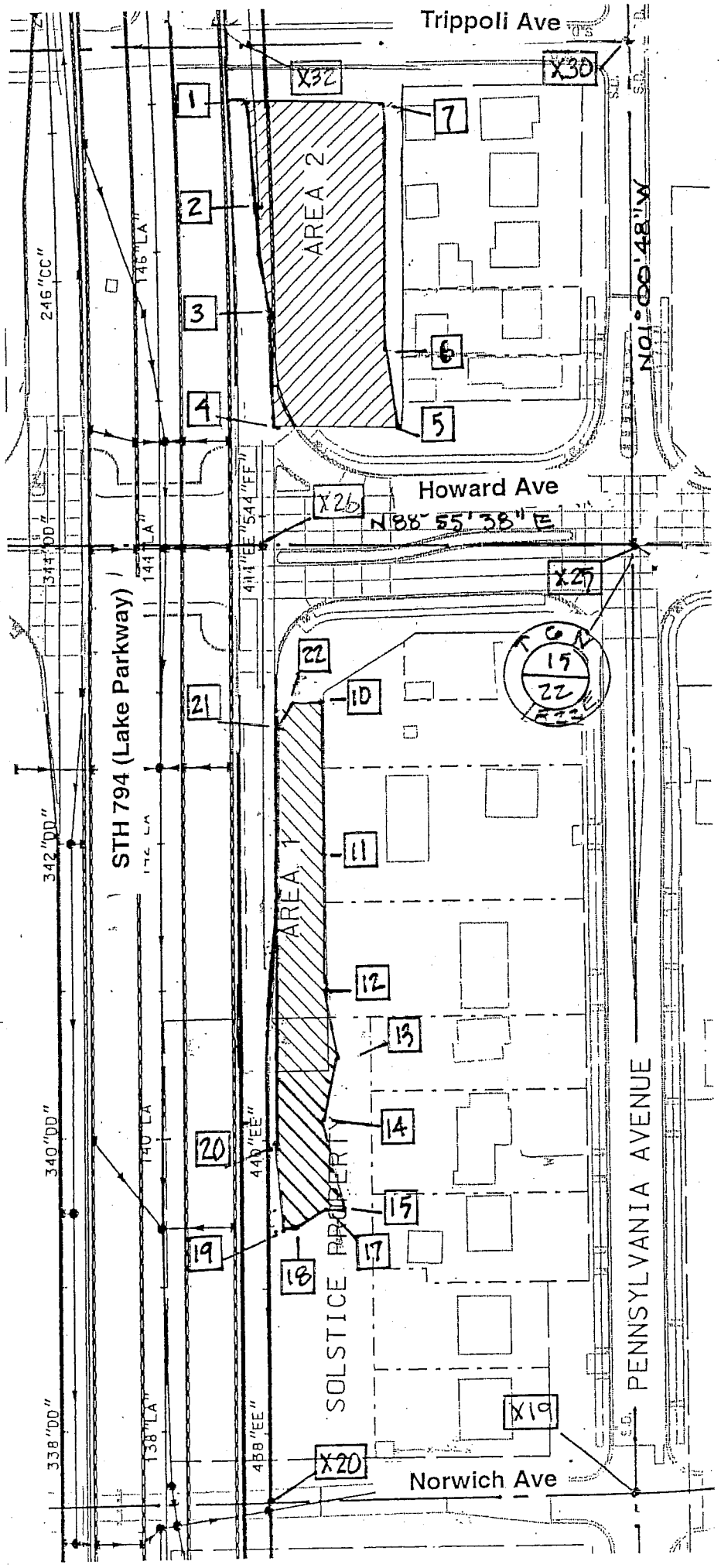
RMT INC.

DWN. BY:	SRC
APPROVED BY:	RJB
DATE:	APRIL 1997
PROJ. #	10428.15
FILE #	1504.DWG

FIGURE 5

Drawing Name: x
Operator Name: x x
Scale: x
Dwg Size: 112414 Bytes
Plot Date: x
Plot Time: x
Attached Xref's: x x

	Wisconsin State Plane Coordinates North	East
	Area 2	
1	362,407.87	2,567,201.62
2	362,336.90	2,567,205.32
3	362,263.15	2,567,213.36
4	362,194.34	2,567,217.59
5	362,195.09	2,567,300.67
6	362,231.70	2,567,295.78
7	362,403.89	2,567,293.96
	Area 2	
10	361,992.95	2,567,249.51
11	361,890.99	2,567,250.16
12	361,797.70	2,567,251.23
13	361,754.04	2,567,256.29
14	361,706.82	2,567,265.85
15	361,639.48	2,567,258.33
17	361,644.03	2,567,249.32
18	361,632.60	2,567,224.98
19	361,632.18	2,567,218.15
20	361,689.71	2,567,213.61
21	361,976.21	2,567,217.44
22	361,990.40	2,567,228.60
	Reference Points	
X-25	362,107.22	2,567,459.32
X-11	361,447.37	2,567,473.67
X-20	361,422.60	2,567,218.82
X26	362,102.50	2,567,207.38
X-30	362,437.36	2,567,453.48
X32	362,451.55	2,567,195.81
S 1/4 cor Sec 15	362,081 22	2,567,418.57



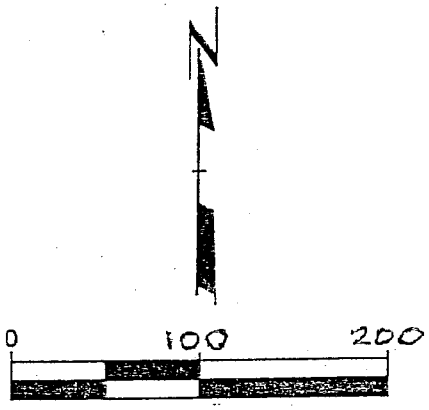
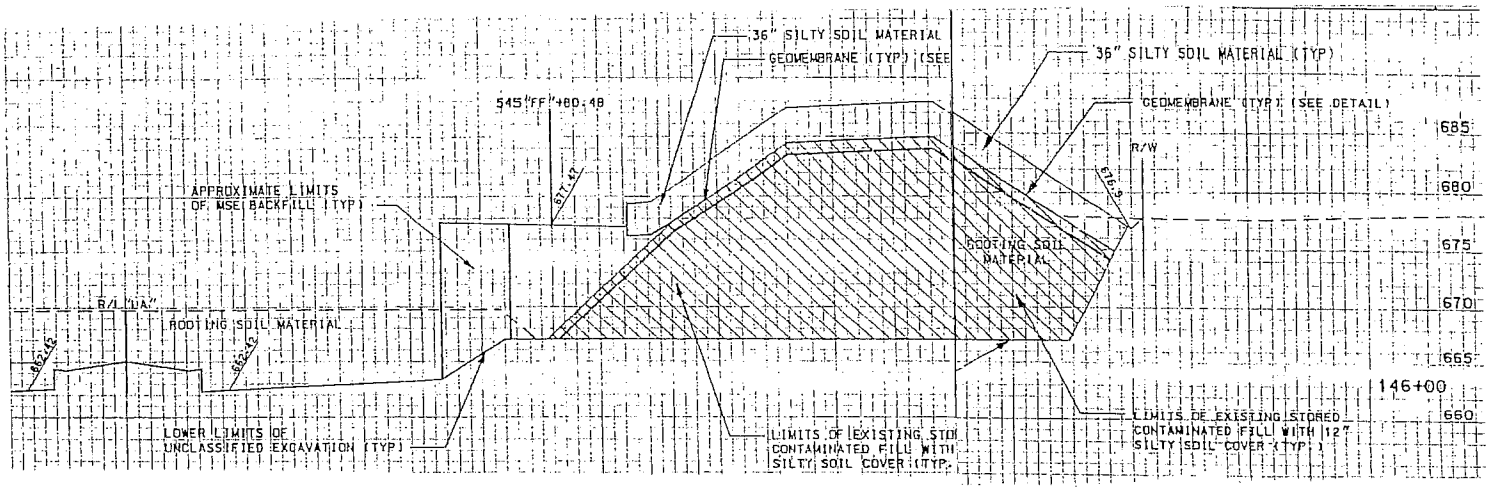


Figure 6

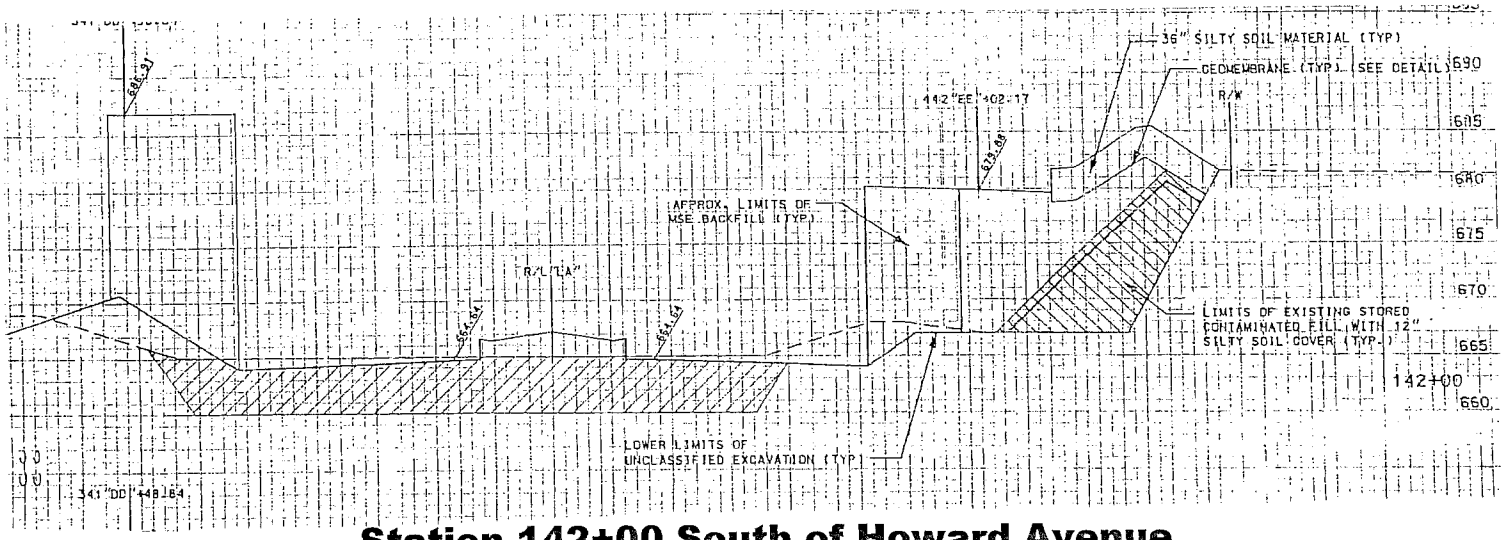
Reuse Areas with Residual Soil Contamination

STH 794 (Lake Parkway)
FID #241501150

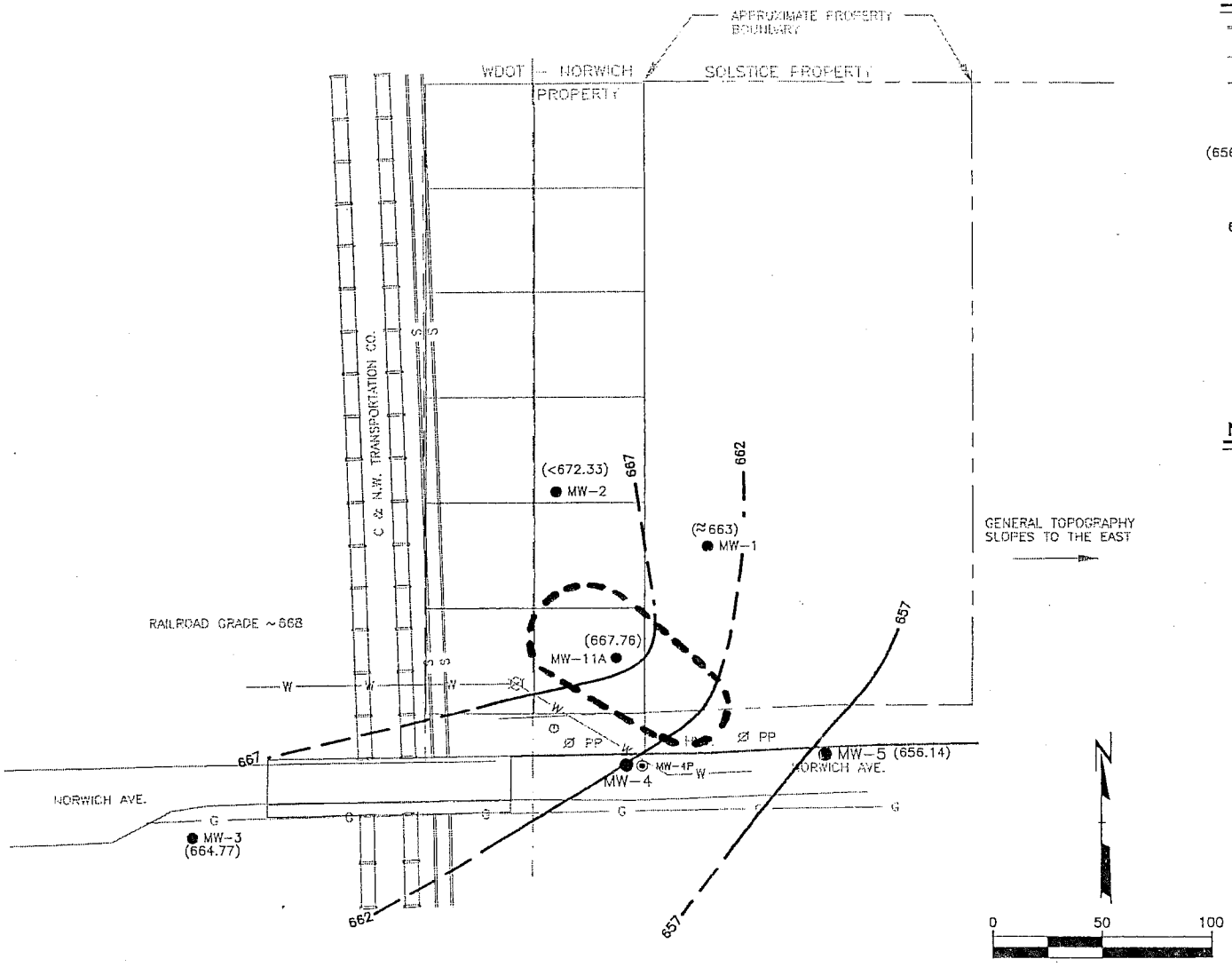
STH 794 (Lake Parkway)
Typical Cross-Sections of Reuse Areas
Figure 7



Station 146+00 North of Howard Avenue



Station 142+00 South of Howard Avenue



LEGEND

S	SEWAGE LINE
W	WATER LINE
G	GAS LINE
HYD.	HYDRANT
Ø PP	POWER POLE
(656.14) MW-5	MONITORING WELL LOCATION
MW-4P	PIEZOMETER LOCATION
657	GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 5FT.)
	Denotes approximate limits of TCE contamination in groundwater above NR 140 Enforcement Standards

NOTES

1. MONITORING WELL LOCATIONS ARE BASED ON SURVEYS PREFORMED BY RMT INC.
2. WATER LEVEL DATA BASED ON NOVEMBER 15, 1994 DATA.
3. WATER LEVEL IN MW-1 IS EXTRAPLATED FROM PREVIOUS GROUNDWATER ELEVATION DATA (SEE TEXT).

STH 794 (Lake Parkway)
WisDOT - Norwich and
WisDOT - Solstice Sites
Limits of Groundwater Contamination
of NR 140 Enforcement Standards

RMT INC.

DWN. BY:	RBN
APPROVED BY:	
DATE:	APRIL 1995
PROJ. #	10428.06
FILE #	0609

FIGURE 8

Plot File = P:\0609.PRF
Scale = 50000.000000
Plot Date = Mon Apr 10 15:03:39 1995

Table 1
Volatile Organic Compounds (VOCs) Laboratory Analysis Results[1] (all results are ug/kg)
1993 Investigation

Constituents	B-1 (5 - 7)	B-4 (2 - 4)	B-7 (4.5 - 6.5)	B-8 (2.5 - 4.5)	B-9 (10 - 12)	B-10 (5 - 7)	B-11 (2.5 - 4.5)	B-12 (7.5 - 9.5)	B-13 (2.5 - 4.5)	B-14 (4.5 - 6.5)	MW-1 (10 - 12)	MW-2 (5 - 7)	Universal Treatment Standards[2]
cis-1,2-Dichloroethene	ND	ND	1,000	4	ND	520	ND	ND	ND	ND	ND	470	NS
Trichloroethene	ND	ND	~~9,700~~	~~8,600~~	34	~~47,000~~	~~26,000~~	6.2	~~13,000~~	6.2	ND	~~21,000~~	6,000
Tetrachloroethene	ND	480	ND	19	ND	2,700	920	ND	ND	ND	ND	600	6,000
Acetone	ND	ND	ND	27	ND	3,900	ND	ND	ND	ND	ND	22,000	16,000
1,1,1-Trichloroethane	ND	ND	ND	3	ND	270	ND	ND	ND	ND	ND	220	6,000
Toluene	ND	ND	ND	ND	2.5	ND	ND	1.3	ND	ND	ND	ND	10,000

NOTES:
1 This table contains volatiles that were detected in one or more samples.
2 Universal treatment standards from the land disposal restrictions listed in 40 CFR 268.48.
ND Not detected
NS No standard promulgated
~~X~~ Denotes material treated in-situ for TCE subsequent to 1993 investigation. Refer to post treatment result (Table 10).

Table 2
Semivolatile Organic Compounds Laboratory Analysis Results [1]
1993 Investigation

Constituent	B-4 (4.5 - 6.5)	B-9 (10 - 12)	B-10 (5 - 7)	B-13 (5 - 7)	B-16 (2.5 - 4.5)	MW-2 (5 - 7)	Universal Treatment Standards[2]
Naphthalene	ND	ND	ND	ND	1,100	ND	5,600
2-Methylnaphthalene	ND	ND	ND	ND	560	ND	NS
Acenaphthene	ND	ND	110 Q	110 Q	920	ND	3,400
Dibenzofuran	ND	ND	ND	ND	1,100	ND	NS
Fluorene	ND	ND	200 Q	250 Q	980	ND	3,400
Phenanthrene	670	ND	1,300 Q	3,000	12,000	290 Q	5,600
Anthracene	230 Q	ND	390 Q	1,200	1,000	ND	3,400
Di-n-butylphthalate	520	ND	ND	ND	ND	330 Q	NS
Fluoranthene	1,200	ND	1,400 Q	5,400	10,000	660 Q	3,400
Pyrene	1,300	ND	1,000 Q	4,400	8,500	630	8,200
Benzo(a)anthracene	500	ND	550 Q	2,300	3,000	320 Q	3,400
Chrysene	540	ND	540 Q	2,100	3,600	380 Q	3,400
Benzo(b)fluoranthene	700	ND	480 Q	2,400	4,100	ND	6,800
Benzo(k)fluoranthene	410 Q	ND	320 Q	1,500	2,900	ND	6,800
Benzo(a)pyrene	490	ND	390 Q	1,800	3,300	ND	3,400
Indeno(1,2,3-cd)pyrene	ND	ND	ND	730	1,500	ND	3,400
Benzo(g,h,i)perylene	ND	ND	ND	750	1,500	ND	1,800

NOTES:
1 This table contains semivolatiles that were detected in one or more samples.
2 Universal treatment standards from the land disposal restrictions listed in 40 CFR 268.48.
ND Not detected
NS No standard promulgated

Table 2
Semivolatile Organic Compounds Laboratory Analysis Results [1]
1993 Investigation

Boring	Depth (feet)	Geology	Total Quantifiable Semivolatiles[1] (µg/kg)
B-4	4.5 - 6.5	Silt (fill)	9,920
B-9	10 - 12	Sand	ND[2]
B-10	5 - 7	Fly ash (fill)	3,700
B-13	5 - 7	Fly ash (fill)	25,580
B-16	2.5 - 4.5	Silt (fill)	55,500
MW-2	5 - 7	Fly ash (fill)	NQ[3]

NOTES:

1 Total of all quantifiable semivolatiles is presented. Additional semivolatiles may have been detected in the sample, but if they were not above the reporting limit, they have not been included. Laboratory data sheets for these analyses are contained in Appendix E.

2 No semivolatile compounds are detected.

3 No semivolatile compounds were presented above the reporting limit.

Table 3
Metals Laboratory Analysis Results
1993 Investigation

Boring	Depth (feet)	Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver	
		Total	TCLP	Total	TCLP	Total	TCLP	Total	TCLP	Total	TCLP	Total	TCLP	Total	TCLP	Total	TCLP
B-1	5 - 7	9.3	--	47	--	< 1.1	--	22	--	28	--	< 0.11	--	< 0.68	--	< 1.1	--
B-2	7.5 - 9.5	5.6	--	27	--	< 1.1	--	13	--	< 22	--	< 0.11	--	< 0.67	--	< 1.1	--
B-3	2.5 - 4.5	2.8	--	53	--	< 1.2	--	9.0	--	< 23	--	< 0.12	--	< 0.70	--	< 1.2	--
B-5	2- 4	6.8	--	62	--	< 1.1	--	15	--	< 22	--	< 0.11	--	< 0.67	--	< 1.1	--
B-6	2.5 - 4.5	14	--	110	--	< 1.2	--	95	--	27	--	0.19	--	4.0	--	< 1.2	--
B-7	2 - 4	25	--	190	--	< 1.5	--	**200**	< 0.011	< 30	--	0.42	--	12	--	< 1.5	--
B-8	2.5 - 4.5	17	--	70	--	< 1.2	--	**130**	< 0.01	30	--	< 0.12	--	2.5	--	< 1.2	--
B-9	10 - 12	5.8	--	20	--	< 1.2	--	7.2	--	26	--	< 0.12	--	< 0.74	--	< 1.2	--
B-10	7.5 - 9.5	41	--	220	--	< 1.5	--	**290**	< 0.011	54	--	0.34	--	13	--	< 1.5	--
B-11	5 - 7	25	--	130	--	< 1.4	--	**170**	< 0.011	< 29	--	0.29	--	7.5	--	< 1.4	--
B-12	15 - 17	6.0	--	17	--	< 1.1	--	3.8	--	< 21	--	< 0.11	--	< 0.63	--	< 1.1	--
B-13	5 - 7	11	--	44	--	< 1.2	--	**620**	< 0.01	< 24	--	0.18	--	2.7	--	< 1.2	--
B-14	7 - 9	2.9	--	8.1	--	< 1.1	--	4.2	--	< 22	--	< 0.11	--	< 0.66	--	< 1.1	--
B-15	12.5 - 14.5	3.4	--	9.2	--	< 1.1	--	5.2	--	< 22	--	< 0.11	--	< 0.67	--	< 1.1	--
B-16	5 - 7	36	--	150	--	1.6	--	**190**	< 0.01	< 32	--	0.33	--	9.7	--	< 1.6	--
B-17	4.5 - 6.5	15	--	80	--	< 1.3	--	43	--	< 26	--	0.15	--	5.5	--	< 1.3	--
MW-1	10 - 12	4.2	--	27	--	< 1.1	--	13	--	< 23	--	< 0.11	--	< 0.68	--	< 1.1	--
MW-2	5 - 7	17	--	190	--	< 1.2	--	**130**	0.76	**110**	< 0.21	0.26	--	8.2	--	< 1.2	--
MW-3	5 - 7	4.2	--	25	--	< 1.2	--	7.2	--	< 24	--	< 0.12	--	< 0.71	--	< 1.2	--
Universal Treatment Standard[1]		NS	5.0	NS	7.6	NS	0.69	NS	0.86	NS	0.37	NS	0.025	NS	0.16	NS	0.30

NOTES:
Total metals concentrations expressed as mg/kg. TCLP metals concentrations expressed as mg/L.
1 Universal treatment standards from the lead disposal restrictions listed in 40 CFR 268.48.
-- Not analyzed
NS No standard promulgated

Table 4
Polychlorinated Biphenyls (PCB) Laboratory Analysis Results
1993 Investigation

Boring	Geology	Depth (feet)	Total PCBs (mg/kg)[1]
B-1	Silt (fill)	5 - 7	50
B-2	Clay (fill)	0 - 2	5.8
B-3	Silt (fill)	2.5 - 4.5	ND
~~B-5~~	~~Silt~~	~~2 - 4~~	~~340~~
B-6	Fly Ash (fill)	2.5 - 4.5	ND
B-7	Silt/Fly Ash (fill)	2 - 4	ND[2]
B-8	Fly Ash (fill)	2.5 - 4.5	0.11
B-9	Sand	10 - 12	0.081
B-10	Fly Ash (fill)	7.5 - 9.5	0.089
B-11	Fly Ash (fill)	5 - 7	0.11
B-12	Sand	12.5 - 14.5	ND
B-13	Fly Ash (fill)	5 - 7	ND
B-14	Sand	7 - 9	0.077
B-15	Gravel	12.5 - 14.5	ND
B-16	Silt	10 - 12	ND
B-17	Silt	7 - 9	ND
MW-1	Silt	10 - 12	ND
MW-2	Fly Ash (fill)	5 - 7	79
MW-3	Silt	5 - 7	ND

NOTES:

1 PCB scan was performed on each sample. All detectable PCB concentrations were reported as Aroclor 1254, except for soil sample B-11, 5 - 7 in which the PCB concentration was reported as Aroclor 1260.

2 The detection limits for this sample were elevated.

ND Not Detected.

Denotes material excavated and disposed of at TSCA Landfill subsequent to 1993 investigation.

Table 5
Trichloroethylene (TCE) Field Screening Results
1993 Investigation

Boring	Sample Depth (feet)	Geology	TCE Headspace (ppm)	PID Headspace (instrument units as isobutylene)
B-1	~~0 - 2~~	~~Fill~~	~~0.10~~	~~<2~~
	2.5 - 4.5	Fill	BD	<2
	5 - 7	Fill	0.09	<2
	7.5 - 9.5	Native	BD	<2
	10 - 12	Native	BD	<2
B-2	0 - 2	Fill	0.04	<2
	2.5 - 4.5	Fill	BD	<2
	5 - 7	Fill	BD	<2
	7.5 - 9.5	Native	BD	<2
	10 - 12	Native	BD	<2
	12.5 - 14.5	Native	BD	<2
B-3	0 - 2	Fill	BD	<2
	2.5 - 4.5	Fill	BD	<2
	5 - 7	Fill	BD	<2
	7.5 - 9.5	Fill	BD	<2
	10 - 12	Fill	BD	<2
B-4	0 - 2	Fill	2.15	<2
	2 - 4	Fill	7.44	<2
	4.5 - 6.5	Fill	6.27	<2
	9.5 - 11.5	Native	2.24	NA
	12 - 14	Native	3.02	NA
B-5	~~0 - 2~~	~~Fill~~	~~1.98~~	~~<2~~
	2 - 4	Fill	2.90	<2
	4.5 - 6.5	Fill	2.44	<2
	7 - 9	Fill	2.61	NA
	9.5 - 11.5	Fill	BD	<2
B-6	~~0 - 2~~	~~Fill~~	~~0.43~~	~~<2~~
	2.5 - 4.5	Fill	0.23	<2
	5 - 7	Fill	0.16	<2
	7.5 - 9.5	Native	0.02	NA
	10 - 12	Native	BD	<2

Table 5
Trichloroethylene (TCE) Field Screening Results
1993 Investigation

Boring	Sample Depth (feet)	Geology	TCE Headspace (ppm)	PID Headspace (instrument units as isobutylene)
B-6 (contd)	12.5 - 14.5	Fill	BD	<2
B-7	0 - 2	Fill	~~7.39~~	~~<2~~
	2 - 4	Fill	~~7.39~~	~~<2~~
	4.5 - 6.5	Fill	~~7.82~~	~~12~~
	7 - 9	Fill	~~3.84~~	~~<2~~
	9.5 - 11.5	Fill	~~1.28~~	~~<2~~
	12 - 14	Fill	0.17	<2
B-8	0 - 2	Fill	~~18.19~~	~~<2~~
	2.5 - 4.5	Fill	~~27.28~~	~~NA~~
	5 - 7	Fill	~~19.32~~	~~<2~~
	7.5 - 9.5	Fill	~~12.50~~	~~NA~~
	10 - 12	Fill	~~11.94~~	~~<2~~
	12.5 - 14.5	Fill	6.82	16.9
B-9	0 - 2	Fill	0.24	<2
	2.5 - 4.5	Fill	0.97	<2
	5 - 7	Fill	2.84	<2
	7.5 - 9.5	Fill	5.26	<2
	10 - 12	Fill	5.54	<2
	12.5 - 14.5	Native	0.32	<2
B-10	0 - 2	Fill	~~6.54~~	~~NA~~
	2.5 - 4.5	Fill	~~16.34~~	~~16.9~~
	5 - 7	Fill	~~34.81~~	~~NA~~
	7.5 - 9.5	Fill	~~24.87~~	~~NA~~
	10 - 12	Fill	~~16.48~~	~~NA~~
	12.5 - 14.5	Fill	2.42	NA
	15 - 17	Native	1.53	NA
	17.5 -19.5	Native	1.42	<2
B-11	0 - 2	Fill	~~7.96~~	~~<2~~
	2.5 - 4.5	Fill	~~32.97~~	~~NA~~
	5 - 7	Fill	~~17.05~~	~~NA~~

Table 5
Trichloroethylene (TCE) Field Screening Results
1993 Investigation

Boring	Sample Depth (feet)	Geology	TCE Headspace (ppm)	PID Headspace (instrument units as isobutylene)
B-11 (contd)	7.5 - 9.5	Fill	~~8.53~~	~~NA~~
	10 - 12	Fill	~~16.48~~	~~NA~~
	12.5 - 14.5	Fill	9.66	NA
	15 - 17	Native	5.68	<2
	17.5 -19.5	Native	3.27	<2
B-12	2.5 - 4.5	Fill	0.99	<2
	5 - 7	Fill	1.28	<2
	7.5 - 9.5	Fill	3.13	<2
	10 - 12	Fill	3.41	<2
	12.5 - 14.5	Fill	2.56	<2
	15 - 17	Fill	3.48	<2
	17.5 -19.5	Native	3.69	<2
	20 - 22	Native	4.83	<2
B-13	0 - 2	Fill	~~3.98~~	~~NA~~
	2.5 - 4.5	Fill	~~27.85~~	~~NA~~
	5 - 7	Fill	~~29.84~~	~~NA~~
	7.5 - 9.5	Fill	~~17.62~~	~~NA~~
	10 - 12	Fill	4.87	NA
	12.5 - 14.5	Fill	1.14	NA
	15 - 17	Native	0.88	NA
B-14	0 - 2	Fill	2.16	NA
	2 - 4	Fill	3.95	NA
	4.5 - 6.5	Fill	3.18	NA
	7 - 9	Fill	3.74	NA
	9.5 - 11.5	Fill	3.14	NA
B-15	0 - 2	Fill	0.51	NA
	2.5 - 4.5	Fill	0.22	NA
	7.5 - 9.5	Fill	1.46	NA
	10 - 12	Fill	2.10	NA
	12.5 - 14.5	Fill	4.08	NA
	15 - 17	Fill	5.86	NA

Table 5
Trichloroethylene (TCE) Field Screening Results
1993 Investigation

Boring	Sample Depth (feet)	Geology	TCE Headspace (ppm)	PID Headspace (instrument units as isobutylene)
B-16	0 - 2	Fill	0.02	<2
	2.5 - 4.5	Fill	BD	843
	5 - 7	Fill	BD	NA
	7.5 - 9.5	Fill	--	NA
	10 - 12	Fill	0.08	NA
	12.5 - 14.5	Native	BD	NA
B-17	0 - 2	Fill	1.40	NA
	2 - 4	Fill	6.11	NA
	4.5 - 6.5	Fill	7.52	NA
	7 - 9	Fill	7.64	NA
	9.5 - 11.5	Fill	6.62	NA
	12 - 14	Fill	4.59	NA
MW-1	0 - 2	Fill	BD	NA
	2.5 - 4.5	Fill	0.49	NA
	5 - 7	Fill	0.32	<2
	7.5 - 9.5	Fill	0.42	<2
	10 - 12	Fill	1.63	<2
	12.5 - 14.5	Fill	0.58	<2
MW-2	0 - 2	Fill	~~5.93~~	~~<2~~
	2.5 - 4.5	Fill	~~22.78~~	~~7.2~~
	5 - 7	Fill	~~23.24~~	~~NA~~
	7.5 - 9.5	Fill	~~11.62~~	~~NA~~
	10 - 12	Fill	6.97	<2
	12.5 - 14.5	Native	0.02	<2
	15 - 17	Fill	BD	<2
MW-3	0 - 2	Fill	BD	<2
	2.5 - 4.5	Fill	BD	<2
	5 - 7	Fill	BD	<2
	7.5 - 9.5	Fill	BD	<2
	10 - 12	Fill	BD	<2
	12.5 - 14.5	Fill	BD	<2

Table 5
Trichloroethylene (TCE) Field Screening Results
1993 Investigation

Boring	Sample Depth (feet)	Geology	TCE Headspace (ppm)	PID Headspace (instrument units as isobutylene)
MW-3 (contd)	15 - 17	Fill	BD	<2
	17.5 - 19.5	Fill	BD	<2
	20 - 22	Fill	BD	<2

NOTES:
BD Below detection limits.
NA Not analyzed.
Denotes material treated in-situ for TCE subsequent to 1993 investigation. Refer to post treatment result (Table 10).

Denotes material excavated and disposed of at TSCA Landfill subsequent to 1993 investigation.

Table 6
Trichloroethylene (TCE) Field Screening and Laboratory Analysis Results
1993 Investigation

Boring	Depth (feet)	Geology	Screening Results			Laboratory Results
			TCE Headspace (µL/L)	TCE Compositional (µg/kg)	TCE TCLP Screen (mg/L)	TCE TCLP (mg/L)[1]
B-1	5 - 7	Fill	0.09	<1.1	NA	NA
B-4	2 - 4	Fill	7.44	3,500	NA	NA
B-7	4.5 - 6.5	Fill	~~7.82~~	~~9,700~~	~~NA~~	~~NA~~
B-8	2.5 - 4.5	Fill	~~27.28~~	~~8,600~~	~~NA~~	~~NA~~
B-9	10 - 12	Fill	5.54	34	NA	NA
B-10	0 - 2	Fill	~~6.54~~	~~NA~~	~~0.07~~	~~NA~~
	2.5 - 4.5	Fill	~~16.34~~	~~NA~~	~~1.2~~	~~NA~~
	5 - 7	Fill	~~34.81~~	~~47,000~~	~~1.6~~	~~1.4~~
	7.5 - 9.5	Fill	~~24.87~~	~~NA~~	~~1.2~~	~~NA~~
	10 - 12	Fill	~~16.43~~	~~NA~~	~~0.06~~	~~NA~~
	12.5 - 14.5	Fill	2.42	NA	0.01	NA
	15 - 17	Native	1.53	NA	<0.01	NA
	17.5 - 19.5	Native	1.42	NA	<0.01	NA
B-11	0 - 2	Fill	~~7.96~~	~~NA~~	~~0.05~~	~~NA~~
	2.5 - 4.5	Fill	~~32.97~~	~~26,000~~	~~0.67~~	~~0.50[2]~~
	5 - 7	Fill	~~17.05~~	~~NA~~	~~0.49~~	~~0.48[2]~~
	7.5 - 9.5	Fill	~~8.53~~	~~NA~~	~~0.11~~	~~NA~~
	12.5 - 14.5	Fill	9.66	NA	0.04	NA
B-12	7.5 - 9.5	Fill	3.13	6.2	NA	NA
B-13	0 - 2	Fill	~~3.98~~	~~NA~~	~~<0.01~~	~~NA~~
	2.5 - 4.5	Fill	~~37.58~~	~~13,000~~	~~0.69~~	~~0.56~~
	5 - 7	Fill	~~29.34~~	~~NA~~	~~1.14~~	~~1.6~~
	7.5 - 9.5	Fill	~~17.62~~	~~NA~~	~~0.03~~	~~NA~~
	10 - 12	Fill	4.82	NA	0.03	NA
	12.5 - 14.5	Fill	1.44	NA	0.02	NA
B-14	4.5 - 6.5	Fill	3.18	6.2	NA	NA
MW-1	10 - 12	Fill	1.63	<1.1	NA	NA
MW-2	5 - 7	Fill	~~23.24~~	~~21,000~~	~~NA~~	~~NA~~

NOTES:

1 TCLP results have not been corrected for matrix spike recoveries.

2 Because of the limited sample recovery and the multiple analyses, the laboratory used available sample volume for the analysis. See case narrative in Appendix E.

NA Not Analyzed.

~~X~~ Denotes material treated in-situ for TCE subsequent to 1993 investigation. Refer to post treatment result (Table 10).

Table 7
Diesel Range Organics (DRO) Laboratory Analysis Results
1993 Investigation

Boring	Depth (feet)	Geology	DRO (mg/kg)
B-1	5 - 7	Silt (fill)	<4.1
B-2	0 - 2	Clay (fill)	100
B-3	2.5 - 4.5	Silt (fill)	<4.8
~~B-5~~	~~2 - 4~~	~~Silt~~	~~340~~
B-6	2.5 - 4.5	Fly ash (fill)	<6.2
B-7	4.5 - 6.5	Silt/Fly ash (fill)	120
B-14	7 - 9	Sand	7.7
B-16	5 - 7	Fly ash (fill)	9.3
MW-1	10 - 12	Silt	<5.2
MW-3	5 - 7	Silt	<4.7

NOTES:

Denotes material excavated and disposed of at TSCA Landfill subsequent to 1993 investigation.

Table 8
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
October 1994 Investigation

Boring I.D.	Sample Depth (feet)	Soil Geology	Screening Results			Laboratory Results[4]
			PCB[1] (mg/kg)	TCE[2] (µL/L)	TCE-TCLP[3] (mg/L)	
X3-1	~~2.5-4.5~~	~~Fill~~	~~94~~	~~NR~~	~~NR~~	~~PCB-58~~
	5-7	Fill	ND	NR	NR	PCB-0.73
	10-12	Native	ND	NR	NR	PCB-<0.037
Y1-1	1-3	Fill	ND	BD	NR	
	3.5-5.5	Fill	ND	BD	NR	
	6-8	Fill/Native	ND	BD	NR	
	8.5-10.5	Native	ND	BD	NR	
	11-13	Native	ND	BD	NR	
Y2-1	1-3	Fill	ND	0.042	NR	
	3.5-5.5	Fill	ND	BD	NR	
	6-8	Fill	ND	BD	NR	
	8.5-10.5	Native	ND	BD	NR	
Y2-2	~~1-3~~	~~Fill~~	~~> 510~~	~~0.38~~	~~NR~~	
	3.5-5.5	Fill	7.6	0.19	NR	
	6-8	Fill	ND	0.08	NR	
	8.5-10.5	Native	ND	0.02	NR	
Y3-1	~~1-3~~	~~Fill~~	~~66~~	~~0.54~~	~~NR~~	~~PCB-120~~
	3.5-5.5	Fill	ND	0.44	NR	
	6-8	Fill	6.7	0.17	NR	
	8.5-10.5	Native	ND	0.40	NR	
Y4-1	~~1-3~~	~~Fill~~	~~ND~~	~~2.2~~	~~NR~~	
	3.5-5.5	Fill	ND	1.6	NR	
	6-8	Native	ND	1.2	NR	
	8.5-10.5	Native	ND	1.2	NR	PCB-0.39
	11-13	Native	ND	BD	NR	
Y4-2	5-7	Fill	ND	NR	NR	PCB-8.4
	7.5-9.5	Fill	4.1	NR	NR	PCB-7.0
	10-12	Native	ND	NR	NR	PCB-<0.037
Y5-1	1-3	Fill	990	~~2.0~~	~~NR~~	

Table 8
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
October 1994 Investigation

Boring I.D.	Sample Depth (feet)	Soil Geology	Screening Results			Laboratory Results[4]
			PCB[1] (mg/kg)	TCE[2] (µL/L)	TCE-TCLP[3] (mg/L)	
Y5-1 (contd)	3.5-5.5	Fill	520	~~2.3~~	~~NR~~	
	6-8	Fill	3.6	~~6.5~~	~~NR~~	
	8.5-10.5	Fill	ND	~~2.5~~	~~NR~~	
	11-13	Fill	ND	~~0.35~~	~~NR~~	
	13.5-15.5	Fill/Native	ND	BD	NR	
	16-18	Native	ND	BD	NR	
Y5-2	1-3	Fill	157	25	0.38	PCB-140
	3.5-5.5	Fill	35	52	1.2	PCB-0.24
	6-8	Fill	6.3	44	0.69	
	8.5-10.5	Fill	ND	35	0.29	TCLP-0.22
	11-13	Fill	ND	15	0.06	
	13.5-15.5	Fill	ND	11	0.04	
	16-18	Fill/Native	ND	1.8	NR	
	18.5-20.5	Native	ND	0.42	NR	
Y5-3	1-3	Fill	450	~~20~~	~~0.22~~	
	3.5-5.5	Fill	ND	~~27~~	~~0.81~~	
	6-8	Fill	8.6	~~33~~	~~0.33~~	~~TCLP-0.26~~
	8.5-10.5	Fill	3.3	~~16~~	~~0.05~~	
	11-13	Fill	ND	9.1	NR	
	13.5-15.5	Fill	6.4	0.32	NR	
	16-18	Native	ND	0.27	NR	
Y5-4	1-3	Fill	ND	0.12	NR	
	3.5-5.5	Fill	ND	0.08	NR	
	6-8	Fill	ND	0.18	NR	
	8.5-10.5	Fill	ND	0.04	NR	
	11-13	Fill	ND	0.06	NR	
	20-22	Native	ND	0.01	NR	
Y6-1	1-3	Fill	ND	~~22~~	~~0.28~~	
	3.5-5.5	Fill	ND	~~34~~	~~0.41~~	~~TCLP-0.38~~

Table 8
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
October 1994 Investigation

Boring I.D.	Sample Depth (feet)	Soil Geology	Screening Results			Laboratory Results[4]
			PCB[1] (mg/kg)	TCE[2] (µL/L)	TCE-TCLP[3] (mg/L)	
Y6-1 (contd)	6-8	Fill	ND	~~34~~	~~0.20~~	
	8.5-10.5	Fill	NR[5]	~~0.33~~	~~NR~~	
	11-13	Fill	ND	2.5	NR	
	13.5-15.5	Fill	ND	3.6	NR	
	16-18	Fill	ND	7.2	NR	
	18.5-20.5	Native	ND	0.07	NR	
Y6-2	1-3	Fill	ND	6.4	NR	
	3.5-5.5	Fill	4.5	3.4	NR	
	6-8	Fill	ND	3.7	NR	
	8.5-10.5	Fill	ND	2.5	NR	
	11-13	Fill	ND	3.5	NR	
	13.5-15.5	Fill	ND	3.8	NR	
Y6-2	16-18	Fill	ND	9.0	NR	
	18.5-20.5	Native	ND	0.12	NR	
Z1-1	1-3	Fill	ND	BD	NR	
	3.5-5.5	Fill	ND	BD	NR	
	6-8	Native	ND	BD	NR	
	11-13	Native	ND	BD	NR	
Z2-1	1-3	Fill	10	1.1	NR	
	3.5-5.5	Fill	9.9	1.4	NR	
	6-8	Fill/Native	4.9	0.40	NR	PCB-0.17
	8.5-10.6	Native	ND	0.25	NR	
Z3-1	1-3	Fill	27	1.2	NR	PCB-48
	3.5-5.5	Fill	ND	0.89	NR	
	6-8	Fill	ND	0.62	NR	
	8.5-10.5	Fill	ND	1.5	NR	
	11-13	Fill/Native	ND	0.33	NR	
Z4-1	1-3	Fill	ND	12	0.62	TCLP-0.16
	3.5-5.5	Fill	ND	12	0.27	TCLP-0.22
	6-8	Fill	ND	5.6	NR	

Table 8
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
October 1994 Investigation

Boring I.D.	Sample Depth (feet)	Soil Geology	Screening Results			Laboratory Results[4]
			PCB[1] (mg/kg)	TCE[2] (μL/L)	TCE-TCLP[3] (mg/L)	
Z4-1 (contd)	8.5-10.5	Fill	ND	4.6	NR	
	13.5-15.5	Native	ND	0.15	NR	
	16-18	Native	ND	BD	NR	
Z4-2	1-3	Fill	21	2.0	NR	
	3-5	Fill	16	2.2	NR	PCB-15
Z5-1	1-3	Fill	130	~~7.2~~	~~NR~~	
	3.5-5.5	Fill	140	~~8.2~~	~~NR~~	
	6-8	Fill	11	~~8.4~~	~~NR~~	
	8.5-10.5	Fill	ND	~~6.4~~	~~NR~~	
	11-13	Fill	ND	~~6.8~~	~~NR~~	
	13.5-15.5	Fill/Native	ND	0.04	NR	
	16-18	Native	ND	BD	NR	
Z5-2	1-3	Fill	ND	5.8	NR	
	3.5-5.5	Fill	ND	6.2	NR	
	6-8	Fill	ND	16	0.08	
	8.5-10.5	Fill	ND	11.1	0.01	
	11-13	Fill	ND	10	0.02	
	13.5-15.5	Native	ND	0.86	NR	
Z5-3	1.5-2	Fill	19	~~0.99~~	~~NR~~	PCB-4.1
	4-5	Fill	9	~~2.3~~	~~NR~~	
Z6-1	1-3	Fill	2.5	2.2	NR	
	3.5-5.5	Fill	3.8	1.6	NR	
	6-8	Fill	ND	1.2	NR	
	8.5-10.5	Fill	ND	1.5	NR	
	11-13	Fill	ND	3.1	NR	
	13.5-15.5	Native	ND	0.12	NR	
MW-4P	1-3	Fill	ND	1.1	NR	
	3.5-5.5	Fill	ND	1.3	NR	
	6-8	Fill	ND	1.8	NR	
	8.5-10.5	Fill	ND	2.5	NR	

Table 8
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
October 1994 Investigation

Boring I.D.	Sample Depth (feet)	Soil Geology	Screening Results			Laboratory Results[4]
			PCB[1] (mg/kg)	TCE[2] (μL/L)	TCE-TCLP[3] (mg/L)	
MW-4P (contd)	11-13	Fill	ND	4.3	NR	
	13.5-15.5	Fill	ND	1.9	NR	
	16-18	Native	ND	3.4	NR	
	18.5-20.5	Native	ND	3.8	NR	
	21-23	Native	ND	2.8	NR	
	23.5-25.5	Native	ND	BD	NR	
MW-5	1-3	Fill	ND	BD	NR	
	3.5-5.5	Fill	ND	0.02	NR	
	6-8	Fill	ND	0.06	NR	
	8.5-10.5	Native	ND	0.03	NR	
	11-13	Native	ND	0.02	NR	
	13.5-15.5	Native	ND	BD	NR	
	16-18	Native	ND	0.40	NR	

NOTES:

1 PCB immunoassay analysis.
2 Soil headspace analysis by portable GC.
3 TCLP leachate headspace analysis by portable GC.
4 PCB results in mg/kg; TCLP-TCE results in mg/L.
5 Insufficient sample volume to perform PCB analysis

ND Not detected. Samples were analyzed using standards with an effective working range of 2.5 to 50 mg/kg. Quantitation less than 2.5 mg/kg was considered unreliable. Therefore, the estimated quantitation limit is approximately 2.5 mg/kg, and all samples exhibiting concentrations less than that have been qualified as "ND."

BD Below detection. Samples were analyzed using maximum instrument sensitivity, and no detections were observed.
NR Analysis not required.
ND Not detected.
Denotes material treated in-situ for TCE subsequent to 1993 investigation. Refer to post treatment result (Table 10).

Denotes material excavated and disposed of at TSCA Landfill subsequent to 1993 investigation.

Table 9
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
February 1995 Investigation

Boring 1D	Sample Depth	Soil Geology	Screening Results		Laboratory[3] Result
			PCB[1] (mg\kg)	TCE[2] (µL/L)	
V1-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Fill	ND	BD	
	8.5-10.5	Fill	ND	BD	
	11-13	Native	ND	BD	
	13.5-15.5	Native	ND	BD	
	16-18	Native	ND	BD	
V2-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Fill	ND	BD	
	8.5-10.5	Fill	ND	BD	
	11-13	Fill	ND	BD	
V3-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Native	ND	BD	
V4-1	1-3	Fill	ND	BD	
	3.5-5.5	Native	ND	BD	
	6-8	Native	ND	BD	
V5-1	1-3	Fill	ND	BD	
	3.5-5.5/dup	Fill	ND/ND	BD/BD	
	6-8	Fill	ND	BD	
	8.5-10.5	Native	ND	BD	
V6-1	1-3	Fill	ND	BD	
	3.5	Fill	ND	BD	
	6-8	Fill	ND	BD	
	8.5-10.5	Fill	ND	BD	
	11-13	Native	ND	BD	
	13.5-15.5	Native	ND	BD	
W1-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	

Table 9
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
February 1995 Investigation

Boring 1D	Sample Depth	Soil Geology	Screening Results		Laboratory[3] Result
			PCB[1] (mg\kg)	TCE[2] (µL/L)	
W1-1 (contd)	6-8	Native	ND	BD	
W2-1	1-3	Fill	ND	BD	
	3.5-5.5	Native	ND	BD	
W3-1	1-3	Fill	ND	BD	
	3.5-5.5	Native	ND	BD	
	6-8	Native	ND	BD	
	8.5-10.5	Native	ND	BD	
W4-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Fill	ND	BD	
	8.5-10.5	Native	ND	BD	
W5-1	1-3	Fill	ND	~~BD~~	
	3.5-5.5	Fill	ND	~~BD~~	
	6-8	Fill	ND	~~BD~~	
	8.5-10.5	Fill	ND	~~BD~~	
	11-13	Fill	ND	BD	
	13.5-15.5	Native	ND	BD	
W6-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Fill	ND	BD	
	11-13	Fill	ND	BD	
	13.5-15.5	Native	ND	BD	
	16-18	Native	ND	BD	
X1-1	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Native	ND	BD	
X1-2	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Native	ND	BD	
X2-1	1-3/dup	Fill	ND/ND	BD/BD	
	3.5-5.5	Native	ND	BD	

Table 9
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
February 1995 Investigation

Boring ID	Sample Depth	Soil Geology	Screening Results		Laboratory[3] Result
			PCB[1] (mg\kg)	TCE[2] (µL/L)	
X2-1 (contd)	6-8	Native	ND	BD	
	8.5-10.5	Native	ND	BD	
X3-2	1-3	Fill	ND	BD	
	3.5-5.5	Fill	ND	BD	
	6-8	Native	ND	BD	
	8.5-10.5	Native	ND	BD	
	11-13	Native	ND	BD	
X3-3	1-3	Fill	ND	0.05	
	3.5-5.5	Fill	ND	BD	
	6-8	Native	ND	BD	
X4-1	1-3/dup	Fill	ND/ND	0.03	
	3.5-5.5	Fill	ND	BD	
	6-8	Fill	ND	0.04	
	8.5-10.5	Fill	ND	BD	
	11-13	Native	ND	BD	
X4-2	~~1-3~~	~~Fill~~	~~7.83~~	~~1.2~~	~~PCB = 55 mg/kg~~
	3.5-5.5/dup	Fill	ND/ND	1.2	
	6-8	Fill	ND	0.13	
	8.5-10.5	Native	ND	0.05	
	11-13	Native	ND	BD	
X5-1	1-3	Fill	ND	~~BD~~	
	3.5-5.5	Fill	ND	~~0.15~~	
	6-8	Fill	ND	~~0.06~~	
	8.5-10.5	Fill	ND	~~0.08~~	
	11-13	Fill	ND	0.25	
	13.5-15.5	Native	ND	BD	
X5-2	1-3	Fill	~~ND~~	~~1.3~~	
	3.5-5.5	Fill	~~ND~~	~~6.4~~	~~TCLP <0.1 mg/L~~
	6-8	Fill	~~ND~~	~~8.4~~	~~TCLP <0.1 mg/L~~

Table 9
Polychlorinated Biphenyls (PCBs) and Trichloroethylene (TCE)

Field Screening and Laboratory Analysis Results
February 1995 Investigation

Boring ID	Sample Depth	Soil Geology	Screening Results		Laboratory[3] Result
			PCB[1] (mg\kg)	TCE[2] (µL/L)	
X5-2 (contd)	8.5-10.5	Fill	~~ND~~	~~3.5~~	
	11-13	Fill	ND	1.6	
	13.5-15.5	Native	ND	BD	
X6-1	1-3	Fill	~~ND~~	~~BD~~	
	3.5-5.5	Fill	~~ND~~	~~0.06~~	
	6-8	Fill	~~ND~~	~~BD~~	
	8.5-10.5	Fill	~~ND~~	~~0.42~~	
	11-13	Fill	ND	0.26	
	13.5-15.5	Fill	ND	0.16	
	16-18	Native	ND	BD	
X6-2	1-3	Fill	ND	2.0	
	3.5-5.5	Fill	ND	19.1	TCLP 0.21 mg/L
	8.5-10.5	Fill	ND	6.2	
	11-13	Fill	ND	7.7	TCLP <0.1 mg/L
	13.5-15.5	Native	ND	7.04	TCLP <0.1 mg/L
	18.5-20.5	Native	ND	2.6	
HX2-2	~~2~~	~~Fill~~	~~ND~~	~~0.23~~	
HX3-4	~~2.5/dup~~	~~Fill~~	~~11.3/22.7~~	~~0.64~~	~~PCB = 5.6 mg/kg~~
HX5-3	4.0	Fill	ND	0.48	

NOTES:

1 PCB immunoassay analysis.

2 Soil headspace analysis by portable GC.

3 PCB results in mg/kg; TCLP-TCE results in mg/L; blank space indicates sample was not analyzed.

ND Not detected. Samples were analyzed using standards with an effective working range of 2.5 to 50 mg/kg. Quantitation less than 2.5 mg/kg was considered unreliable. Therefore, the estimated quantitation limit is approximately 2.5 mg/kg, and all samples exhibiting concentrations less than that have been qualified as "ND."

BD Below detection. Samples were analyzed using maximum instrument sensitivity, and no detections were observed.

☒ Denotes material treated in-situ for TCE subsequent to 1993 investigation. Refer to post treatment result (Table 10).

▭ Denotes material excavated and disposed of at TSCA Landfill subsequent to 1993 investigation.

Table 10
Summary of TCE Treatment
Solstice and WisDOT-Norwich Remediation
September 17 – November 1, 1996
(all units in mg/L, unless otherwise noted)

Lift	North Area					South Area				
	Initial Elevation[1]	Final Elevation[1]	Thickness of Treatment (ft.)	TCLP-TCE Results #1	TCLP-TCE Results #2	Initial Elevation[1]	Final Elevation[1]	Thickness of Treatment (ft.)	TCLP-TCE Results #3	TCLP-TCE Results #4
A	99.8	99.0	0.8	< 0.10	< 0.10	99.4	99.0	0.4	< 0.10	< 0.10
B	99.0	98.0	1.0	0.12	< 0.10	99.0	98.0	1.0	< 0.10	< 0.10
C	98.0	97.0	1.0	0.17	<0.10	98.0	97.0	1.0	0.11	< 0.10
D	97.0	96.0	1.0	0.32	< 0.10	97.0	96.0	1.0	0.42	0.22
E	96.0	95.0	1.0	0.22	0.18	96.0	95.0	1.0	0.21	0.15
F[2]	95.0	94.0	1.0	0.20	0.16	95.0	--	1.0	0.74	0.49
						--	--	1.0	0.52	0.51
						--	94.0	1.0	0.26	0.32
G[2]	94.0	93.0	1.0	0.26	0.28	94.0	--	1.0	0.69	0.93
						--	93.0	1.0	0.36	0.48
H	93.0	92.0	1.0	0.12	0.12	93.0	92.0	1.0	0.21	0.39
I	92.0	91.0	1.0	< 0.10	< 0.10	92.0	91.0	1.0	< 0.10	< 0.10
J	91.0	90.0	1.0	< 0.10	< 0.10	91.0	90.0	1.0	< 0.10	< 0.10
K[3]	90.0	--	No treatment	< 0.10	< 0.10	90.0	--	No treatment	< 0.10	< 0.10

NOTES:

1 Elevation is referenced to a site-specific datum. Elevations at same horizontal location for each lift.

2 The south area of Cell F, and the south area of Cell G, required more than one round of treatment before the TCE concentrations were reduced to acceptable levels.

3 Samples collected from lift K were collected of untreated fill/soil to demonstrate that additional treatment and excavation was not warranted.

Table 11
Summary of Groundwater Elevations

Well ID	Date Installed	Measurement Date	Reference Elevation Top of PVC (feet above M.S.L.)	Depth to Water[1] feet)	Water Elevation (feet M.S.L.)
MW1	2/02/93	2/26/93	689.68	26.26	663.42
		3/18/93		25.93	664.05
		11/15/94		> 17.35[2]	≈ 663[3]
		2/15/95		> 23.64	> 666.04
MW2	2/02/93	2/26/93	690.79	DRY	--
		3/19/93		26.09	664.70
		11/15/94		> 17.80[2]	> 672.99
		2/15/95		> 23.80	> 666.91
MW3	2/04/93	2/26/93	688.94	24.91	664.03
		3/18/93		24.80	664.14
		11/15/94		24.17	664.77
		2/15/95		Not measured	--
MW4	10/11/94	11/15/94	682.11	29.16[4]	642.95[4]
		2/15/95		24.79	657.32
MW4P	10/10/94	11/15/94	681.48	46.23[4]	635.25[4]
		2/15/95		31.93	49.55
MW5	10/11/94	11/15/94	672.82	16.68	656.14
		2/15/95		16.65	656.17
MW11A	5/30/91	2/26/93	689.41	21.11	668.30
		3/18/93		21.27	668.14
		11/15/94		21.65	667.76
		2/15/95		21.95	667.46

NOTES:
1 Measurements taken from reference elevation, top of PVC.
2 MW1 and MW2 appear to have been filled and/or vandalized.
3 Extrapolated data; see text, p. 13.
4 MW4 and MW4P may not be at equilibrium elevations.

Table 12
Groundwater Sample Results

VOC (units in μg/L)

Parameter	MW-5	MW-11A		NR 140 Standards	
	10/20/94	2/26/93	10/20/94	ES	PAL
1,1-Dichloroethane	< 1.0	18	24	850	85
cis-1,2-Dichloroethene	< 1.0	9.1	12	--	--
1,1,1-Trichloroethane	< 1.0	6.8	8.6	200	40
Trichloroethene	4.0	**11**	**21**	5	2

NOTES:
1. MW-1, MW-2, MW-4, and MW-4P were not sampled on 10/20/94.
2. MW-3 has had no detections in three rounds of sampling.
3. Only VOCs that were detected using EPA method 8021 are shown in this table.

Groundwater Sample Results for Trace Elements (units in μg/L)

Parameter	Well Number					NR 140 Standards	
	MW-3		MW-5	MW-11			
	3/93	10/94	10/94	3/93	10/94	ES	PAL
Arsenic	4.0	< 3.0	< 3.0	< 3.0	< 3.0	50	5
Barium	230	210	160	78	52	1,000	200
Cadmium	< 0.3	< 5.0	< 5.0	< 0.3	< 5.0	10	1
Chromium	< 10	< 10	< 10	< 10	< 10	50	5
Lead	< 3.0	< 200	< 200	< 3.0	< 200	50	5
Mercury	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	2	0.02
Selenium	< 3.0	< 6	17	6.3	< 6.0	10	1
Silver	< 1.0	< 10	< 10	< 1.0	< 10	50	10

NOTE:
MW-1, MW-2, MW-4, and MW-4P were not sampled on 10/20/94.

744 Heartland Trail 53717-1934
P.O. Box 8923 53708-8923
Madison, WI
Telephone: 608-831-4444
Fax: 608-831-3334
www.rmtinc.com

October 19, 2006

Mr. Jeff Laskowski
Highway Superintendent
City of St. Francis
4235 South Nicholson Avenue
St. Francis, WI 53235

Ms. Melinda Dejewski
City Engineer
City of St. Francis
4235 South Nicholson Avenue
St. Francis, WI 53235

Ms. Sharlene TeBeest
Wisconsin Department of Transportation
4802 Sheboygan Avenue
P.O. Box 7965
Madison, WI 53707-7965

Subject: Notification of Contamination in the STH 794 (Lake Parkway) Right-of-Way, WisDOT-Solstice Site, between Norwich Avenue and Tripoli Avenue, St. Francis, Wisconsin

Dear Mr. Laskowski, Ms. Dejewski, and Ms. TeBeest:

The Wisconsin Department of Natural Resources (WDNR) closed the above-referenced site subject to the WisDOT filing a GIS Registry. Soil contaminated with low-level volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), heavy metals, and petroleum was reused as fill for construction of screening berms and embankments on the east side of STH 794 (Lake Parkway) at locations indicated on the attached site map (Figure 1) and typical cross-sections (Figure 2). In addition, groundwater contaminated with VOCs is present north of Norwich Avenue, as indicated on the attached Figure 3 at the concentrations and depths indicated on the attached tables. For that reason, we are providing you with notification of the presence of these impacts in accordance with NR 726.05(2)(b)4. The regulation states that "the town clerk, and the municipal department or state agency that is responsible for maintaining the street or highway have been given written notification of the presence of residual soil and groundwater contamination within the right-of-way."

No action is required at this time by the City or State; however, if excavations of the cap over the contaminated soil are necessary, the cap shall be replaced in kind in accordance with the attached Maintenance Plan for Barrier Cap. Contaminated soil excavated shall be disposed of as required by regulations.

Please keep this letter on file as a reminder to personnel who may be conducting excavations at this location in the future that contamination is present.

If you have any questions, please call me, at (608) 662-5248.

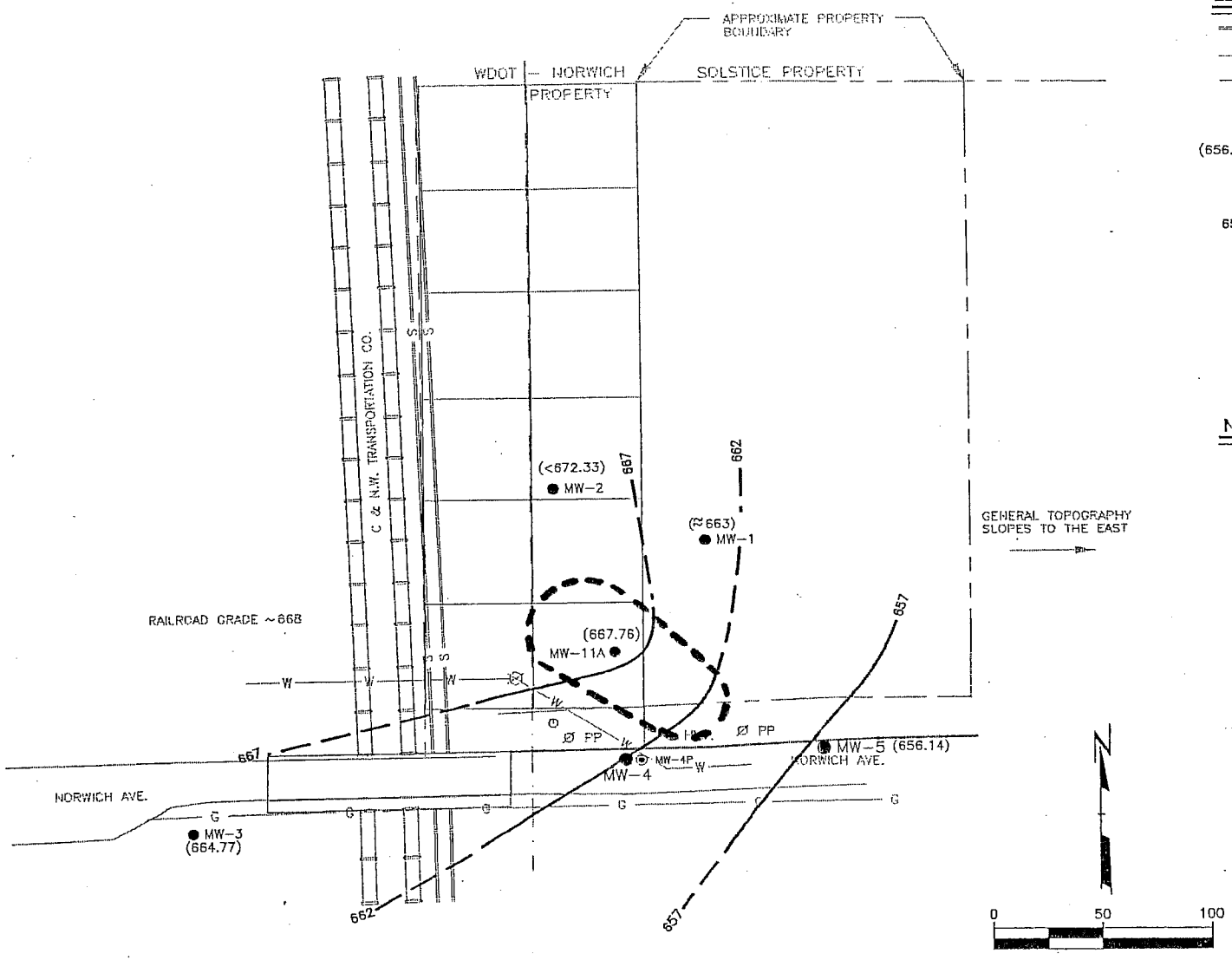
Sincerely,

RMT, Inc.

Richard P. Fish
Vice President, Midwest Region

Attachments: Figure 1 – Site Location Map of Reuse Area
Figure 2 – Typical Cross Sections of Reuse Areas
Figure 3 – Location of Groundwater Contamination
Tables – Depth to Groundwater and Nature of Groundwater Contamination
Maintenance Plan for Barrier Cap
Wisconsin Department of Transportation (WisDOT) Notification Form

cc: Brenda Boyce, WDNR
Ken Wade, WisDOT Southeast Region
Bob Pearson, WisDOT Bureau of Equity and Environmental



LEGEND

S	SEWAGE LINE
W	WATER LINE
G	GAS LINE
HYD.	HYDRANT
Ø PP	POWER POLE
(656.14) MW-5	MONITORING WELL LOCATION
MW-4P	PIEZOMETER LOCATION
657	GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 5FT.)
	Denotes approximate limits of TCE contamination in groundwater above NR 140 Enforcement Standards

NOTES

1. MONITORING WELL LOCATIONS ARE BASED ON SURVEYS PREFORMED BY RMT INC.
2. WATER LEVEL DATA BASED ON NOVEMBER 15, 1994 DATA.
3. WATER LEVEL IN MW-1 IS EXTRAPLATED FROM PREVIOUS GROUNDWATER ELEVATION DATA (SEE TEXT).

STH 794 (Lake Parkway)
WisDOT - Norwich and
WisDOT - Solstice Sites
Limits of Groundwater Contamination
of NR 140 Enforcement Standards

RMT INC.

DWN. BY:	RBN
APPROVED BY:	
DATE:	APRIL 1995
PROJ. #	10428.06
FILE #	0609

FIGURE 3

Plot File = P:\0609.PRF
Scale = 50000.000000
Plot Date = Mon Apr 10 15:03:39 1995

Summary of Groundwater Elevations

Well ID	Date Installed	Measurement Date	Reference Elevation Top of PVC (feet above M.S.L.)	Depth to Water[1] feet)	Water Elevation (feet M.S.L.)
MW1	2/02/93	2/26/93	689.68	26.26	663.42
		3/18/93		25.93	664.05
		11/15/94		> 17.35[2]	≈ 663[3]
		2/15/95		> 23.64	> 666.04
MW2	2/02/93	2/26/93	690.79	DRY	--
		3/19/93		26.09	664.70
		11/15/94		> 17.80[2]	> 672.99
		2/15/95		> 23.80	> 666.91
MW3	2/04/93	2/26/93	688.94	24.91	664.03
		3/18/93		24.80	664.14
		11/15/94		24.17	664.77
		2/15/95		Not measured	--
MW4	10/11/94	11/15/94	682.11	29.16[4]	642.95[4]
		2/15/95		24.79	657.32
MW4P	10/10/94	11/15/94	681.48	46.23[4]	635.25[4]
		2/15/95		31.93	49.55
MW5	10/11/94	11/15/94	672.82	16.68	656.14
		2/15/95		16.65	656.17
MW11A	5/30/91	2/26/93	689.41	21.11	668.30
		3/18/93		21.27	668.14
		11/15/94		21.65	667.76
		2/15/95		21.95	667.46

NOTES:

1 Measurements taken from reference elevation, top of PVC.

2 MW1 and MW2 appear to have been filled and/or vandalized.

3 Extrapolated data; see text, p. 13.

4 MW4 and MW4P may not be at equilibrium elevations.

Groundwater Sample Results

VOC (units in µg/L)

Parameter	MW-5	MW-11A		NR 140 Standards	
	10/20/94	2/26/93	10/20/94	ES	PAL
1,1-Dichloroethane	< 1.0	18	24	850	85
cis-1,2-Dichloroethene	< 1.0	9.1	12	--	--
1,1,1-Trichloroethane	< 1.0	6.8	8.6	200	40
Trichloroethene	4.0	11	21	5	2

NOTES:
1. MW-1, MW-2, MW-4, and MW-4P were not sampled on 10/20/94.
2. MW-3 has had no detections in three rounds of sampling.
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Groundwater Sample Results for Trace Elements (units in µg/L)

Parameter	Well Number					NR 140 Standards	
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Chromium	< 10	< 10	< 10	< 10	< 10	50	5
Lead	< 3.0	< 200	< 200	< 3.0	< 200	50	5
Mercury	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	2	0.02
Selenium	< 3.0	< 6	17	6.3	< 6.0	10	1
Silver	< 1.0	< 10	< 10	< 1.0	< 10	50	10

NOTE:
MW-1, MW-2, MW-4, and MW-4P were not sampled on 10/20/94.

Notification of Contamination in the Right-of-Way

Provide WisDOT with the following information VIA E-MAIL to sharlene.tebeest@dot.state.wi.us

County: Milwaukee
Highway: STH 794 (Lake Parkway)
Site Name: WisDOT - Solstice Site
Site Address: Lake Parkway (North & South of Howard Avenue), St. Francis, WI
BRRTS Number: N/A
PECFA Number: N/A
FID Number: 241501150

Owner's Name: WisDOT
Owner's Address: 4802 Sheboygan Avenue, Madison, WI 53707-7965

Consulting Firm: RMT, Inc.
Consultant Contact: Richard Fish
Consultant Address: 744 Heartland Trail, Madison, WI 53717-1934
Consultant Phone#: (608) 662-5248 Fax #: (608) 831-3334 E-mail: dick.fish@rmtinc.com

Soil Contamination: ☒ yes ☐ no
Depth to Contaminated Soil: approx. 4 feet
Vertical Extent of Contaminated Soil: from 4 feet to 18 feet below ground surface
Groundwater Contamination: ☒ yes ☐ no
Depth to Water Table: approx. 25 feet

Describe the type(s) of contamination present:
Soil: petroleum, volatile organic compounds (VOCs), PCBs
Groundwater: VOCs, TCE

Attachments:

- Figure 1: Site Location Map – Reuse Areas with Residual Soil Contamination
- Figure 2: Typical cross-sections of reuse areas with residual soil contamination and geomembrane/clean soil cover
- Figure 3: Location of Groundwater Contamination above NR 140 Enforcement Standards
- Table: Depth to Groundwater and Nature of Groundwater Contamination
- Maintenance Plan for Barrier Cap