Institutional Control Audit Site

The documentation contained within was collected by the WDNR Project Manager from existing documentation contained in the case file for audit purposes.

This case was closed by the WDNR prior to the existence of GIS Registry submittal requirements being in place.

Certain documents that are currently required in ch. NR 726, Wis. Adm. Code, for inclusion on the GIS Registry may therefore be unavailable.

GIS REGISTRY
Cover Sheet

July, 2008
(RR 5367)

Source Property Information

CLOSURE DATE: 04/19/1999

BRRTS #: **02-49-000526**

FID #: NA

ACTIVITY NAME: NORTHWEST WISC ELECTRIC CO

DATCP #: NA

PROPERTY ADDRESS: 200 ASH STREET

COMM #: NA

MUNICIPALITY: FREDERIC

PARCEL ID #: 126-00350-0000

***WTM COORDINATES:**

X: **327937** Y: **578636**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

- (●) Approximate Center Of Contaminant Source
- ( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

- [x] Groundwater Contamination > ES *(236)*
  - [ ] Contamination in ROW
  - [ ] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*

- [x] Soil Contamination > *RCL or **SSRCL *(232)*
  - [ ] Contamination in ROW
  - [ ] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*

Land Use Controls:

- [ ] Soil: maintain industrial zoning *(220)*

  *(**note:** soil contamination concentrations between residential and industrial levels)*

- [x] Structural Impediment *(224)*
- [ ] Site Specific Condition *(228)*
- [ ] Cover or Barrier *(222)*

  *(**note:** maintenance plan for groundwater or direct contact)*

- [ ] Vapor Mitigation *(226)*
- [ ] Maintain Liability Exemption *(230)*

  *(**note:** local government or economic development corporation)*

Monitoring wells properly abandoned? *(234)*

(●) Yes ( ) No ( ) N/A

** Residual Contaminant Level*
***Site Specific Residual Contaminant Level*

GIS REGISTRY INFORMATION

SITE NAME:	**NORTHWEST WISC ELECTRIC CO**
BRRTS #:	**02-49-000526** — **FID # (**if appropriate**): NA**
COMMERCE # (if appropriate**):**	**NA**
CLOSURE DATE:	**04/19/1999**
STREET ADDRESS:	**200 ASH STREET**
CITY:	**FREDERIC**
SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection)**:**	**X= 327937** **Y= 578636**

CONTAMINATED MEDIA:	Groundwater [ ]	Soil [ ]	Both [X]
OFF-SOURCE GW CONTAMINATION >ES:	[ ] **Yes**	[X] **No**	
OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL):	[ ] **Yes**	[X] **No**	
CONTAMINATION IN RIGHT OF WAY:	[ ] **Yes**	[X] **No**	

DOCUMENTS NEEDED:

Closure Letter, and any conditional closure letter or denial letter issued	X
Copy of any maintenance plan referenced in the final closure letter.	NA
Copy of (soil or land use) deed notice *if any required as a condition of closure*	X
Copy of most recent deed, including legal description, for all affected properties	
Certified survey map or relevant portion of the recorded plat map (*if referenced in the legal description*) for all affected properties	
County Parcel ID number, *if used for county* , for all affected properties **PIN: 126-00350-0000**	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.**	
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**)**	X
RP certified statement that legal descriptions are complete and accurate	NA
Copies of off-source notification letters (if applicable)	NA
Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW)	NA

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
William H. Smith, Regional Director

NORTHERN REGIONAL OFFICE
810 West Maple Street
Spooner, WI 54801
TELEPHONE 715-635-2101
FAX 715-635-4105
TDD 715-635-4001

March 10, 1999

FILE REF: 02-49-000526

Mr. John Dahlberg
Northwest Wisconsin Electric Co.
318 East Madison Ave.
Grantsburg, WI 54840

Re: Frederic Generating Plant Petroleum - Site Closure

Dear Mr. Dahlberg:

The Department of Natural Resources provided a notice to you that the degree and extent of the Petroleum contamination at the above-named site was required to be investigated and remediated. We have since been informed that the required investigation and remediation has been accomplished.

On March 9,1999, the above-named site was reviewed by the Northern Region Closeout Committee for a determination as to whether or not the case qualified for close out under ch. NR 726, Wis. Adm. Code.

Based on the investigative and remedial documentation provided to the Department, it appears that the petroleum contamination at the above-named site has been remediated to the extent practicable under current site conditions. Therefore, the Department considers the case "closed," having determined that no further action is necessary on the site at this time. However, due to the presence of residual contamination remaining at the site which may become accessible in the future if [structural barriers][other circumstances] on the property are removed, a condition of the closeout of the case is that the owner sign and record a deed restriction for the property within 30 days after receipt of this letter. To document that this condition has been complied with, the property owner must submit to the Department a copy of the recorded deed restriction, with the recording information stamped on it, within 15 days after the County Register of Deeds returns the deed restriction to the property owner. The deed restriction may be amended in the future with the approval of DNR if conditions change at the site and the residual contamination is remediated.

Further, due to the presence of residual naphthalene contamination remaining in the groundwater, a condition of the closeout of the case is that the owner sign and record a Groundwater Use Restriction for the property.

Copies of the above mentioned deed restriction were submitted with your closure request package. Department of natural Resources attorneys will review the draft and return it to you with revisions. After you have made the revisions, you should sign and record the restriction with the Polk County Register of Deeds. To document that this condition has been complied with, the property owner must submit to the Department a copy of the recorded Groundwater Use Restriction, with the recording information stamped on it, within 15 days after the Register of Deeds returns the Groundwater Use Restriction to the property owner. The Groundwater Use Restriction may be amended in the future with the approval of DNR is conditions change at the site and the residual contamination is remediated.

Please note that this case closure is contingent upon proper documentation of proper abandonment of the monitoring wells on site. If monitoring wells remain at this site, please provide the documentation that this action has been completed, or have your consultant do so. The documentation can be sent to my attention at the above address.

If you have any additional information which was not formerly provided to the Department, and which you feel would significantly impact this closure decision, you may submit that information for our re-evaluation of case closure."

If you have any questions, please call me at 715-635-4049.

Sincerely,

Jamie Dunn
Hydrogeologist
Northern Region

cc: File
Steve Karklins, RR/3
Dale Ziege, RR/3
Sally Kefer, RR/3

02-49-100526

581724

Document Number

DEED RESTRICTION AND GROUNDWATER USE RESTRICTION

BOOK 0776 PAGE 0843

RECEIVED FOR RECORD

APR - 7 1999

AT 10:00 O'CLOCK a M

Bonnie Hallberg, Register of Deeds, POLK COUNTY

Laurie Anderson, Deputy

Recording Area

Name and Return Address
Darrell Reed
SEH
421 Frenette Drive
Chippewa Falls, WI 54729

John Dahlberg
Northwestern Wisconsin Elec
104 S Pine St PO Box 8
Grantsburg WI 54840

Parcel Identification Number (PIN)

Declaration of Restrictions

In Re: Lots 1, 2, and 3, all in Block 6, Industrial Subdivision of the Village of Frederic, and Lots 3, 4, 5, and 6 of Block 6, Industrial Subdivision of the Village of Frederic, Polk County, Wisconsin.

STATE OF WISCONSIN)
) ss
COUNTY OF POLK)

COPY

WHEREAS, Northwestern Wisconsin Electric Company, Inc. is the owner of the above-described property.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further soil or groundwater remediation activities on the property at the present time.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied, and improved subject to the following limitation and restrictions:

One or more diesel range organic (DRO) compounds, petroleum volatile organic compounds (PVOC), and polynuclear aromatic hydrocarbon (PAH) discharges have occurred on this property. Structural impediments consisting of; the power generation building foundation, transformer storage area, transformer/switches area; substation area and a Village of Frederic sanitary sewer main existing at the time of cleanup made complete remediation of the soil contamination impracticable. DRO, PVOC, and PAH-contaminated soil may remain on this property at the approximate location shown on Attachment 1. Any future work on this property which removes the structural impediments which currently exist shall include an investigation of the degree and extent of DRO, PVOC, and PAH contamination remaining in the soil. To the extent that contamination is found at that time, the Wisconsin Department of Natural Resources shall be immediately notified and the contaminated soil shall be properly treated or disposed of in accordance with applicable laws.

Naphthalene-contaminated groundwater above ch. NR 140, Wis. Adm. Code, enforcement standards exists on this property as of the date that this document is signed, in the approximate area shown on Attachment 2. Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific prohibitions or requirements are applicable prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

These restrictions are hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. These restrictions inure to the benefit of and are enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, 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 covenant 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, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

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By signing this document, John E. Dahlberg asserts that [he/~~she~~] is duly authorized to sign this document on behalf of Northwestern Wisconsin Electric Company, Inc.

IN WITNESS WHEREOF, the owner of the property hereby executes this Declaration of Restrictions.

Signature: John E. Dahlberg
Printed Name: John E. Dahlberg
Title: Secretary & Treasurer

Subscribed and sworn to before me
this 5th day of April, 1999.

Keith F. Marthe
Notary Public, State of WISCONSIN
My commission expires May 5, 2002.

This document was drafted by Darrell R. Reed, P.G., Short Elliott Hendrickson Inc., and was revised by the Wisconsin Department of Natural Resources.
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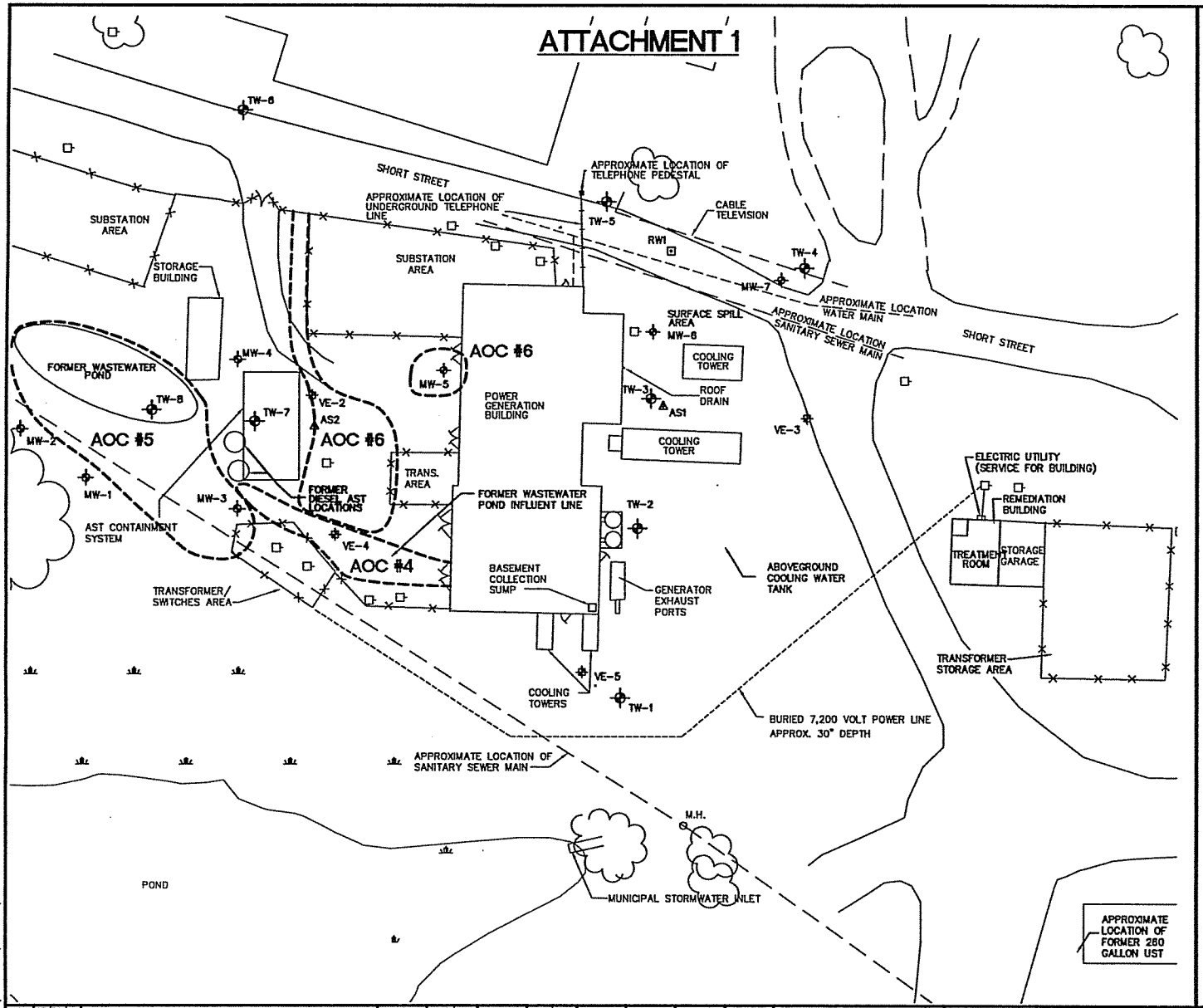
ATTACHMENT 1



N

SCALE IN FEET
0 10 20 40

LEGEND

MW-7	PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER
TW-3	TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER (08/93)
AS1	AIR SPARGING WELL LOCATION AND NUMBER
VE-2	VAPOR EXTRACTION WELL LOCATION AND NUMBER
RW1	GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
	POWER POLES
M.H.	MANHOLE
	TREES
	WATER MAIN
	SANITARY SEWER MAIN
	FENCE
	WETLAND AREA
AOC #5	AREA OF CONCERN

NO.	DATE	ISSUE/REVISIONS	DRAWN BY	DESIGN	FIELD REVIEW	QC CHECK
1	03/30/99	-	JLE 03/99	DRR 03/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT
DEED RESTRICTION

ATTACHMENT 1
EXTENT OF SOIL CONTAMINATION

PROJ. NO. HWWEC9401
DATE 03/30/99

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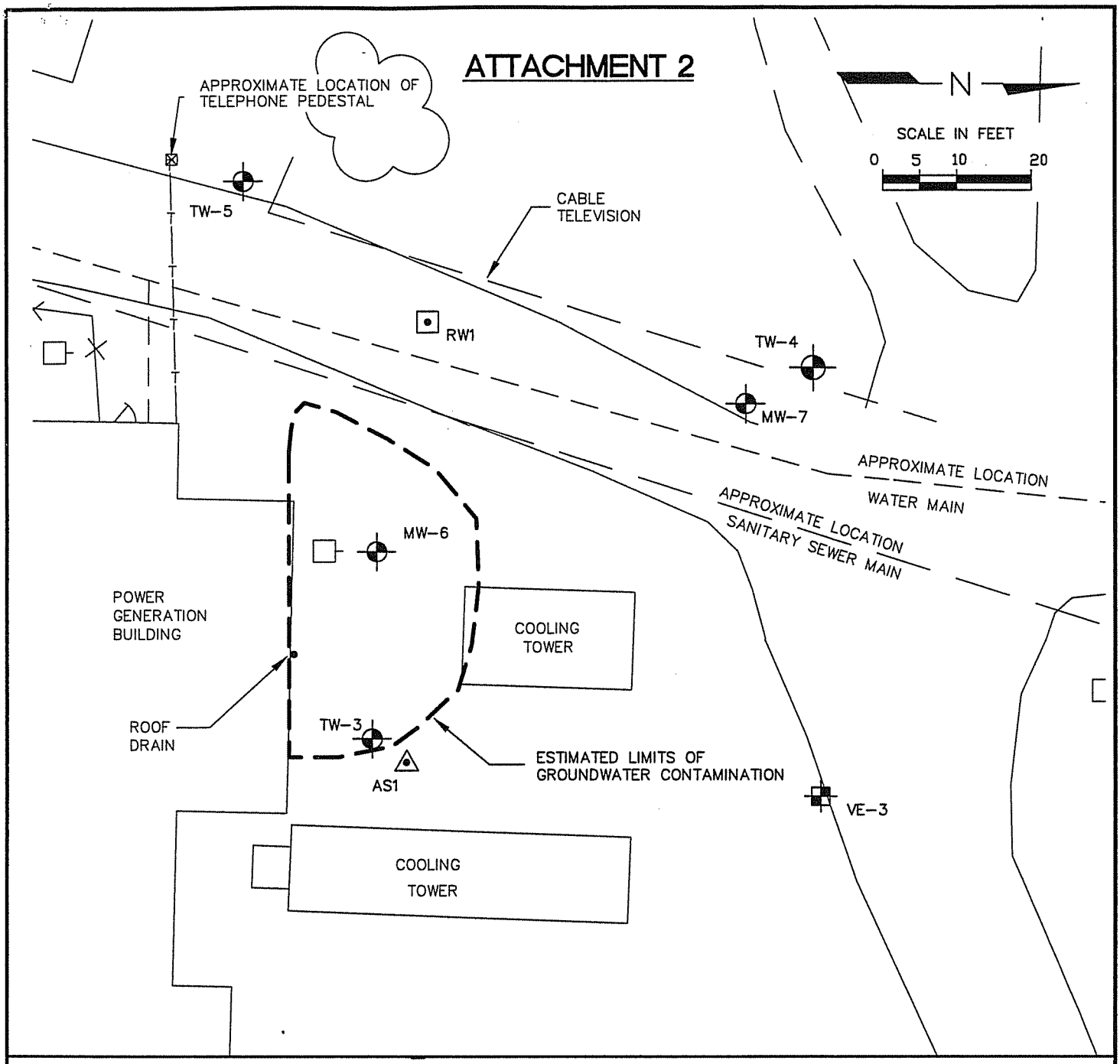
BOOK 0776 PAGE 0846

BOOK 0776 PAGE 0845
581724

ATTACHMENT 2



LEGEND

- MW-7 — PERMANENT GROUNDWATER MONITORING WELL
- TW-7 — TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER
- AS1 — AIR SPARGING WELL SAMPLE LOCATION AND NUMBER
- VE-3 — VAPOR EXTRACTION WELL LOCATION AND NUMBER
- RW1 — GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL SAMPLE LOCATION AND NUMBER
- TREES
- WATER MAIN
- UNDERGROUND TELEPHONE LINE
- SANITARY SEWER MAIN
- FENCE
- POWER POLES

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	03/30/99	–	JLE	03/99	DRR	03/99				

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

ATTACHMENT 2
ESTIMATED LIMITS OF GROUNDWATER CONTAMINATION

PROJ. NO. NWEC9401
DATE 03/30/99

E:\WASTE\NWEC9401\CLOSURE\9401FZE2

REPRODUCED FROM

USGS FREDERIC QUADRANGLE

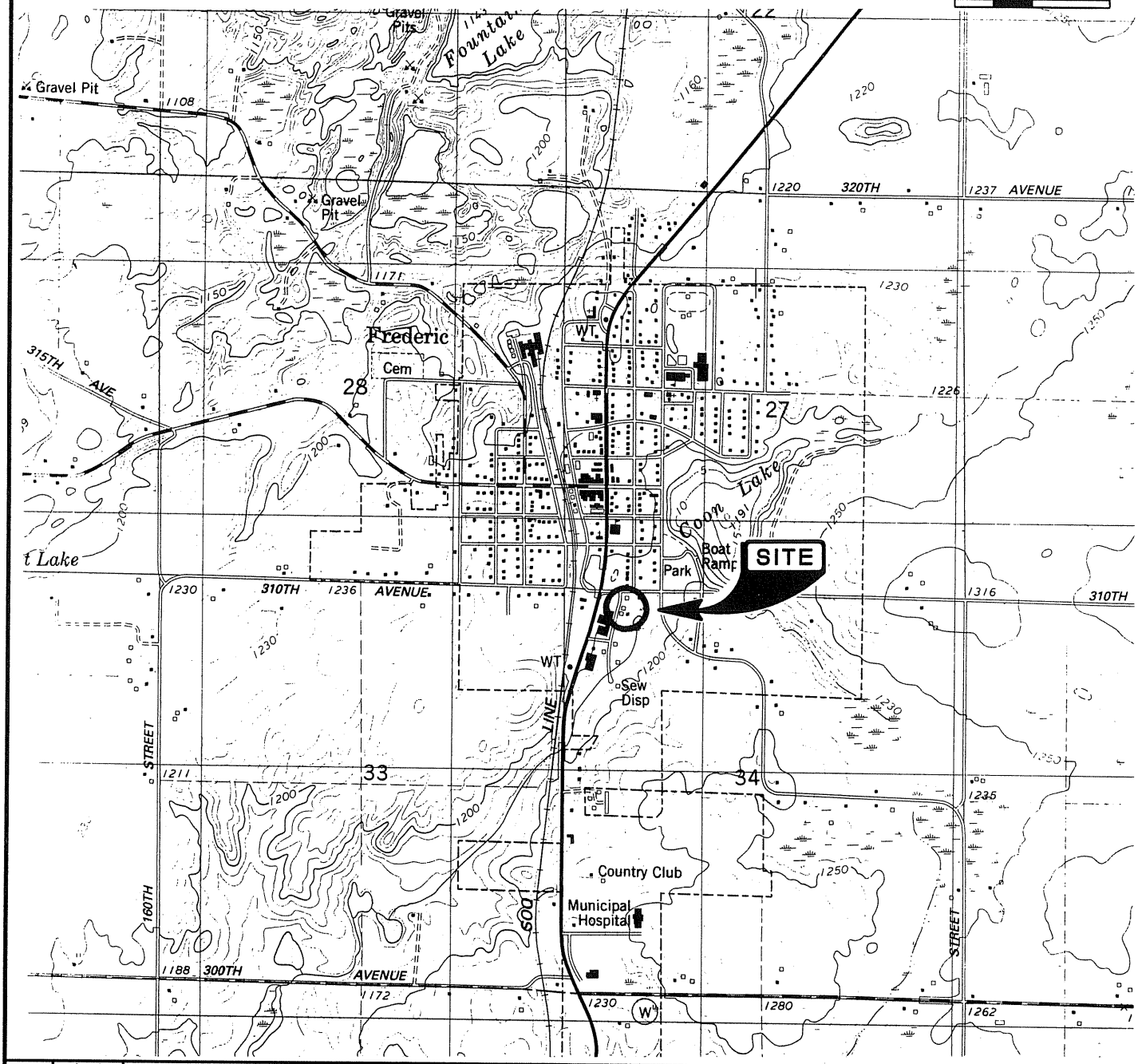
WISCONSIN – POLK CO. 7.5 MINUTE SERIES

1983

N

SCALE IN FEET

0 500 1000 2000



NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 1
SITE LOCATION

PROJ. NO. NWEC9401

DATE 01/25/99

1 / 12

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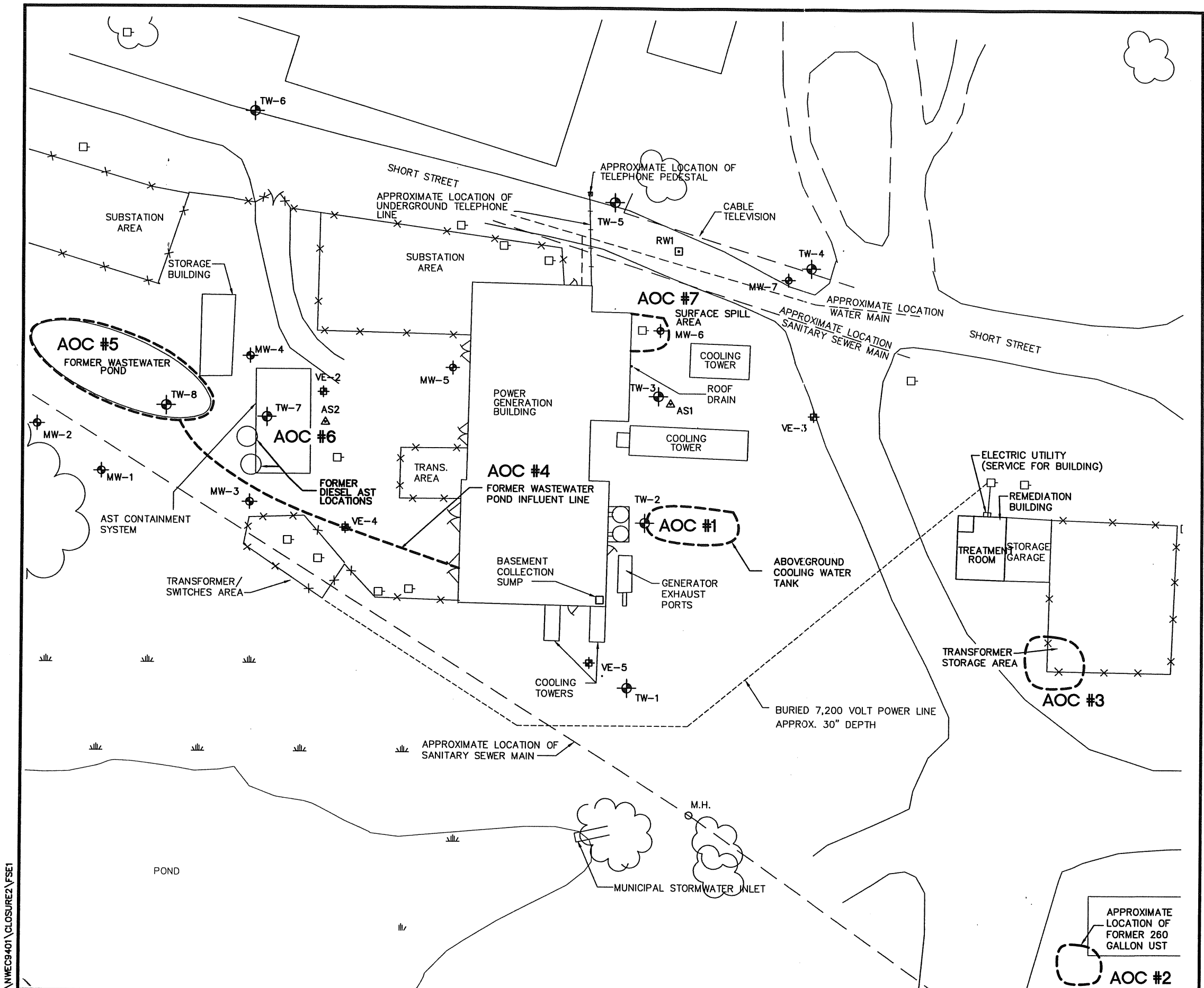

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SCALE IN FEET
0 10 20 40

LEGEND

MW-7	PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER
TW-3	TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER (08/93)
AS1	AIR SPARGING WELL LOCATION AND NUMBER
VE-2	VAPOR EXTRACTION WELL LOCATION AND NUMBER
RW1	GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
	POWER POLES
M.H.	MANHOLE
	TREES
	WATER MAIN
	SANITARY SEWER MAIN
	FENCE
	WETLAND AREA
AOC #5	AREA OF CONCERN

NO.	DATE	ISSUE/REVISIONS	DRAWN BY	DESIGN	FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE 01/99	DRR 01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 2
SITE DETAILS

PROJ. NO. NWWEC9401
DATE 01/25/99

2/12

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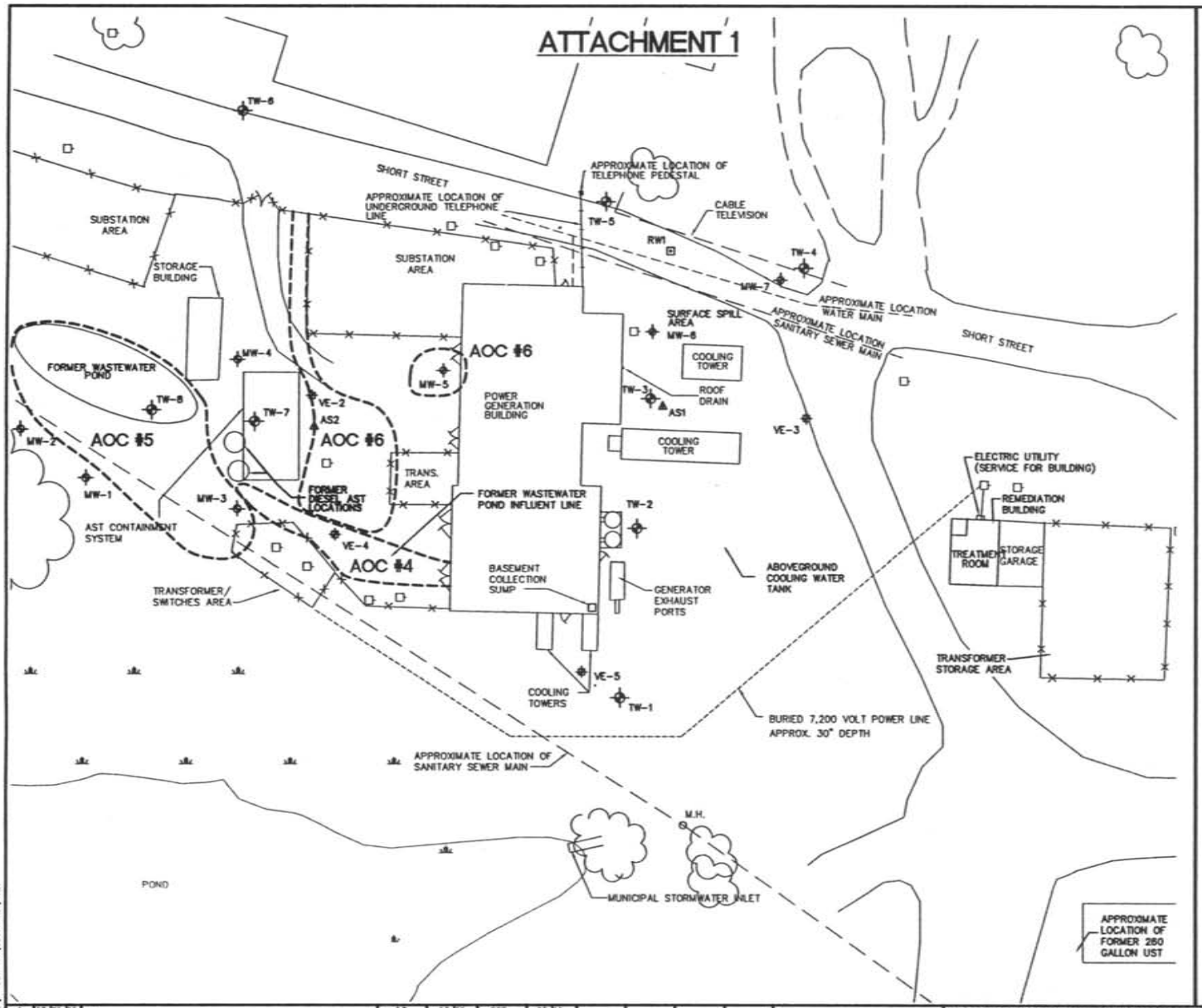
ATTACHMENT 1



N

SCALE IN FEET

0 10 20 40

LEGEND

MW-7	PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER
TW-3	TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER (08/93)
AS1	AIR SPARGING WELL LOCATION AND NUMBER
VE-2	VAPOR EXTRACTION WELL LOCATION AND NUMBER
RW1	GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
	POWER POLES
M.H.	MANHOLE
	TREES
	WATER MAIN
	SANITARY SEWER MAIN
	FENCE
	WETLAND AREA
AOC #5	AREA OF CONCERN

NO.	DATE	ISSUE/REVISIONS	DRAWN BY	DESIGN	FIELD REVIEW	QC CHECK
1	03/30/99	-	JLZ 03/99	DRR 03/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT
DEED RESTRICTION

ATTACHMENT 1
EXTENT OF SOIL CONTAMINATION

PROJ. NO. NWMECS401
DATE 03/30/99

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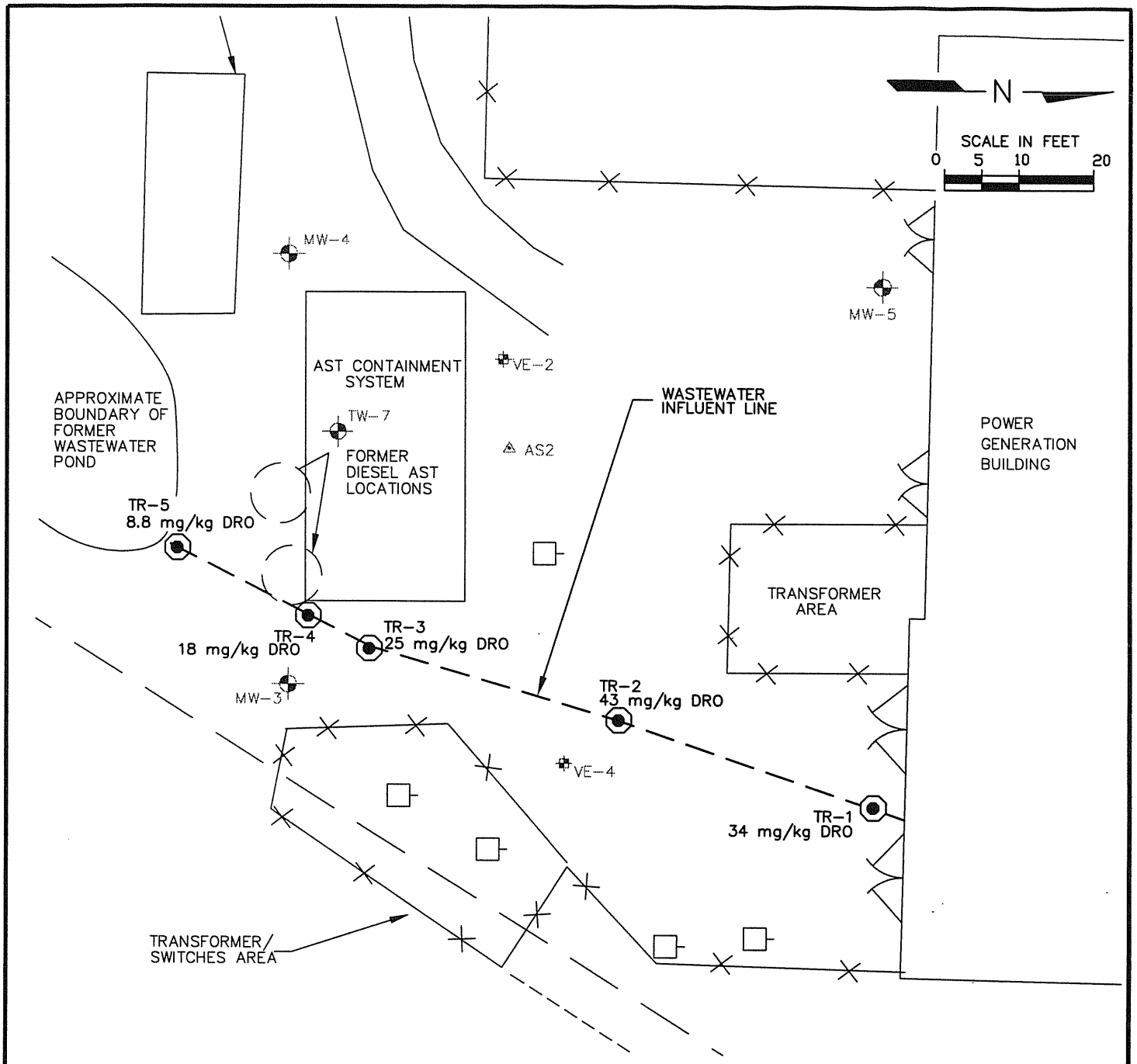
BOOK 0776 PAGE 0846



LEGEND

TR-4 18 mg/kg DRO — WASTEWATER POND INFLUENT LINE SAMPLE LOCATION AND NUMBER WITH 08/11/93 DRO SOIL CONCENTRATION (mg/kg)

TW-7 — TEMPORARY GROUNDWATER MONITORING WELL LOCATION (08/93)

MW-3 — PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER

AS-2 — AIR SPARGING WELL LOCATION AND NUMBER

VE-4 — VAPOR EXTRACTION WELL LOCATION AND NUMBER

APPROXIMATE LOCATION OF WATER MAIN

APPROXIMATE LOCATION OF SANITARY SEWER MAIN

FENCE

POWER POLES

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 8
AOC #4
SITE DETAILS

PROJ. NO. NWEC9401
DATE 01/25/99

8 / 12

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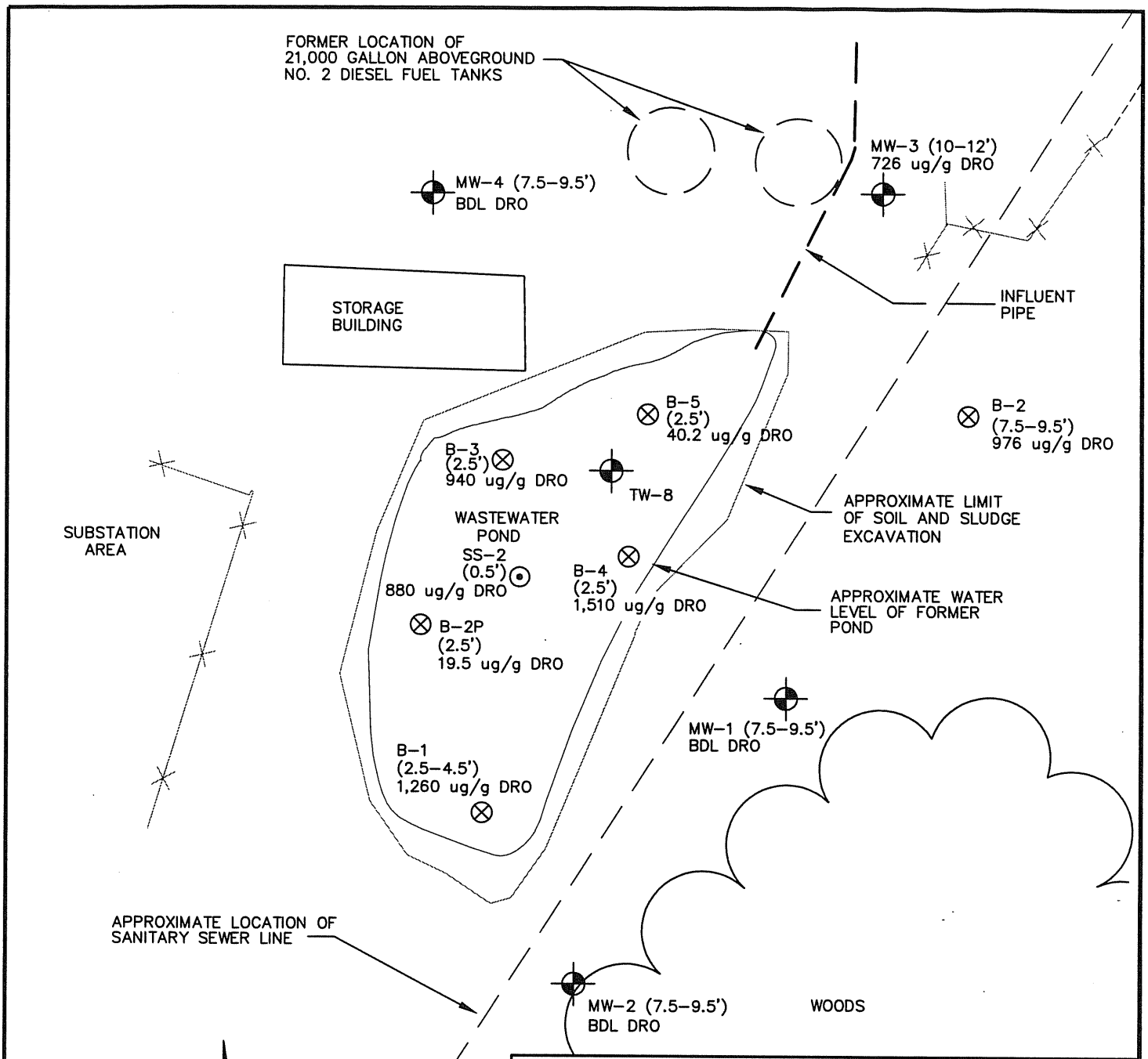

LEGEND

SS-2 (0.5') 880 ug/g DRO	PRE-EXCAVATION SOIL SAMPLE LOCATION AND DEPTH WITH 06/92 SOIL DRO CONCENTRATION (ug/kg)
B-1 (2.5-4.5') 1,260 ug/g DRO	POST EXCAVATION SOIL BORING SAMPLE LOCATION AND DEPTH WITH 08/92 SOIL DRO CONCENTRATION (ug/g)
MW-4 (7.5-9.5') BDL DRO	PERMANENT GROUNDWATER MONITORING WELL SAMPLE LOCATION AND DEPTH WITH 08/92 SOIL DRO CONCENTRATION (mg/kg)
TW-8	TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER (08/93)
BDL	BELOW LABORATORY DETECTION LIMITS

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 9
AOC # 5
SITE DETAILS

PROJ. NO. NWWEC9401
DATE 01/25/99

9 / 12

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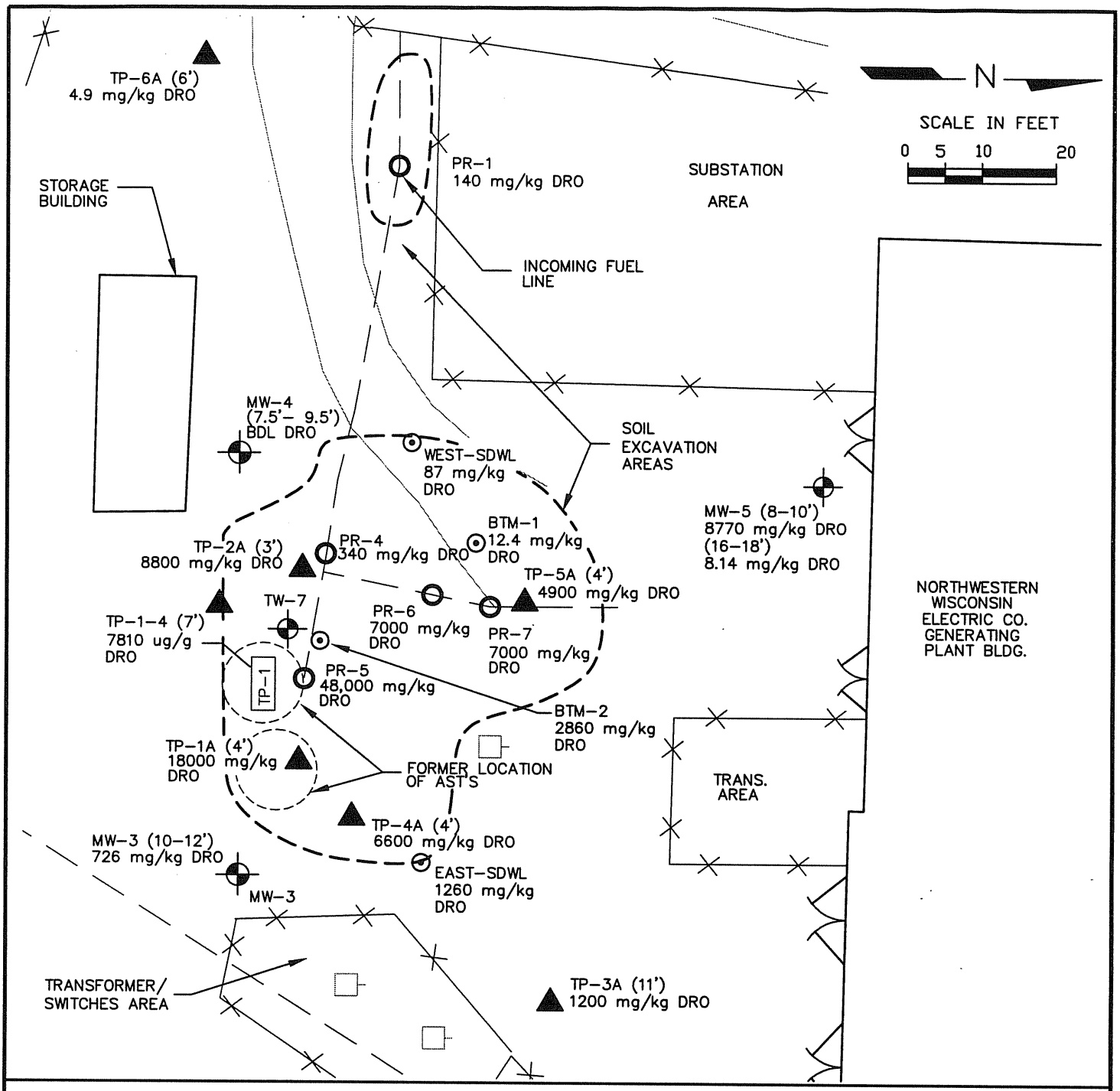

LEGEND

MW-4 (7.5-9.5') BDL GRO — PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER WITH 8/92 DRO SOIL ANALYTICAL RESULT (mg/kg)

PR-6 7000 mg/kg DRO — PIPING RUN SAMPLE LOCATION AND NUMBER WITH 7/93 DRO SOIL ANALYTICAL RESULT (mg/kg)

TP-5A (4') 4900 mg/kg DRO — TEST PIT AUGER SAMPLE LOCATION AND NUMBER (06/93) WITH DRO SOIL ANALYTICAL RESULT (mg/kg)

7810 ug/g DRO (TP-1) — TEST PIT SAMPLE LOCATION (10/92) WITH DRO SOIL ANALYTICAL RESULT (ug/g)

BTM-2 2860 mg/kg DRO — EXCAVATION SAMPLE LOCATION (08/16/94) WITH DRO SOIL ANALYTICAL RESULT (mg/kg)

TW-7 — TEMPORARY MONITORING WELL LOCATION AND NUMBER

NOTE:

1. MAXIMUM DRO CONCENTRATION MILLIGRAM PER KILOGRAM (mg/kg or ug/g) INDICATED AT SOIL SAMPLE LOCATIONS
2. BDL= BELOW LABORATORY DETECTION LIMITS.

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 10
AOC #6- SITE DETAILS

PROJ. NO. NWWEC9401
DATE 01/25/99

10 / 12

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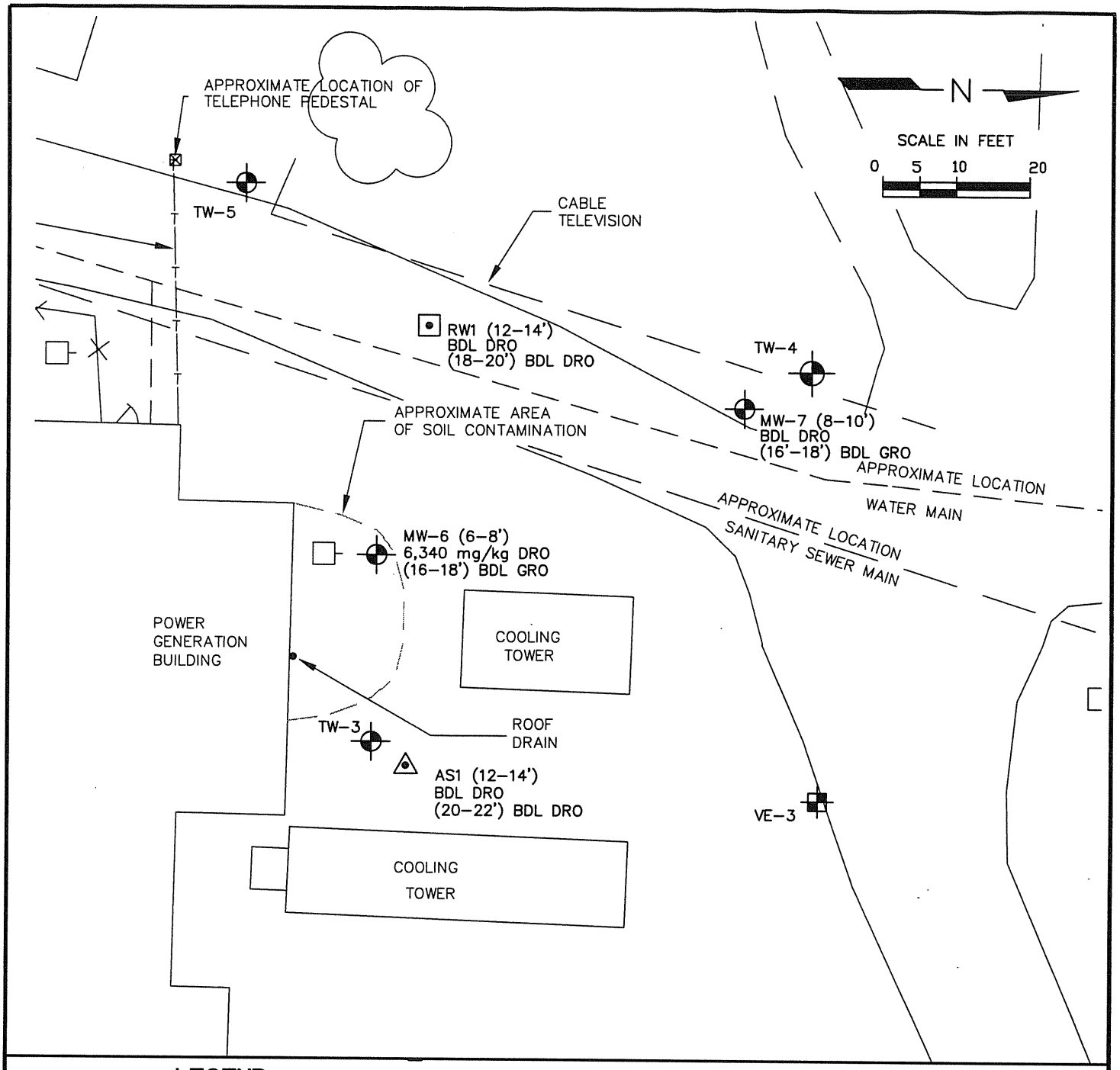

LEGEND

MW-7 (8-10') BDL DRO	PERMANENT GROUNDWATER MONITORING WELL SAMPLE LOCATION AND DEPTH WITH 04/94 DRO SOIL CONCENTRATION (mg/kg)
TW-5	TEMPORARY GROUNDWATER MONITORING WELL LOCATION (08/93)
AS1 (12-14') BDL DRO	AIR SPARGING WELL SAMPLE LOCATION AND DEPTH WITH 04/94 DRO SOIL CONCENTRATION (mg/kg)
VE-3	VAPOR EXTRACTION WELL LOCATION AND NUMBER
RW1 (12-14') BDL DRO	GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL SAMPLE LOCATION AND DEPTH WITH 04/94 DRO SOIL CONCENTRATION (mg/kg)

BDL= BELOW LABORATORY DETECTION LIMITS

TREES

WATER MAIN

SANITARY SEWER MAIN

FENCE

POWER POLES

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 11
AOC #7
SITE DETAILS

PROJ. NO. NWEC9401
DATE 01/25/99

11 / 12

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NOTES:

1. ELEVATIONS ARE SHOWN IN REFERENCE TO SITE DATUM.
2. FOR THE PURPOSE OF ILLUSTRATING SUBSURFACE CONDITIONS ON THE CROSS SECTIONS, SOME OF THE BORING LOGS HAVE BEEN SIMPLIFIED. FOR A DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS.
3. HORIZONTAL DISTANCES ARE MEASURED WITH RESPECT TO THE CENTER OF EACH SOIL BORING LOCATION.
4. GROUNDWATER ELEVATIONS ARE BASED ON MEASUREMENTS OBTAINED BY SEH ON 9/95.
5. SOIL DRO CONCENTRATIONS (mg/kg) SHOWN.

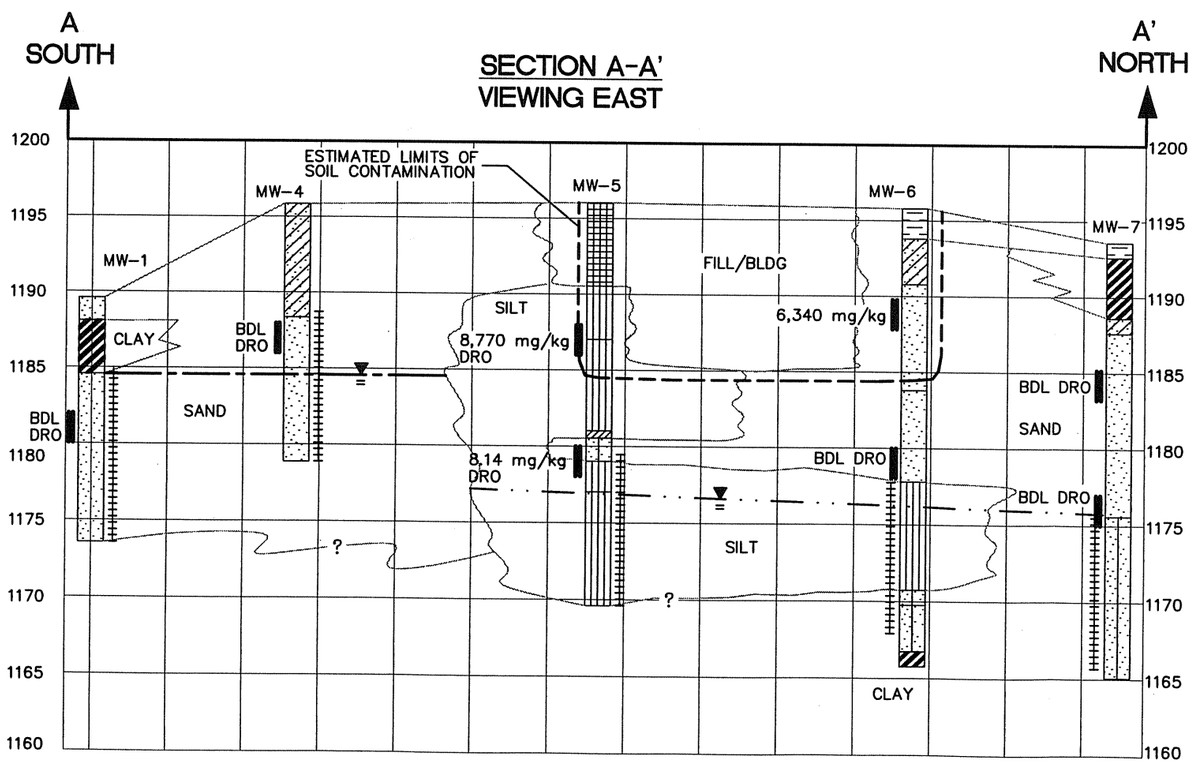
LEGEND

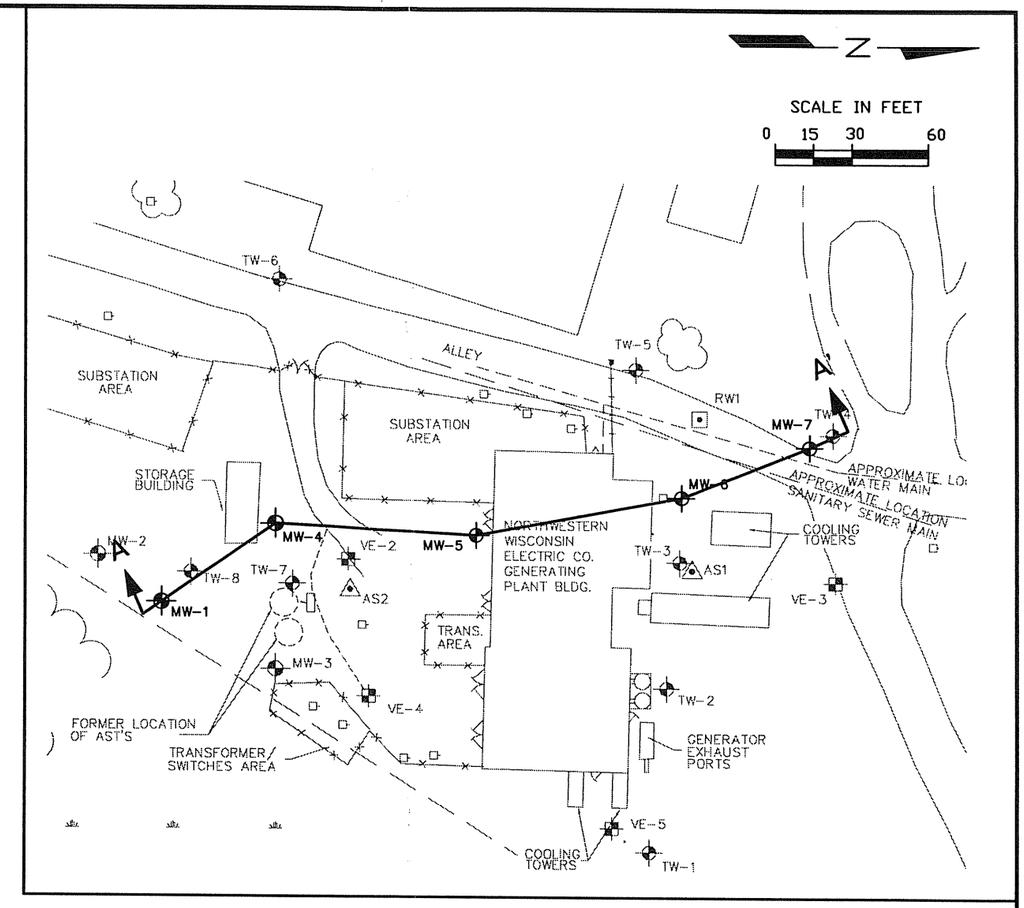
- CLAY
- SILT
- SAND
- FILL
- WATER TABLE ELEVATION AS OF 09/95
- PERCHED GROUNDWATER UNIT
- WELL SCREEN INTERVAL

0 2.5 5 10 VERTICAL SCALE (FEET)

0 10 20 40 HORIZONTAL SCALE (FEET)

SECTION A-A'
VIEWING EAST





NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99				

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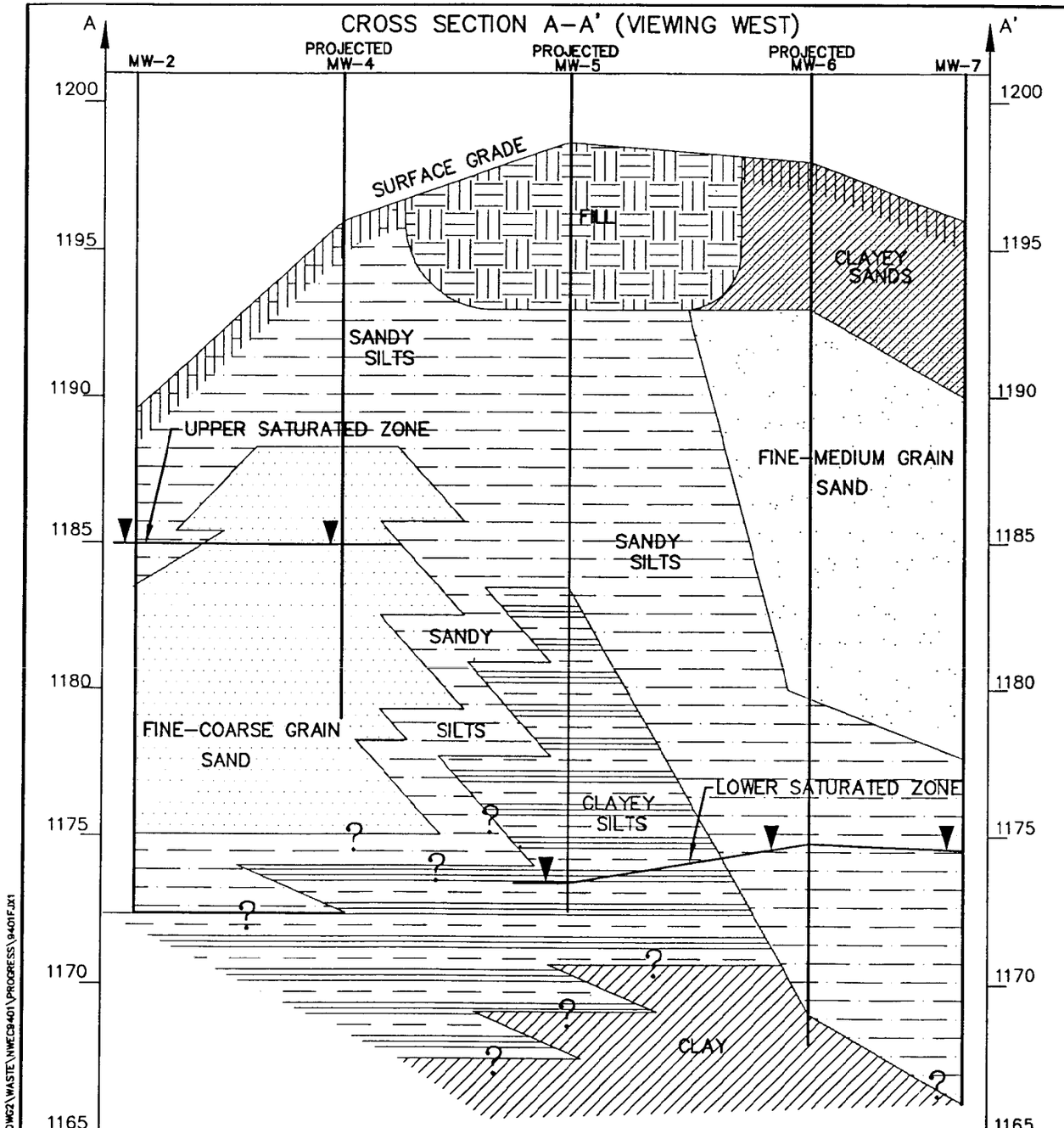
NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

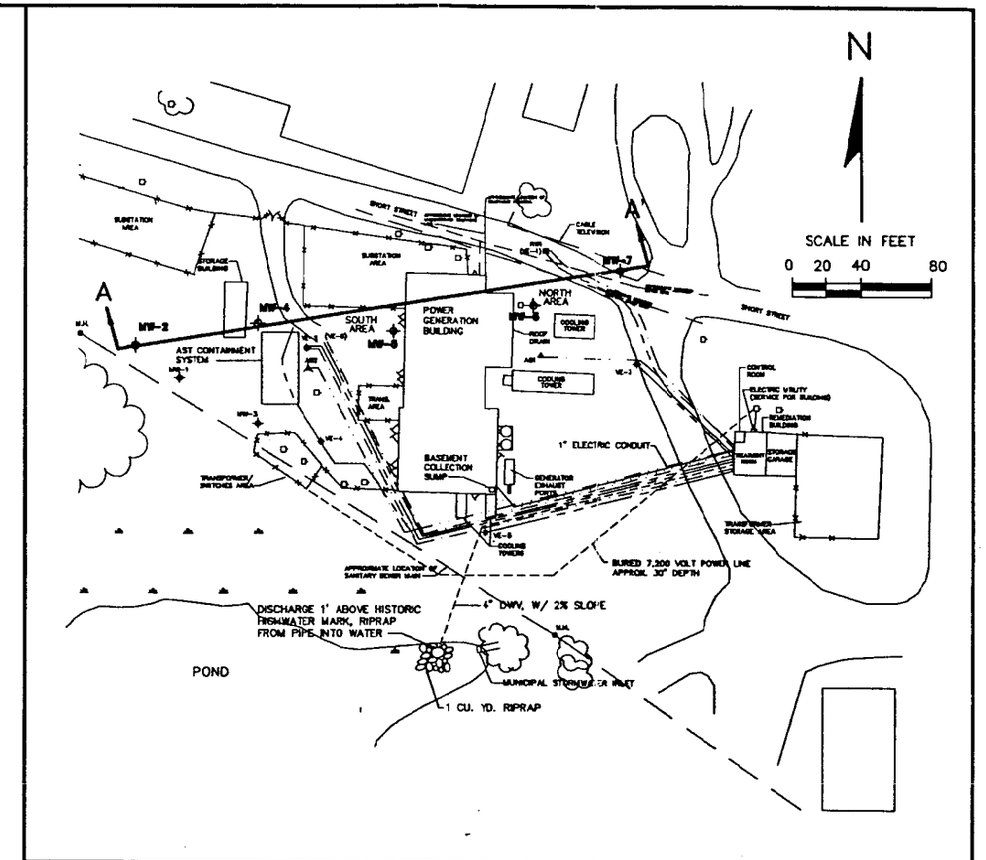
FIGURE 3
CROSS SECTION

PROJ. NO. NWWEC9401
DATE 01/25/99

DRAWING FILENAME: 9401FS31
DRAWING DIRECTORY: E:\WASTE\NWEC9401\CLOSURE2
XREF FILENAME:

CROSS SECTION A–A' (VIEWING WEST)





NOTES

1. THE STRATUM LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS.
2. FOR THE PURPOSE OF ILLUSTRATING SUBSOIL CONDITIONS ON THE CROSS SECTIONS, SOME OF THE BORING LOGS HAVE BEEN SIMPLIFIED. FOR A DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS IN APPENDIX A.
3. HORIZONTAL DISTANCES ARE MEASURED WITH RESPECT TO THE CENTER OF EACH SOIL BORING LOCATION.
4. THE WATER TABLE ELEVATIONS (▼) ARE BASED ON MEASUREMENTS OBTAINED BY SEH, INC. ON MAY 4, 1994.
5. ELEVATIONS ARE SHOWN IN REFERENCE TO U.S.G.S. DATUM

0 1 2 4 VERTICAL SCALE (FEET)

0 10 20 40 HORIZONTAL SCALE (FEET)

NO.	DATE	ISSUE/REVISIONS	DRAWN BY	DESIGN	FIELD REVIEW	QC CHECK
1	12/12/98	PROGRESS REPORT	JLE 12/98	BLK 12/98		

SEH ENGINEERS ARCHITECTS PLANNERS

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 3
CROSS SECTIONS

PROJ. NO. NWWEC9401
DATE 12/12/98
3 / 6

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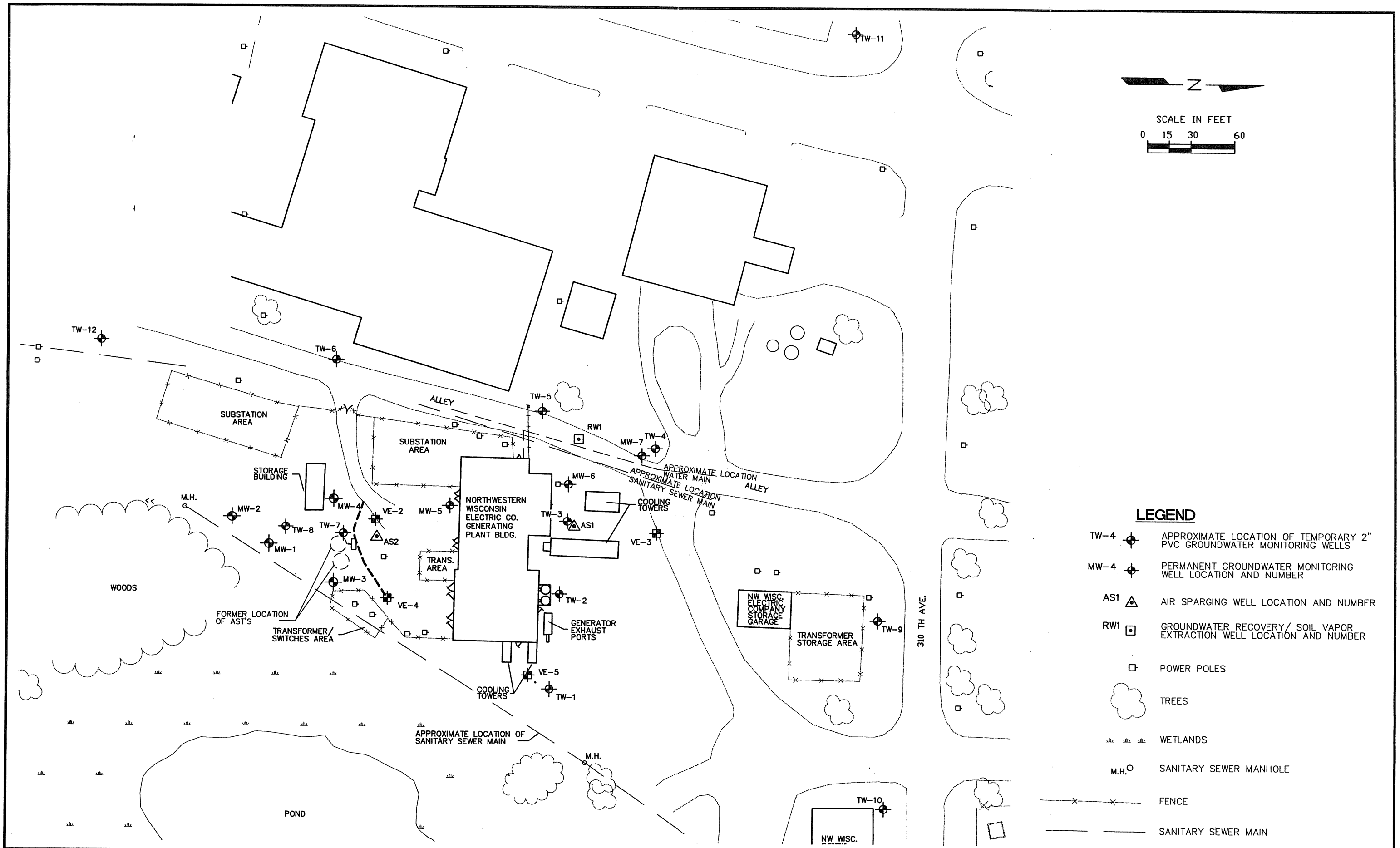

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1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99				

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NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

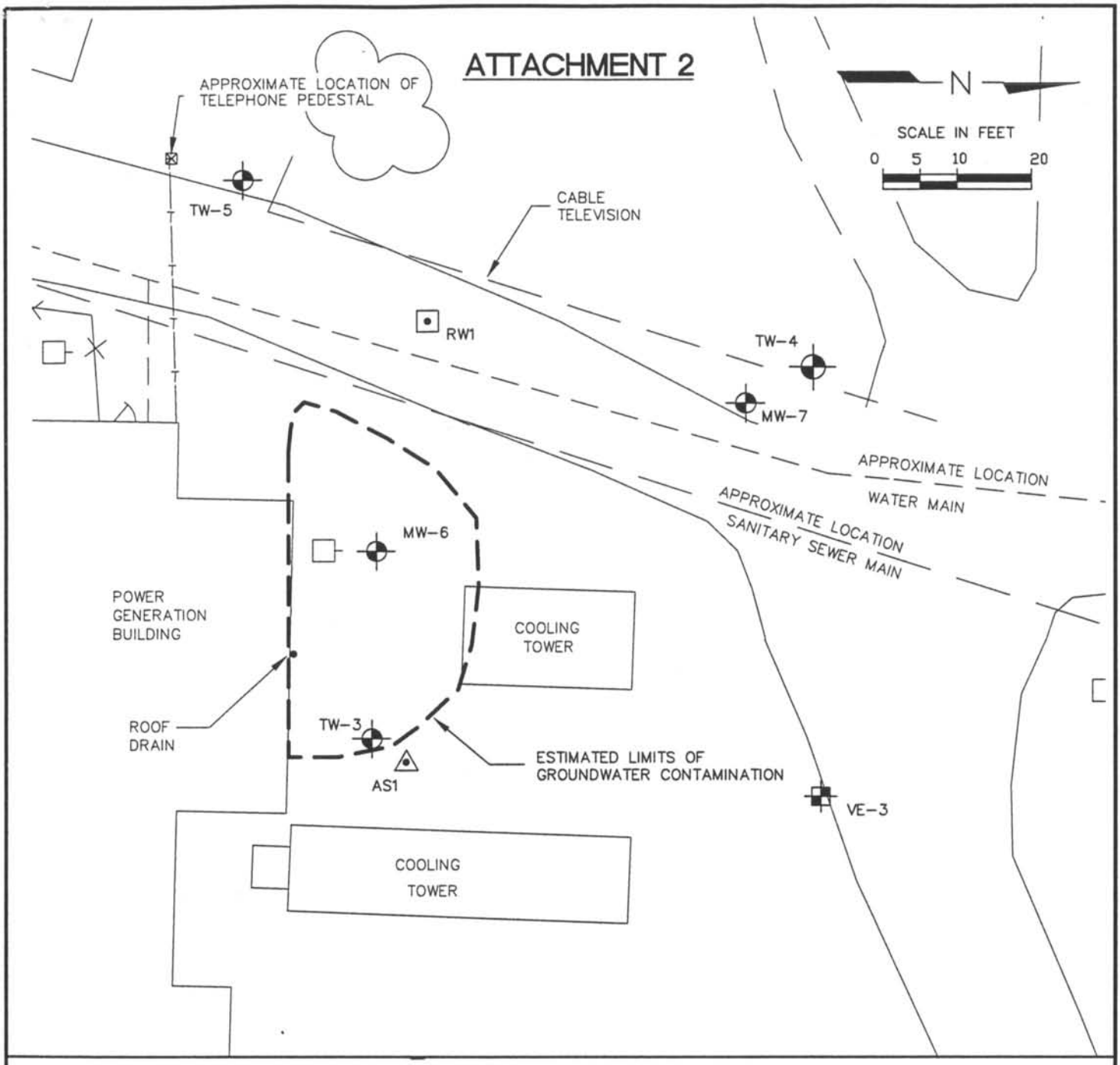
FIGURE 12
GROUNDWATER INVESTIGATION-SITE DETAILS

PROJ. NO. NWWEC9401
DATE 01/25/99

12/12

BOOK 0776 PAGE 0845
581724

ATTACHMENT 2



LEGEND

- MW-7 — PERMANENT GROUNDWATER MONITORING WELL
- TW-7 — TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER
- AS1 — AIR SPARGING WELL SAMPLE LOCATION AND NUMBER
- VE-3 — VAPOR EXTRACTION WELL LOCATION AND NUMBER
- RW1 — GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL SAMPLE LOCATION AND NUMBER
- TREES
- WATER MAIN
- UNDERGROUND TELEPHONE LINE
- SANITARY SEWER MAIN
- FENCE
- POWER POLES

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW	QC CHECK
1	03/30/99	–	JLE	03/99	DRR	03/99		

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

ATTACHMENT 2
ESTIMATED LIMITS OF GROUNDWATER CONTAMINATION

PROJ. NO. NWEC9401
DATE 03/30/99

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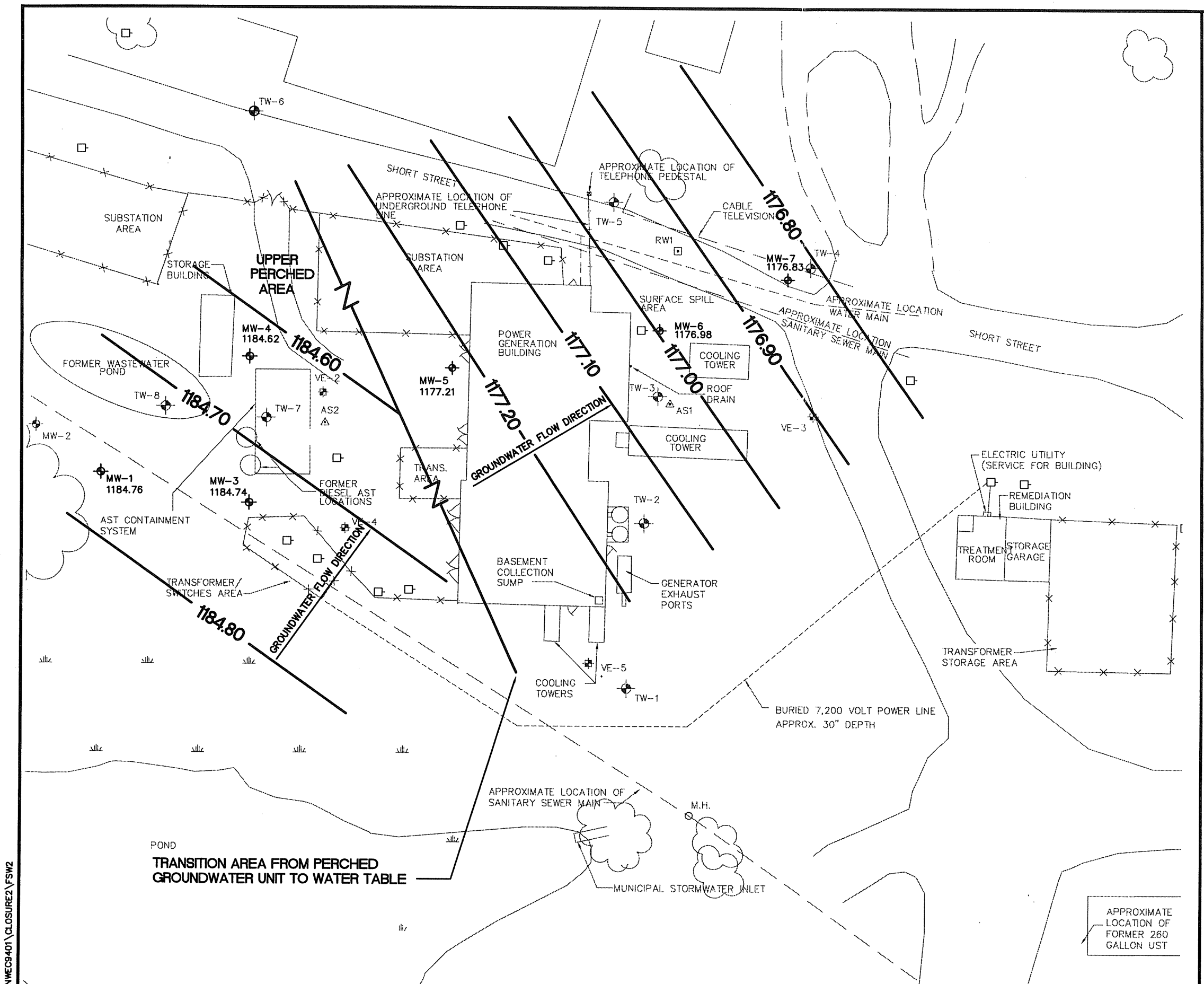

N

SCALE IN FEET

0 10 20 40

LEGEND

	GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL= 0.1 FT
MW-7	PERMANENT GROUNDWATER MONITORING WELL LOCATION AND NUMBER
TW-3	TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND NUMBER (08/93)
AS1	AIR SPARGING WELL LOCATION AND NUMBER
VE-2	VAPOR EXTRACTION WELL LOCATION AND NUMBER
RW1	GROUNDWATER RECOVERY/SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
	POWER POLES
M.H.	MANHOLE
	TREES
	WATER MAIN
	SANITARY SEWER MAIN
	FENCE
	WETLAND AREA

E:\WASTE\NWEC9401\CLOSURE2\FSW2

NO.	DATE	ISSUE/REVISIONS	DRAWN BY		DESIGN		FIELD REVIEW		QC CHECK	
1	01/25/99	CASE CLOSURE	JLE	01/99	DRR	01/99				

SEH

NORTHWESTERN WISCONSIN ELECTRIC CO.
FREDERIC GENERATING PLANT

FIGURE 4
GROUNDWATER CONTOURS
9/13/95

PROJ. NO. NWWEC9401
DATE 01/25/99

4/12

Table 1
AOC #1 – Soil and Groundwater Analytical Results

Analytical Parameters	Soil Analytical Results									
	Sample No./Date/Depth (ft)									
	Pre-Excavation					Post Excavation				
	11/11/91					6/8/92				8/10/93
	C-1 (0.25)	C-1 (1.5)	C-2 (0.5)	C-3 (0.7)	C-4 (0.7)	SS-3 (4)	SS-4 (3)	SS-5 (1)	SV-12 (1)	TW-2 (7.5-9.5)
TPH (D) (mg/kg)	9,500	28	65	48	15	--	--	--	--	--
TRPH (mg/kg)	--	--	--	--	--	1,400	BDL	45	11	--
DRO (mg/kg)	--	--	--	--	--	--	--	--	--	BDL
PAHs (μg/kg)										
Anthracene	--	--	--	--	--	BDL	7.1	1.7	--	--
Benzo(a)Anthracene	--	--	--	--	--	BDL	59	12	--	--
Benzo(b)Fluoranthene	--	--	--	--	--	6.0	30	16	--	--
Benzo(k)Fluoranthene	--	--	--	--	--	BDL	13	6.5	--	--
Benzo(g,h,i)Perylene	--	--	--	--	--	15	17	15	--	--
Benzo(a)Pyrene	--	--	--	--	--	BDL	55	11	--	--
Chrysene	--	--	--	--	--	BDL	64	15	--	--
Dibenzo(a,h)Anthracene	--	--	--	--	--	3.3	17	3.1	--	--
1-Methyl Naphthalene	--	--	--	--	--	BDL	17	BDL	--	--
Fluoranthene	--	--	--	--	--	BDL	170	61	--	--
Fluorene	--	--	--	--	--	BDL	0.67	1.2	--	--
Indeno(1,2,3-cd)Pyrene	--	--	--	--	--	14	21	16	--	--
Phenanthrene	--	--	--	--	--	BDL	46	34	--	--
Pyrene	--	--	--	--	--	12	140	140	--	--

Table 1 (Continued)
AOC #1 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 140 standards		Groundwater Analytical Results
			Sample No./Date
			TW-2
	ES	PAL	8/11/93
PVOCs (μg/l)			
Toluene	343	68.6	1.0
PAHs (μG/l)			
Benzo(a)Anthracene	3,000	600	0.0040
Benzo(b)Fluoranthene	0.2	0.02	0.0054*
Benzo(k)Fluoranthene	NSE	NSE	0.0024*
Benzo(g,h,i)Perylene	NSE	NSE	0.011*
Benzo(a)Pyrene	0.2	0.02	0.0065*
Fluoranthene	400	80	0.049*
Fluorene	400	80	0.13
2-Methyl Naphthalene	NSE	NSE	0.36
Phenanthrene	NSE	NSE	0.040*
Pyrene	250	50	0.059*

-- = Not analyzed for
BDL = Below laboratory detection limits
μg/l = micrograms per liter (ppb)
mg/kg = milligrams per kilogram (ppm)
μg/kg = micrograms per kilogram (ppb)
* = Compound detected in method blank. See analytical report for method blank concentrations.
Note: Only compounds with detectable concentrations indicated on table
Compiled by: DRR Checked by: TJB

Table 2
AOC #2 – Soil Analytical Results

Analytical Parameters	Date/Sample Name/Depth (ft)		
	11/11/91		
	TP-1-1 (6.5)	TP-1-2 (9.5)	TP-1-3 (8.5)
TPH (D) (mg/kg)	BDL	BDL	BDL

TPH (D) = Total Petroleum Hydrocarbons as diesel
BDL = Below laboratory detection limits
mg/kg = milligrams per kilogram (ppm)
Compiled by: DRR Checked by: TJB

Table 3
AOC #3 – Soil Analytical Results

Analytical Parameters	Date/Sample No./Depth (ft)							
	Pre-Excavation			Post Excavation				
	11/11/91			6/8/92			8/12/92	
	B-1 (Surface)	B-2 (Surface)	B-3 (6-8")	SS-6	SS-7	SS-8	SS-1 (Stockpile)	SS-2 (Stockpile)
PCB (ppm)	11	2.0	BDL	BDL	BDL	BDL	BDL	BDL

BDL = Below laboratory detection limits
ppm = parts per million
Compiled by: DRR Checked by: TJB

Table 4
AOC #4 – Soil Analytical Results

Analytical Parameters	ch. NR 720 soil cleanup standards	Sample No./Date/Depth				
		8/11/93				
		TR-1	TR-2	TR-3	TR-4	TR-5
DRO (mg/kg)	100	34	43	25	18	8.8

mg/kg = milligrams per kilogram, parts per million (ppm)
Compiled by: DRR Checked by: TJB

Table 5
AOC #5 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 720 soil cleanup standards[1]	Soil Analytical Results										
		Sample No./Depth (ft)/Date										
		Pre-Excavation		Post Excavation								
		SS-1	SS-2	B-1[1]	B-2	B-2P[1]	B-3[1]	B-4[1]	B-5[1]	MW-1	MW-2	MW-3
		0.5	0.5	2.5-4.5	7.5-9.5	2.5	2.5	2.5	2.5	7.5-9.5	7.5-9.5	10-12
		6/8/92	6/8/92	8/11/92	8/11/92	8/11/92	8/11/92	8/11/92	8/11/92	8/11/92	8/11/92	8/12/92
DRO (mg/kg)	100	**3,700**	**880**	**1,260**	**976**	19.5	**940**	**1,510**	40.2	BDL	BDL	**726**
VOCs (mg/kg)												
n-Butylbenzene	NSE	1.8	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	2.9	0.076	--	BDL	--	--	--	--	--	--	--	--
p-Isopropyltoluene	NSE	0.09	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	NSE	BDL	--	3.1	--	--	--	--	--	--	--	--
Naphthalene	NSE	0.70	--	--	--	--	--	--	--	--	--	--
Tetrachloroethylene	NSE	0.03	--	1.8	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	NSE	0.48	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	NSE	0.26	--	--	--	--	--	--	--	--	--	--
Total Xylenes	4.1	0.34	--	2.2	--	--	--	--	--	--	--	--
PAHs (μg/kg)												
Acenaphthylene	NSE	BDL	--	250	--	--	--	--	--	--	--	--
Anthracene	NSE	830	--	BDL	--	--	--	--	--	--	--	--
Benzo(k)Fluoranthene	NSE	51	--	BDL	--	--	--	--	--	--	--	--
Benzo(a)Pyrene	NSE	13	--	BDL	--	--	--	--	--	--	--	--
Fluoranthene	NSE	3,400	--	BDL	--	--	--	--	--	--	--	--
Fluorene	NSE	940	--	104	--	--	--	--	--	--	--	--
Indeno(1,2,3)Pyrene	NSE	33	--	BDL	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	NSE	2,200	--	BDL	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	NSE	3,000	--	394	--	--	--	--	--	--	--	--
Naphthalene	NSE	1,600	--	566	--	--	--	--	--	--	--	--
Phenanthrene	NSE	5,700	--	257	--	--	--	--	--	--	--	--
Pyrene	NSE	25,000	--	BDL	--	--	--	--	--	--	--	--
Lead (mg/kg)	50	BDL	--	--	--	--	--	--	--	--	--	--
Cadmium (mg/kg)	8.0	BDL	--	--	--	--	--	--	--	--	--	--

B-1[1] = Sample taken from pond excavation area
= Exceeds ch. NR 720 soil cleanup standards
BDL = Below laboratory detection limits
NSE = No standard established
-- = Not analyzed for
Note: Only compounds detected indicated on table
Compiled by: DRR Checked by: ___

Table 5 (Continued)
AOC #5 – Soil and Groundwater Analytical Results

Analytical Parameter	ch. NR 140 standard		Groundwater Analytical Results					
			Sample No./Date					
			TW-8	MW-1				
	ES	PAL	8/93	8/17/92	10/22/92	6/16/93	6/14/94	3/20/97
DRO (μg/l)	NSE	NSE	--	174	ND	49	ND	--
VOC (μg/l)								
Benzene	5.0	0.5	0.68	ND	--	ND	--	ND
Ethyl Benzene	700	140	2.6	ND	--	ND	--	ND
Methyl-tert-Butyl Ether	60	12	ND	ND	--	ND	--	ND
Methylene Chloride	5.0	0.5	--	**5.6**[1]	--	--	--	--
Toluene	343	68.6	3.9	25.7	--	ND	--	ND
Total Trimethylbenzene	480	96	1.7	ND	--	ND	--	ND
Total Xylenes	620	124	ND	ND	--	ND	--	ND
PAH (μg/l)								
Acenaphthene	NSE	NSE	ND	ND	--	ND	ND	ND
Acenaphthylene	NSE	NSE	5.7	ND	--	ND	ND	ND
Anthracene	3000	600	0.19	ND	--	ND	ND	ND
Benzo(a)Anthracene	NSE	NSE	0.017	ND	--	ND	ND	ND
Benzo(a)Pyrene	0.2	0.02	0.034	ND	--	ND	ND	ND
Benzo(b)Fluoranthene	0.2	0.02	0.034*	ND	--	ND	ND	ND
Benzo(ghi)Perylene	NSE	NSE	0.042*	ND	--	ND	ND	ND
Benzo(k)Fluoranthene	NSE	NSE	0.012*	ND	--	ND	ND	ND
Chrysene	0.2	0.02	0.18	ND	--	ND	ND	ND
Dibenzo(a,h)Anthracene	NSE	NSE	0.0088	ND	--	ND	ND	ND
Fluoranthene	400	80	6.2*	ND	--	ND	ND	ND
Fluorene	400	80	3.4	ND	--	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	NSE	NSE	0.055	ND	--	ND	ND	ND
1-Methyl Naphthalene	NSE	NSE	4.2	ND	--	ND	ND	ND
2-Methyl Naphthalene	NSE	NSE	10	ND	--	ND	ND	ND
Naphthalene	40	8.0	0.45	ND	--	ND	ND	ND
Phenanthrene	NSE	NSE	7.6*	ND	--	ND	ND	ND
Pyrene	250	50	0.43*	ND	--	ND	ND	ND

Table 5 (Continued)
AOC #5 – Soil and Groundwater Analytical Results

Analytical Parameter	ch. NR 140 standard		Sample No./Date			
			MW-2			
	ES	PAL	8/17/92	10/22/92	6/16/93	6/14/94
DRO (μg/l)	NSE	NSE	99.8	ND	140	ND
VOC (μg/l)						
Benzene	5.0	0.5	ND	--	ND	--
Ethyl Benzene	700	140	ND	--	ND	--
Methyl-tert-Butyl Ether	60	12	ND	--	ND	--
Methylene Chloride	5.0	0.5	**5.9**[1]	--	--	--
Toluene	343	68.6	2.9	--	ND	--
Total Trimethylbenzene	480	96	ND	--	ND	--
Total Xylenes	620	124	ND	--	ND	--
PAH (μg/l)						
Acenaphthene	NSE	NSE	ND	--	ND	ND
Acenaphthylene	NSE	NSE	ND	--	ND	ND
Anthracene	3000	600	ND	--	ND	ND
Benzo(a)Anthracene	NSE	NSE	ND	--	0.0097	ND
Benzo(a)Pyrene	0.2	0.02	ND	--	ND	ND
Benzo(b)Fluoranthene	0.2	0.02	ND	--	ND	ND
Benzo(ghi)Perylene	NSE	NSE	ND	--	0.0043	ND
Benzo(k)Fluoranthene	NSE	NSE	ND	--	0.00071	ND
Chrysene	0.2	0.02	ND	--	ND	ND
Dibenzo(a,h)Anthracene	NSE	NSE	ND	--	ND	ND
Fluoranthene	400	80	ND	--	ND	ND
Fluorene	400	80	ND	--	ND	ND
Indeno(1,2,3-cd)Pyrene	NSE	NSE	ND	--	ND	ND
1-Methyl Naphthalene	NSE	NSE	ND	--	ND	ND
2-Methyl Naphthalene	NSE	NSE	ND	--	ND	ND
Naphthalene	40	8.0	ND	--	ND	ND
Phenanthrene	NSE	NSE	ND	--	ND	ND
Pyrene	250	50	ND	--	ND	ND

Table 5 (Continued)
AOC #5 – Soil and Groundwater Analytical Results

Analytical Parameter	ch. NR 140 standard		Groundwater Analytical Results						
			Sample No./Date						
			MW-3						
	ES	PAL	8/17/92	10/22/92	6/16/93	6/14/94	12/4/95	6/5/96	3/20/97
DRO (μg/l)	NSE	NSE	59,200	11,700	6,800	1,700	3,020	5,660	--
GRO (μg/l)	NSE	NSE	--	--	--	--	ND	--	--
VOC (μg/l)									
Benzene	5.0	0.5	ND	--	ND	--	ND	--	ND
n-Butylbenzene	NSE	NSE	15.7	--	--	--	--	--	--
Ethyl Benzene	700	140	ND	--	ND	--	ND	--	ND
Methyl-tert-Butyl Ether	60	12	ND	--	ND	--	ND	--	ND
Methylene Chloride	5.0	0.5	**256[1]**	--	--	--	--	--	--
Naphthalene	40	8.0	8.8	--	--	--	--	--	--
n-Propylbenzene	NSE	NSE	5.2	--	--	--	--	--	--
Toluene	343	68.6	ND	--	ND	--	ND	--	ND
Total Trimethylbenzene	480	96	8.1	--	ND	--	ND	--	0.3
Total Xylenes	620	124	ND	--	ND	--	ND	--	ND
PAH (μg/l)									
Acenaphthene	NSE	NSE	17.0	--	6.6	ND	ND	ND	ND
Acenaphthylene	NSE	NSE	8.38	--	ND	ND	ND	ND	ND
Anthracene	3000	600	ND	--	0.25	ND	ND	ND	0.06
Benzo(a)Anthracene	NSE	NSE	ND	--	0.45	ND	ND	ND	0.07
Benzo(a)Pyrene	0.2	0.02	ND	--	0.011	ND	ND	ND	0.02
Benzo(b)Fluoranthene	0.2	0.02	ND	--	0.02	ND	ND	ND	0.02
Benzo(ghi)Perylene	NSE	NSE	ND	--	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	NSE	NSE	ND	--	0.001	ND	ND	ND	0.01
Chrysene	0.2	0.02	ND	--	ND	ND	ND	ND	**0.2**
Dibenzo(a,h)Anthracene	NSE	NSE	ND	--	ND	ND	ND	ND	ND
Fluoranthene	400	80	ND	--	ND	ND	ND	ND	0.03
Fluorene	400	80	25.9	--	0.99	1.48	0.572	ND	0.38
Indeno(1,2,3-cd)Pyrene	NSE	NSE	ND	--	ND	ND	ND	ND	ND
1-Methyl Naphthalene	NSE	NSE	84.4	--	1.1	ND	ND	ND	ND
2-Methyl Naphthalene	NSE	NSE	105	--	ND	ND	ND	ND	ND
Naphthalene	40	8.0	1.25	--	ND	ND	ND	ND	ND
Phenanthrene	NSE	NSE	77.3	--	3.4	2.11	ND	ND	0.89
Pyrene	250	50	ND	--	9.0	ND	ND	ND	0.21

NSE = No standard established
-- = Not analyzed
ND = Not detected
5.6 = ch. NR 140 Enforcement Standard Exceedance
0.5 = ch. NR 140 Preventive Action Limit Exceedance
Note: **256[1]** = Compound detected in laboratory method blank
Compiled by: DRR Checked by: ___

Table 6
AOC #6 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 720 soil cleanup standards	Soil Analytical Results																									
		Date/Sample No./Depth (ft)																									
		Pre-Excavation																						Post Excavation			
		8/12/92	10/22/92	6/8/93												7/6/93					8/11/93		4/27/94		8/16/95			
		MW-4 (7.5-9.5)	TP-1-4 (7)	TP-1A (4)	TP-1A (8)	TP-2A (3)	TP-2A (7)	TP-3A (4)	TP-3A (11)	TP-4A (4)	TP-4A (10.5)	TP-5A (4)	TP-5A (12)	TP-6A (6)	TP-6A (10)	PR-1	PR-4	PR-5	PR-6	PR-7	TW-7A (3-5)	TW-7B (8-10)	MW-5 (8-10)	MW-5 (16-18)	BTM-1 (12)	BTM-2 (12)	WST-Sidewall	EST-Sidewall
DRO (mg/kg)	100	BDL	**7,810**	**18,000**	**5,600**	**8,800**	**2,500**	**140**	**1,200**	**6,600**	51	**4,900**	3.7	4.9	3.1	**140**	**340**	**48,000**	**7,000**	**7,000**	**13,000**	1.9	**8,770**	8.14	12.4	**2,860**	87	**1,260**
PAHs (μg/kg)																												
Acenaphthene	NSE	--	--	--	--	--	BDL	--	--	--	--	--	--	--	--	--	BDL	--	BDL	--	--	--	2,480	BDL	--	--	--	--
Acenaphthylene	NSE	--	--	--	--	--	1,100	--	--	--	--	--	--	--	--	--	BDL	--	2,300	--	--	--	BDL	BDL	--	--	--	--
Anthracene	NSE	--	--	--	--	--	2.5	--	--	--	--	--	--	--	--	--	36	--	130	--	--	--	BDL	BDL	--	--	--	--
Benzo(a)Anthracene	NSE	--	--	--	--	--	3.4	--	--	--	--	--	--	--	--	--	33*	--	BDL*	--	--	--	BDL	BDL	--	--	--	--
Benzo(b)Fluoranthene	NSE	--	--	--	--	--	0.49	--	--	--	--	--	--	--	--	--	110*	--	31*	--	--	--	BDL	BDL	--	--	--	--
Benzo(k)Fluoranthene	NSE	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	28*	--	80*	--	--	--	BDL	BDL	--	--	--	--
Benzo(a)Pyrene	NSE	--	--	--	--	--	0.51	--	--	--	--	--	--	--	--	--	58*	--	29*	--	--	--	BDL	BDL	--	--	--	--
Benzo(g,h,i)Perylene	NSE	--	--	--	--	--	BDL	--	--	--	--	--	--	--	--	--	72*	--	30*	--	--	--	BDL	BDL	--	--	--	--
Chrysene	NSE	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--	--	46	--	BDL	--	--	--	BDL	BDL	--	--	--	--
Dibenzo(a,h)Anthracene	NSE	--	--	--	--	--	BDL	--	--	--	--	--	--	--	--	--	19	--	13	--	--	--	BDL	BDL	--	--	--	--
Fluoranthene	NSE	--	--	--	--	--	29	--	--	--	--	--	--	--	--	--	200	--	3,600	--	--	--	BDL	BDL	--	--	--	--
Fluorene	NSE	--	--	--	--	--	56	--	--	--	--	--	--	--	--	--	41	--	1,400	--	--	--	3,730	BDL	--	--	--	--
Indeno(1,2,3-cd)Pyrene	NSE	--	--	--	--	--	BDL	--	--	--	--	--	--	--	--	--	110	--	35	--	--	--	BDL	BDL	--	--	--	--
Naphthalene	NSE	--	--	--	--	--	360	--	--	--	--	--	--	--	--	--	BDL	--	970	--	--	--	14,200	BDL	--	--	--	--
Phenanthrene	NSE	--	--	--	--	--	94	--	--	--	--	--	--	--	--	--	150	--	170	--	--	--	15,300	BDL	--	--	--	--
Pyrene	NSE	--	--	--	--	--	4.1	--	--	--	--	--	--	--	--	--	110	--	170	--	--	--	BDL	BDL	--	--	--	--
1-Methyl Naphthalene	NSE	--	--	--	--	--	870	--	--	--	--	--	--	--	--	--	17	--	1,200	--	--	--	54,500	BDL	--	--	--	--
2-Methyl Naphthalene	NSE	--	--	--	--	--	2,300	--	--	--	--	--	--	--	--	--	30	--	3,500	--	--	--	44,000	BDL	--	--	--	--
PVOC/VOCs[1] (mg/kg)																												
Tert-Butylbenzene	NSE	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	NSE	--	--	--	--	--	--	--	--	--	--	--	0.044	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	NSE	--	--	--	--	--	--	--	--	--	--	--	0.063	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	NSE	--	--	2.9	--	--	4.0	--	BDL	--	0.037	--	BDL	BDL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	NSE	--	--	6.3	--	--	6.5	--	BDL	--	0.030	--	BDL	BDL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Xylenes	4.1	--	--	2.8	--	--	2.3	--	0.10	--	BDL	--	BDL	BDL	--	--	--	--	--	--	--	--	--	--	--	--	--	--

7,810 = ch. NR 720 soil cleanup standard exceedance
BDL = Below laboratory detection limits
-- = Not analyzed for
NSE = No standard established
mg/kg = micrograms per kilogram, parts per million (ppm)
μg/kg = micrograms per kilogram, parts per billion (ppb)
[1] = Only PVOC/VOCs detected are listed; PVOC/VOCs not listed were BDL
* = Compound detected in method blank
Compiled by: DRR Checked by: TJB

Table 6 (Continued)
AOC #6 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 140 standards		Groundwater Analytical Results							
			Sample No./Date							
			TW-7	MW-4						
	ES	PAL	8/11/93	8/17/92	10/22/92	6/16/93	6/14/94	12/4/95	6/5/96	3/20/97
DRO (μg/l)	NSE	NSE	--	41,300	21,400	6,400	9,330	4,570	4,350	--
GRO (μg/l)	NSE	NSE	--	--	--	--	--	BDL	--	--
PVOCs (μg/l)										
Benzene	5.0	0.5	BDL	BDL	--	1.1	--	BDL	BDL	BDL
n-Butylbenzene	NSE	NSE	--	34.0	--	--	--	--	BDL	BDL
Ethylbenzene	700	140	25	6.8	--	19	--	BDL	BDL	3.6
Methyl-tert-butyl ether	60	12	BDL	BDL	--	BDL	--	BDL	BDL	BDL
Methylene Chloride	5.0	0.5	--	**161***	--	--	--	--	BDL	BDL
Naphthalene	40	8.0	--	**55.1**	--	--	--	--	BDL	BDL
p-Isopropyltoluene	NSE	NSE	--	5.4	--	--	--	--	BDL	--
n-Propylbenzene	NSE	NSE	--	10.3	--	--	--	--	BDL	BDL
Toluene	343	68.6	BDL	4.2	--	BDL	--	BDL	BDL	BDL
Total Trimethylbenzene	480	96	175	37.4	--	31	--	BDL	BDL	7.4
Total Xylenes	620	124	60	BDL	--	11	--	BDL	BDL	1.3
PAHs (μg/l)										
Acenaphthene	NSE	NSE	BDL	17.6	--	BDL	5.79	BDL	BDL	0.6
Acenaphthylene	NSE	NSE	49	29.8	--	39	BDL	BDL	BDL	BDL
Anthracene	3,000	600	5.1	BDL	--	0.33	BDL	BDL	BDL	0.02
Benzo(a)Anthracene	NSE	NSE	BDL	BDL	--	BDL	BDL	BDL	BDL	BDL
Benzo(a)Pyrene	0.2	0.02	0.18*	BDL	--	BDL	BDL	BDL	BDL	BDL
Benzo(b)Fluoranthene	0.2	0.02	0.15*	BDL	--	BDL	BDL	BDL	BDL	BDL
Benzo(g,h,i)Perylene	NSE	NSE	0.17*	BDL	--	BDL	BDL	BDL	BDL	BDL
Benzo(k)Fluoranthene	NSE	NSE	0.065*	BDL	--	BDL	BDL	BDL	BDL	BDL
Chrysene	0.2	0.02	**0.87**	**1.98**	--	BDL	BDL	BDL	BDL	BDL
Dibenzo(a,h)Anthracene	NSE	NSE	0.13	BDL	--	BDL	BDL	BDL	BDL	BDL
Fluoranthene	400	80	26*	BDL	--	BDL	BDL	BDL	BDL	BDL
Fluorene	400	80	14	15.2	--	2.9	2.22	BDL	BDL	0.63
Indeno(1,2,3-cd)Pyrene	NSE	NSE	0.094	BDL	--	BDL	BDL	BDL	BDL	BDL
1-Methyl Naphthalene	NSE	NSE	160	157	--	15	14.7	BDL	BDL	9.1
2-Methyl Naphthalene	NSE	NSE	190	173	--	BDL	14.2	BDL	BDL	1.5
Naphthalene	40	8.0	**81**	13.6	--	3.7	6.73	BDL	BDL	1.9
Phenanthrene	NSE	NSE	25*	26.2	--	BDL	0.765	BDL	BDL	0.28
Pyrene	250	50	BDL*	BDL	--	6.0	BDL	BDL	BDL	BDL

NSE = No standard established
-- = Not analyzed for
BDL = Below laboratory detection limit
55.1 = ch. NR 140 Enforcement Standard exceedance
1.1 = ch. NR 140 Preventive Action Limit exceedance
Note: **161*** = Compound detected in laboratory method blank
Compiled by: DRR Checked by: TJB

Table 7
AOC #7 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 720 soil cleanup standards	Soil Analytical Results							
		Date/Sample No./Depth (ft)							
		4/13/94		4/14/94					
		MW-6 (6-8)	MW-6 (16-18)	MW-7 (8-10)	MW-7 (16-18)	AS-1 (12-14)	AS-1 (20-22)	RW-1 (12-14)	RW-1 (18-20)
DRO (mg/kg)	100	**6,340**	BDL	BDL	BDL	BDL	BDL	BDL	BDL
PAHs (μg/kg)									
Acenaphthene	NSE	BDL	--	--	--	--	--	--	--
Acenaphthylene	NSE	BDL	--	--	--	--	--	--	--
Anthracene	NSE	BDL	--	--	--	--	--	--	--
Benzo(a)Anthracene	NSE	BDL	--	--	--	--	--	--	--
Benzo(b)Fluoranthene	NSE	BDL	--	--	--	--	--	--	--
Benzo(k)Fluoranthene	NSE	BDL	--	--	--	--	--	--	--
Benzo(a)Pyrene	NSE	BDL	--	--	--	--	--	--	--
Benzo(g,h,i)Perylene	NSE	BDL	--	--	--	--	--	--	--
Chrysene	NSE	BDL	--	--	--	--	--	--	--
Dibenzo(a,h)Anthracene	NSE	BDL	--	--	--	--	--	--	--
Fluoranthene	NSE	BDL	--	--	--	--	--	--	--
Fluorene	NSE	BDL	--	--	--	--	--	--	--
Indeno(1,2,3-cd)Pyrene	NSE	BDL	--	--	--	--	--	--	--
Naphthalene	NSE	BDL	--	--	--	--	--	--	--
Phenanthrene	NSE	BDL	--	--	--	--	--	--	--
Pyrene	NSE	BDL	--	--	--	--	--	--	--
1-Methyl Naphthalene	NSE	BDL	--	--	--	--	--	--	--
2-Methyl Naphthalene	NSE	BDL	--	--	--	--	--	--	--
PVOC/VOCs[1] (mg/kg)									
Ethylbenzene	2.9	0.017	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	NSE	0.04	--	--	--	--	--	--	--

6,340 = ch. NR 720 soil cleanup standard exceedance
BDL = Below laboratory detection limits
-- = Not analyzed for
NSE = No standard established
mg/kg = micrograms per kilogram, parts per million (ppm)
μg/kg = micrograms per kilogram, parts per billion (ppb)
[1] = Only PVOC/VOCs detected are listed; PVOC/VOCs not listed were BDL
Compiled by: DRR Checked by: TJB

Table 7 (Continued)
AOC #7 – Soil and Groundwater Analytical Results

Analytical Parameters	ch. NR 140 standards		Groundwater Analytical Results																	
			Sample No./Date																	
			TW-3	TW-4	TW-5	MW-6									MW-7					
	ES	PAL	8/93	8/93	8/93	6/14/94	12/4/95	6/5/96	9/18/96	1/9/97	3/20/97	5/1/97	8/22/97	12/7/98	6/14/94	12/4/95	6/5/96	9/18/96	3/20/97	5/1/97
DRO (μg/l)	NSE	NSE	--	--	--	4,970	2,900	6,420	--	2,600	--	--	--	--	5,620	348	1,760	--	--	--
GRO (μg/l)	NSE	NSE	--	--	--	--	854	875	--	--	--	--	--	--	--	BDL	82	--	--	--
PVOCs (μg/l)																				
Benzene	5.0	0.5	BDL	BDL	BDL	BDL	BDL	3.66	BDL	0.5	0.8	1.0	1.4	0.725	BDL	BDL	BDL	BDL	BDL	BDL
Ethylbenzene	700	140	40	BDL	32	BDL	12.8	24.9	6.61	7.2	12	9.2	13	7.95	1.52	BDL	BDL	BDL	1.1	BDL
Methyl-tert-butyl ether	60	12	BDL	BDL	BDL	BDL	BDL	BDL	--	--	BDL	--	BDL	BDL	BDL	BDL	BDL	--	BDL	--
Toluene	343	68.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Total Trimethylbenzene	480	96	158	BDL	184	BDL	54.5	69.06	--	--	51	--	44	37.01	16.52	BDL	BDL	--	3.0	--
Total Xylenes	620	124	57	BDL	64	BDL	18.0	34.4	6.56	7.7	14.7	12.5	18.1	8.77	2.58	BDL	BDL	BDL	2.0	BDL
PAHs (μg/l)																				
Acenaphthene	NSE	NSE	BDL	BDL	BDL	18.6	BDL	BDL	BDL	BDL	4.7	BDL	BDL	2.2	BDL	BDL	BDL	BDL	0.7	BDL
Acenaphthylene	NSE	NSE	20	BDL	200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Anthracene	3,000	600	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	BDL	0.042	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(a)Anthracene	NSE	NSE	BDL	0.0098	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(a)Pyrene	0.2	0.02	BDL	0.0092*	0.021*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(b)Fluoranthene	0.2	0.02	**0.23***	0.014*	0.04*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(g,h,i)Perylene	NSE	NSE	0.0038*	0.016*	0.027*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(k)Fluoranthene	NSE	NSE	0.23*	0.0056*	0.0022*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chrysene	0.2	0.02	BDL	BDL	0.090	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Dibenzo(a,h)Anthracene	NSE	NSE	0.0092	0.0037	0.012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluoranthene	400	80	69*	0.046*	34*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluorene	400	80	26	BDL	12	6.94	BDL	9.80	1.29	2.1	1.8	1.3	1.1	4.64	0.19	BDL	0.68	BDL	0.32	BDL
Indeno(1,2,3-cd)Pyrene	NSE	NSE	0.023	0.012	0.007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1-Methyl Naphthalene	NSE	NSE	430	BDL	260	139	47.4	75	31	28	42	23	24	54.3	BDL	BDL	BDL	BDL	2.8	BDL
2-Methyl Naphthalene	NSE	NSE	510	BDL	460	244	91.5	106	29.9	34	74	46	43	93.6	0.71	BDL	BDL	BDL	1.2	BDL
Naphthalene	40	8.0	**130**	BDL	**220**	**194**	**91.2**	**106**	**52.5**	**41**	**60**	38	36	**88.6**	BDL	BDL	BDL	BDL	BDL	BDL
Phenanthrene	NSE	NSE	75*	0.026*	27*	8.78	BDL	BDL	BDL	0.88	1.69	1.74	BDL	BDL	BDL	BDL	BDL	BDL	0.24	BDL
Pyrene	250	50	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

NSE = No standard established
-- = Not analyzed
BDL = Below laboratory detection limit
3.66 = ch. NR 140 Preventive Action Limit Exceedance
194 = ch. NR 140 Enforcement Standard exceedance
* = Compound detected in method blank
Compiled by: DRR Checked by: TJB

Table 7 (Continued)
AOC #7 – Soil and Groundwater Analytical Results

Analytical Parameter	ch. NR 140 Standard		Groundwater Analytical Results																	
			Sample No./Date																	
			RW-1A[1]	RW-1B[2]	RW-1															VE-3
	ES	PAL	5/17/94	5/17/94	12/4/95	1/10/96	1/18/96	1/24/96	6/15/96	6/25/96	7/11/96	7/26/96	8/23/96	9/18/96	10/18/96	11/26/96	1/9/97	5/1/97	8/22/97	3/20/97
DRO (μg/l)	NSE	NSE	4,390	4,640	8,900	6,290	--	--	9,710	5,000	3,630	4,500	4,660	4,370	2,600	3,600	3,900	--	--	--
GRO (μg/l)	NSE	NSE	--	--	767	--	--	--	824	--	--	--	--	--	--	--	--	--	--	--
PVOC (μg/l)																				
Benzene	5.0	0.5	**6.2**	4.3	**5.18**	3.16	2.73	2.20	3.51	--	--	--	--	BDL	--	--	1.8	2.4	2.7	BDL
n-Butylbenzene	NSE	NSE	14.3	14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	NSE	NSE	5.5	BDL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	18.2	12.5	22.9	16.1	19.8	19.0	24.8	--	--	--	--	5.81	--	--	15	14	13	BDL
Isopropylbenzene	NSE	NSE	8.8	8.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5.0	0.5	**15***	BDL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl-tert-Butyl Ether	60	12	BDL	BDL	BDL	--	BDL	--	BDL	--	--	--	--	--	--	--	--	--	BDL	BDL
Naphthalene	40	8.0	30.3	**40.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	NSE	NSE	12.8	13.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethylene	5.0	0.5	BDL	3.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	343	68.6	BDL	BDL	BDL	BDL	BDL	BDL	1.53	--	--	--	--	BDL	--	--	1.5	0.5	0.87	BDL
Total Trimethylbenzene	480	96	22.5	20.8	53.26	--	65.7	--	65.1	--	--	--	--	--	--	--	--	--	13.7	BDL
Total Xylenes	620	124	29.1	25.6	36.43	28.86	36.46	26.91	37.71	--	--	--	--	5.62	--	--	24.4	12.1	12.1	BDL
PAH (μg/l)																				
Acenaphthene	NSE	NSE	10.3	10.3	BDL	BDL	BDL	BDL	BDL	--	--	--	--	1.53	--	--	5.8	2.1	2.3	BDL
Acenaphthylene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Anthracene	3,000	600	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	0.2	0.12	0.10	BDL
Benzo(a)Anthracene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Benzo(a)Pyrene	0.2	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Benzo(b)Fluoranthene	0.2	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Benzo(g,h,i)Perylene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Benzo(k)Fluoranthene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Chrysene	0.2	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Dibenzo(a,h)Anthracene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Fluoranthene	400	80	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
Fluorene	400	80	4.08	4.60	BDL	6.63	6.64	BDL	7.63	--	--	--	--	BDL	--	--	4.1	2.8	1.8	BDL
Indeno(1,2,3-cd)Pyrene	NSE	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	BDL	BDL	BDL	BDL
1-Methyl Naphthalene	NSE	NSE	16.8	26.2	40	45.8	40.1	34.5	42	--	--	--	--	19.7	--	--	40	6.7	6.5	BDL
2-Methyl Naphthalene	NSE	NSE	BDL	BDL	27	35.9	35.0	26.1	28.3	--	--	--	--	11	--	--	38	4.7	5.4	BDL
Naphthalene	40	8.0	**40.5**	**53.8**	**70.2**	**61.8**	**45.5**	**44.0**	**50.3**	--	--	--	--	19.3	--	--	36	3.9	5.1	BDL
Phenanthrene	NSE	NSE	BDL	3.23	BDL	BDL	7.41	BDL	BDL	--	--	--	--	BDL	--	--	3.75	2.71	2.1	BDL
Pyrene	250	50	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	--	--	--	BDL	--	--	0.17	0.1	BDL	BDL

[1] = Pre-pumping test groundwater sample
[2] = Post-pumping test groundwater sample
NSE = No standard established
-- = Not analyzed
BDL = Below laboratory detection limit
6.2 = ch. NR 140 Enforcement Standard Exceedance
4.3 = ch. NR 140 Preventive Action Limit Exceedance
* = Methylene chloride exceedance due to lab contamination
Note: Groundwater extraction system shutdown 1/97, SVE/AS system shut down 7/97
Compiled by: DRR Checked by: TJB

Table 8
Groundwater Analytical Results

Analytical Parameters	ch. NR 140 standards		Sample No./Date											
			TW-1	TW-2	TW-3	TW-4	TW-5	TW-6	TW-7	TW-8	TW-9	TW-10	TW-11	TW-12
	ES	PAL	8/11/93								8/17/93			
DRO (μg/l)	NSE	NSE	--	--	--	--	--	--	--	--	--	--	--	--
GRO (μg/l)	NSE	NSE	--	--	--	--	--	--	--	--	--	--	--	--
PVOCs (μg/l)														
Benzene	5.0	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.68	BDL	BDL	**76**	BDL
Ethylbenzene	700	140	BDL	BDL	40	BDL	32	BDL	25	2.6	BDL	BDL	BDL	BDL
Methyl-tert-butyl ether	60	12	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	343	68.6	BDL	1.0	BDL	BDL	BDL	BDL	BDL	3.9	BDL	BDL	BDL	BDL
Total Trimethylbenzene	480	96	BDL	BDL	158	BDL	184	BDL	175	1.7	BDL	BDL	BDL	BDL
Total Xylenes	620	124	BDL	BDL	57	BDL	64	BDL	60	BDL	BDL	BDL	BDL	BDL
PAHs (μg/l)														
Acenaphthene	NSE	NSE	0.36	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Acenaphthylene	NSE	NSE	BDL	BDL	20	BDL	200	BDL	49	5.7	BDL	BDL	BDL	BDL
Anthracene	3,000	600	0.035	BDL	BDL	BDL	BDL	BDL	5.1	0.19	BDL	BDL	BDL	BDL
Benzo(a)Anthracene	NSE	NSE	0.0084	0.0040	BDL	0.0098	BDL	0.0077	BDL	0.017	0.0035	BDL	BDL	BDL
Benzo(b)Fluoranthene*	0.2	0.02	0.012	0.0054	0.11	0.014	0.040	0.015	0.15	0.034	0.0022	0.0021	0.0023	0.0023
Benzo(k)Fluoranthene*	NSE	NSE	0.0065	0.0024	0.23	0.0056	0.0022	0.0065	0.065	0.012	0.00099	0.00093	0.0012	0.0012
Benzo(a)Pyrene*	0.2	0.02	0.012	0.0065	BDL	0.0092	0.021	0.0081	0.18	0.034	0.0015	0.0013	0.0015	0.0015
Benzo(g,h,i)Perylene*	NSE	NSE	0.015	0.011	0.038	0.016	0.027	0.015	0.17	0.042	0.0023	BDL	0.0030	0.0027
Chrysene	0.2	0.02	BDL	BDL	BDL	BDL	0.090	BDL	**0.87**	0.18	BDL	BDL	BDL	BDL
Dibenzo(a,h)Anthracene	NSE	NSE	0.0032	BDL	0.0092	0.0037	0.012	0.0050	0.13	0.0088	BDL	BDL	BDL	BDL
Fluoranthene*[1]	400	80	0.32	0.049	69	0.046	34	0.037	26	6.2	BDL	BDL	BDL	BDL
Fluorene	400	80	0.40	0.13	26	BDL	12	BDL	14	3.4	BDL	BDL	BDL	BDL
Indeno(1,2,3-cd)Pyrene	NSE	NSE	0.014	BDL	0.023	0.012	0.0070	0.014	0.094	0.055	BDL	BDL	BDL	BDL
1-Methyl Naphthalene	NSE	NSE	10	BDL	430	BDL	260	BDL	160	4.2	BDL	BDL	BDL	BDL
2-Methyl Naphthalene	NSE	NSE	3.4	0.36	510	BDL	460	BDL	190	10	BDL	BDL	BDL	BDL
Naphthalene	40	8.0	1.0	BDL	**130**	BDL	**220**	BDL	**81**	0.45	BDL	BDL	BDL	BDL
Phenanthrene*	NSE	NSE	1.2	0.04	75	0.026	27	0.044	25	7.6	0.028	BDL	BDL	BDL
Pyrene*[1]	250	50	BDL	0.059	BDL	BDL	BDL	BDL	BDL	0.43	BDL	BDL	BDL	BDL

ES = ch. NR 140 Enforcement Standard
PAL = ch. NR 140 Preventive Action Limit
NSE = No standard established
* = Parameter detected in 8/11/93 and 8/17/93 laboratory method blank
76 = ch. NR 140 Enforcement Standard Exceedance
0.68 = ch. NR 140 Preventive Action Limit Exceedance
μg/l = Micrograms per liter, parts per billion (ppb)
[1] = Not detected in 8/17/93 method blank
BDL = Below laboratory detection limit
-- = Not analyzed for
Compiled by: DRR Checked by: TJB