

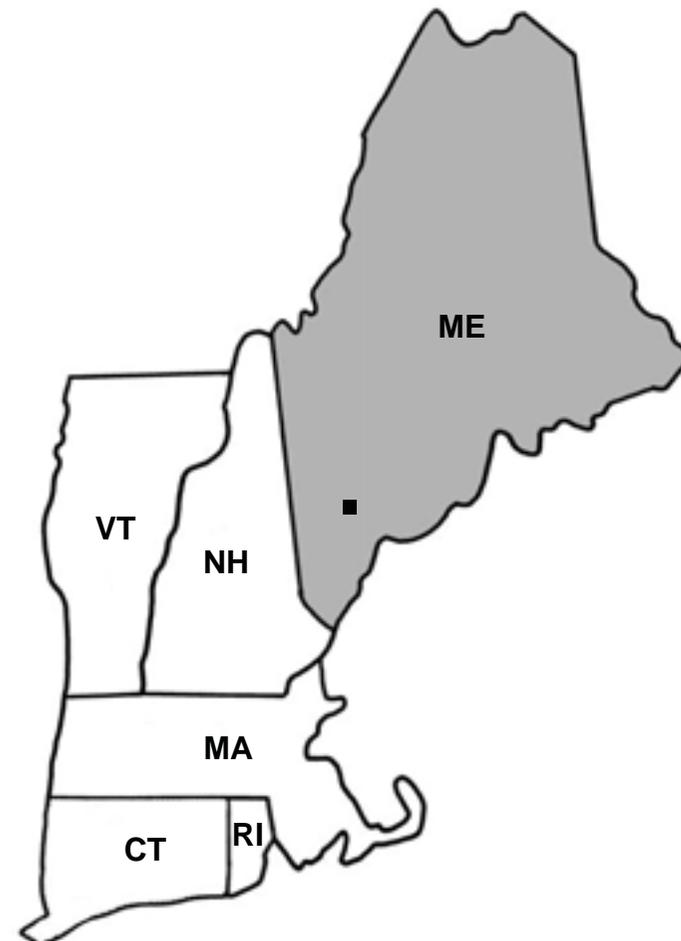


AERIAL PHOTOGRAPHIC ANALYSIS OF LEEDS METAL SITE

Leeds, Maine

Volumes 1 and 2 Combined

EPA Region 1



TS-OEI-21101007S
June 2012

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LEEDS METAL SITE

Leeds, Maine

Volumes 1 and 2 Combined

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Contract No. GS-35F-4550G

Task Order Contracting Officer Representative

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NOTICE

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ABSTRACT

This report presents the findings from historical aerial photographic analysis of the Leeds Metal site located in Leeds, Androscoggin County, Maine. To perform the historical aerial photographic analysis, twelve (12) years of historical black-and-white and color aerial photographs were obtained and analyzed to cover the period from 1939 through 2011. Eleven years of photography were reproduced for inclusion in this report. The purpose of the historical aerial photographic analysis is to document the location and extent of onsite disposal sites and mounded material; identify the onsite road network and buildings; document changes to wetland areas and trenches; and document other environmentally significant activity. This report provides operational remote sensing information in support of remedial actions conducted by the Region 1 Office of the U.S. Environmental Protection Agency (EPA) under the Comprehensive, Environmental Response, Compensation, and Liability Act (CERCLA). The report is presented in two volumes: the first volume includes the text descriptions and photographic analysis, while the second volume contains the aerial photographs and interpretive overlays.

Collateral information supplied by the EPA Region 1 states the Leeds Metal site was mined prior to 1969. Beginning in 1969, the site was used as a scrap metal recovery facility. Junked automobiles and scrap metal were brought to the site to be pulverized to recover metals. The metal was shipped offsite via railroad cars. Fluids from the automobiles are believed to have been dumped onsite. Scrap metal recovery operations ceased by 1984. Elevated levels of PCBs and heavy metals have been detected in soil and in groundwater samples on the Leeds Metal site.

Significant findings for the historical aerial photographic analysis of the Leeds Metal site include the identification of a lagoon, solid waste, scrap metal, mounded material, disposal pits, trenches, and open storage areas.

The Center of Environmental Computing, Office of Technology Operations and Planning, Office of Environmental Information at Research Triangle Park, North Carolina, prepared this report for the EPA Region 5 Superfund Division in Chicago, Illinois, and the EPA Office of Superfund Remediation Technology Innovation in Washington, D.C.

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INTRODUCTION

This report presents the findings from historical aerial photographic analysis of the Leeds Metal site (EPA ID# MEN000103584), located in Leeds, in Androscoggin County, Maine (Figures 1 and 2). To perform the historical aerial photographic analysis, twelve (12) years of historical black-and-white and color aerial photographs were obtained and analyzed to cover the analysis period from 1939 through 2011. Eleven aerial photographs taken in 1939, 1943, 1953, 1960, 1964, 1973, 1980, 1985, 1991, 2003, and 2011 have been reproduced for inclusion in this report. The purpose of the historical aerial photographic analysis is to document the location and extent of onsite disposal sites and mounded material; identify the onsite road network and buildings; document changes to wetland areas and trenches; and document other environmentally significant features and conditions at the site. This analysis and the report provide operational remote sensing information in support of remedial actions conducted by the Region 1 Office of the U.S. Environmental Protection Agency (EPA) under the Comprehensive, Environmental Response, Compensation, and Liability Act (CERCLA).

Collateral information supplied by the EPA Region 1 states the Leeds Metal site was mined prior to 1969. Beginning in 1969, the site was used as a scrap metal recovery facility. Junked automobiles and scrap metal were brought to the site to be pulverized to recover metals. The metal was shipped offsite via railroad cars. Fluids from the automobiles are believed to have been dumped onsite. Scrap metal recovery operations ceased by 1984. Elevated levels of PCBs and heavy metals have been detected in soil and in groundwater samples on the Leeds Metal site.

This report is presented in two volumes. Volume 1 contains the text of the report, including the Introduction, Methodology, and Photographic Analysis sections. Volume 2 contains the various maps and the photographs, with respective annotated overlays.

In the report, if there are no changes in environmentally significant features or activities from one date of analysis to the next, these features and activities will continue to be annotated on the overlays, but may not be discussed in the text. Should these features and activities change in future dates, they will again be discussed in the text.

The Leeds Metal site is bounded to the east by a railroad and to the west by State Route 106. Boundaries used in this report are based on those provided by EPA and been further developed during the course of the analysis. These boundaries do not necessarily denote legal property lines or ownership.

Findings for the historical aerial photographic analysis of the Leeds Metal site discovered a possible mining excavation on the site in 1939. Mining activity continued through at least 1943. In 1943, a probable outfall, and several trenches containing standing liquid were identified on the site. Through the remainder of the analysis period, no features or conditions of environmental significance were observed in the trenches. By 1953, major mining activity had ceased on the Leeds site. Possible outfalls and a lagoon containing possible liquid waste were on the site. Possible liquid waste was present in the lagoon in 1960. By 1964, two onsite open storage areas were being utilized by an offsite industrial facility. One open storage area was placed near the lagoon; the second open storage area was placed on a fill area. The open storage areas remained in use through at least 1980 and 1985. Between 1964 and 1973 solid waste deposits had been deposited at the base of an excavation. The solid waste in the excavation was observed through the remainder of the analysis period. By 1973 several buildings had been constructed and a scrap metal processing facility was operating. Large amounts of scrap were present onsite. Scrap metal processing continued through at least 1980. In 1980, several mounds of material, including mounds of solid waste, and possible and probable solid waste were present. Disposal pits were also on the site. By 1985, the scrap metal processing facility had ceased operating. Several mounds of material remained onsite through the analysis period.

A Glossary, defining features or conditions identified in this report, follows the Photographic Analysis section. Sources for all maps, aerial photographs, and collateral data used in the production of this report are listed in the References section. A list of all aerial photographs that were identified and evaluated for potential application to this study can be obtained by contacting the EPA Task Order Contracting Officer Representative. Historical aerial photographs used in the analysis of this site have been digitally scanned and printed for use in this report. A transparent overlay with interpretative data is affixed to each of the digital prints. See the Methodology section for a discussion of the scanning and printing procedures.

The Center of Environmental Computing, Office of Technology Operations and Planning, Office of Environmental Information at Research Triangle Park, North Carolina, prepared this report for the EPA Region 5 Superfund Division in Chicago, Illinois, and the EPA Office of Superfund Remediation Technology Innovation in Washington, D.C.



Figure 1. Site location map, Maine (USGS, 1972).
 Approximate scale 1:3,125,000.

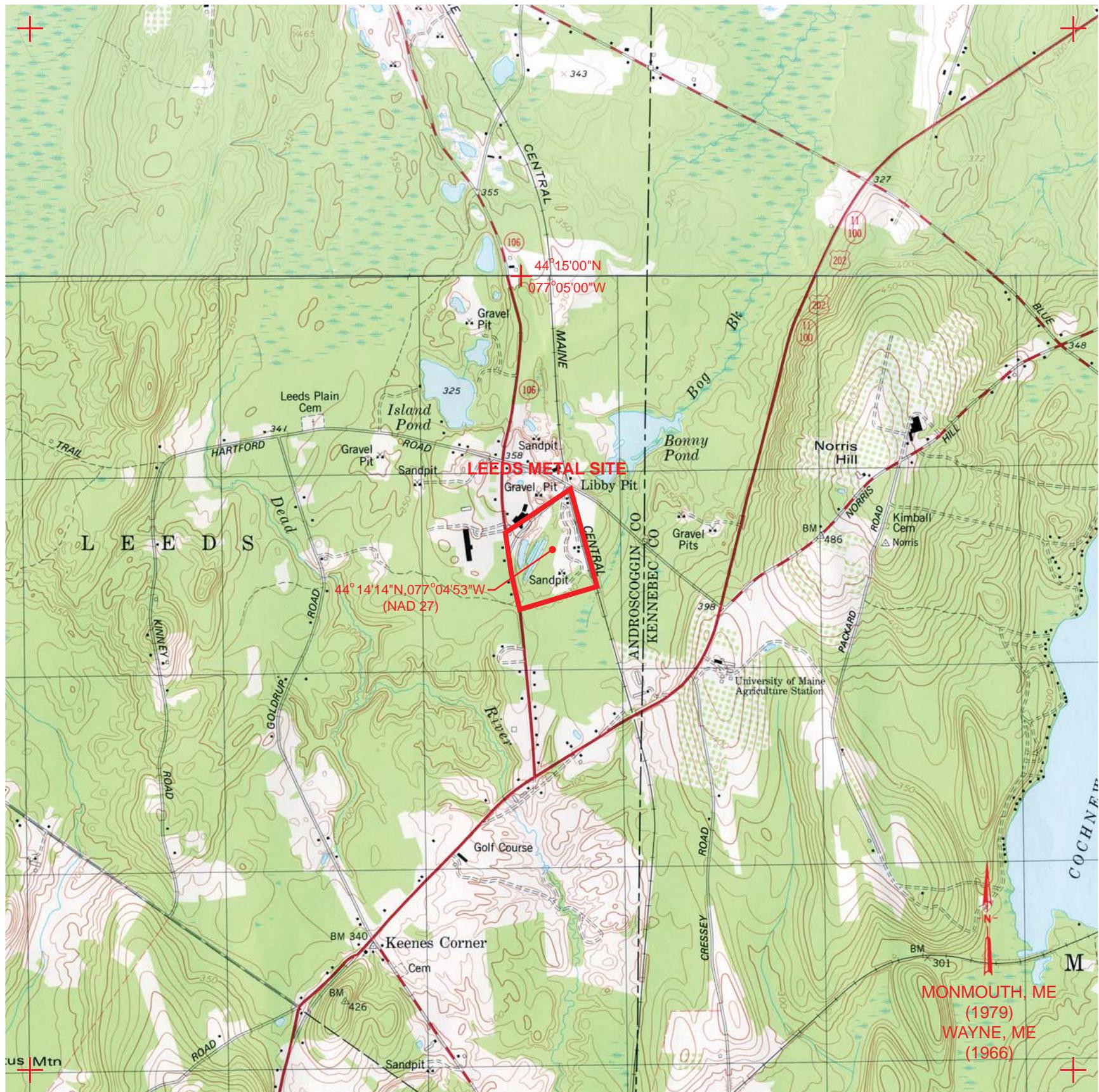


Figure 2. Local site location map, Monmouth, Maine (USGS, 1979) and Wayne, Maine (USGS, 1966). Approximate scale 1:24,000.

METHODOLOGY

This report was prepared using a standard methodology that includes the following steps:

- data identification and acquisition,
- photographic analysis and interpretation, and
- graphics and text preparation.

These steps are described below. Subsections also address details related to specific kinds of analyses that may be required to identify environmental features such as surface drainage and wetlands. All operational steps and processes used to perform this work (including data identification and acquisition, photographic analysis and interpretation, and graphics and text preparation) adhere to strict QA/QC guidelines and standard operating procedures (SOPs).

Data identification and acquisition included a search of government and commercial sources of historical aerial film for the study area. Photographs with optimal spatial and temporal resolution and image quality were identified for acquisition. In addition, U.S. Geological Survey (USGS) topographic maps were obtained to show the study area location and to provide geographic and topographic context.

To conduct this analysis, the analyst examined diapositives (transparencies) of historical aerial photographs showing the study area. Diapositives are most often used for analysis instead of prints because the diapositives have superior photographic resolution. They show minute details of significant environmental features that may not be discernible on a paper print.

A photographic analyst uses a stereoscope to view adjacent, overlapping pairs of diapositives on a backlit light table. In most cases, the stereoscope is capable of various magnifications up to 60 power. Stereoscopic viewing involves using the principle of parallax (observing a feature from slightly different positions) to observe a three-dimensional

representation of the area of interest. The stereoscope enhances the photo interpretation process by allowing the analyst to observe vertical as well as horizontal spatial relationships of natural and cultural features.

The process of photographic analysis involves the visual examination and comparison of many components of the photographic image. These components include shadow, tone, color, texture, shape, size, pattern, and landscape context of individual elements of a photograph. The photo analyst identifies objects, features, and "signatures" associated with specific environmental conditions or events. The term "signature" refers to a combination of components or characteristics that indicate a specific object, condition, or pattern of environmental significance. The academic and professional training, photo interpretation experience gained through repetitive observations of similar features or activities, and deductive logic of the analyst as well as background information from collateral sources (e.g., site maps, geologic reports, soil surveys) are critical factors employed in the photographic analysis.

The analyst records the results of the analysis by using a standard set of annotations and terminology to identify objects and features observed on the diapositives. Significant findings are annotated on overlays attached to the photographic or computer-reproduced prints in the report and discussed in the accompanying text. Annotations that are self-explanatory may not be discussed in the text. The annotations are defined in the legend that accompanies each print and in the text when first used.

Objects and features are identified in the graphics and text according to the analyst's degree of confidence in the evidence. A distinction is made between certain, probable, and possible identifications. When the analyst believes the identification is unmistakable (certain), no qualifier is used. Probable is used when a limited number of discernible characteristics allow the analyst to be reasonably sure of a particular identification. Possible is used when only a few characteristics are discernible, and the analyst can only infer an identification.

The prints in this report have been reproduced, either by photographic or computer methods, from the original film. Reproductions are made from the original film and may be either contact (the same size) prints or enlargements, depending on the scale of the original film. Any computer-produced prints used in this report are generated from scans of the film at approximately 1,300 dots per inch (dpi) and printed at 720 dpi. Although the reproductions allow effective display of the interpretive annotations, they may have less photographic resolution than the original film. Therefore, some of the objects and features identified in the original image and described in the text may not be as clearly discernible on the prints in this report.

Study area boundaries shown in this report were determined from aerial photographs and from information supplied by EPA Region. Boundaries used in this report do not necessarily denote legal property lines or ownership.

Digital Diapositives

Some film vendors no longer supply analog film products (e.g., diapositive transparencies) to their customers. Digital files, created by scanning the original analog film products, are provided. The digital file, a representation of an original analog film product, can be analyzed either by computer viewing techniques or by creating a secondary diapositive from the digital file and viewing the secondary diapositive on a light table. The result of this process of converting an analog diapositive image to a digital file may be a reduction in the photographic resolution. A potential consequence of this in the realm of aerial photographic analysis is a lower confidence in the identification of features or conditions of environmental significance. For example, what may have been identified with certainty as "a drum" on the analog version of the diapositive may, on the digital diapositive, only be determined to be "a probable drum".

Surface Drainage

The surface drainage analysis produced for this report identifies the direction and potential path that a liquid spill or surface runoff would follow based on the topography of the terrain and the presence of discernible obstacles to surface flow. The analyst determines the direction of surface drainage by stereoscopic analysis of the aerial photographs and by examining USGS topographic maps. Site-specific surface drainage patterns are annotated on the map or photo overlay. Where the direction of subtle drainage cannot be determined, an indeterminate drainage line symbol is used. Regional surface flow is ascertained from the USGS topographic maps.

HISTORICAL AERIAL PHOTOGRAPHIC ANALYSIS

The Leeds Metal site, located in Leeds, Androscoggin County, Maine, covers approximately 17.4 hectares (43 acres). The site is surrounded by forested areas to the west, south, and east. Scattered residential developments, mining operations, and light industrial facilities are also present nearby. The natural topography of the site is relatively flat. Surface elevations range from approximately 107 meters (350 feet) above sea level near an industrial facility along the northern site boundary to 98 meters (320 feet) above sea near a wetland in the extreme southeastern part of the site. (USGS, 1979). Surface runoff generally flows toward the wetland area or an excavated area. The wetland in the southeastern portion of the site drains into an unnamed drainage channel which empties into Bonny Pond, located approximately 76 meters (250 feet) northeast of the Leeds Metal site. Onsite drainage channels could not be identified on the photographs.

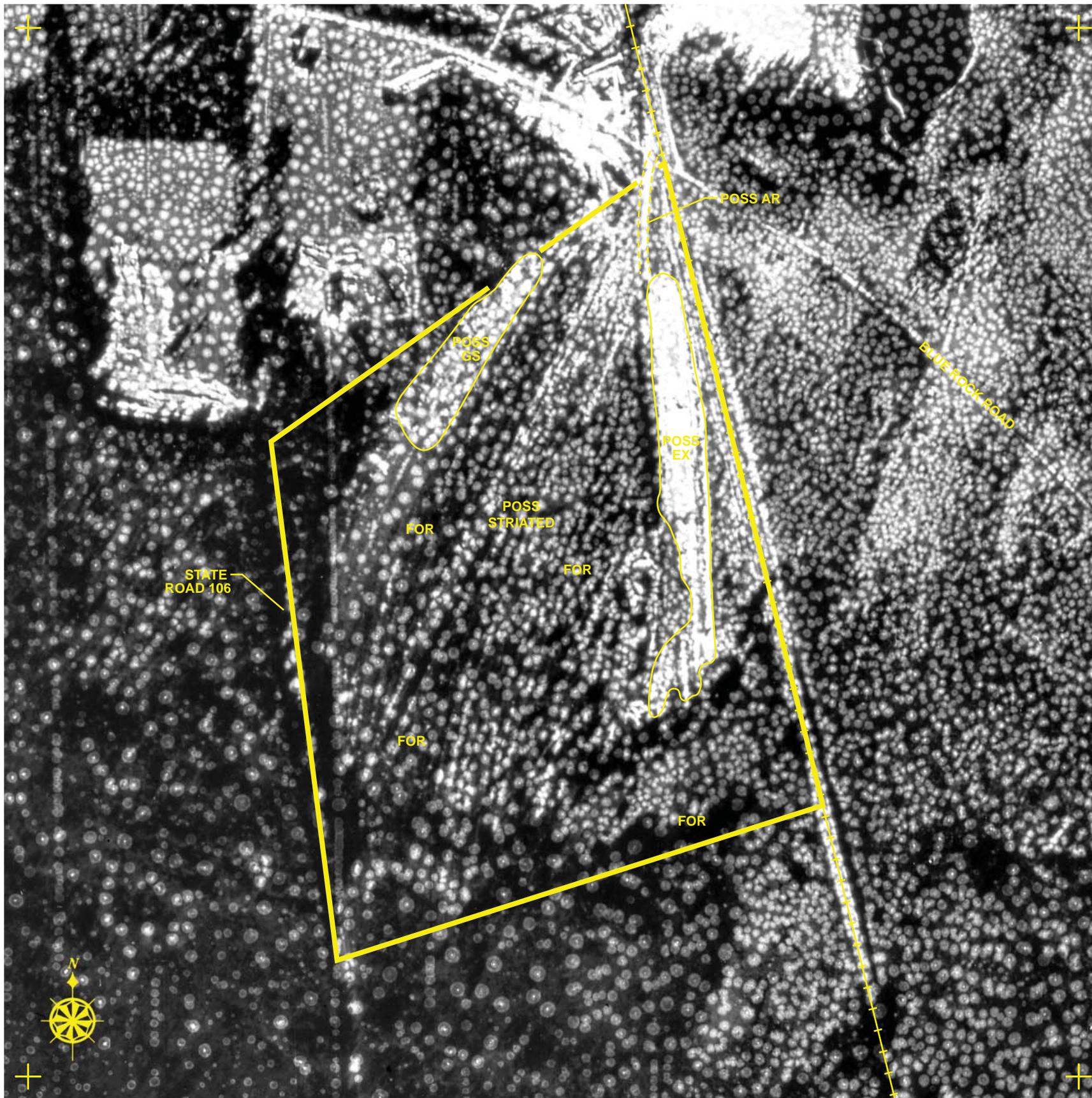
NOVEMBER 27, 1939 (FIGURE 3)

Numerous photographic anomalies are seen in the film used for this year of the report. These photographic anomalies are not annotated on the print overlay. Because of the extreme degradation of the film, the features and conditions visible on photographs from other years of analysis may not be discerned on the 1939 photograph, and the following analysis may not be as detailed. These anomalies should not be confused with environmental features and conditions described in this report.

The Leeds Metal site is located between State Road 106 and a railroad. A possible access road (AR) connects to Blue Rock Road just offsite. The access road extends into the northeastern part of the Leeds Metal site and leads to a possible excavation (EX) alongside the railroad. Adjacent to the northern part of the site is a possible ground scar (GS). Access to the possible ground scar cannot be discerned. It cannot be determined from the photographs if the Leeds Metal site is actively being mined.

Much of the remaining surface area on the Leeds Metal site is possibly striated. The possible striated surface is oriented northeast to southwest, possibly resulting from past mining operations. This area and surrounding areas on the site are vegetated and include forest (FOR).

Near the Leeds Metal site there are several active mining operations (not annotated) likely related to the excavation and processing of sand or gravel.



LEGEND

—	SITE BOUNDARY
← — —	DRAINAGE DIRECTION
+ + + +	RAILROAD
== == ==	ACCESS ROAD
x x x x x	FENCE
• • • • •	PIPELINE
⊖	EXCAVATION/PIT
⊕	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
~	APPROXIMATE

Figure 3. Leeds Metal site, November 27, 1939. Approximate scale 1:3,830.

JULY 24, 1943 (FIGURE 4)

Two mining excavations (EX-1 and EX-2) are present on the site. Excavation EX-1 is linked, via the access road, to an established sand and gravel mining operation to the north of the Leeds Metal site. Excavation EX-1 is located alongside the railroad, where several open-bed railroad cars (RR CARS) are parked. The railroad cars are filled with light-toned material. The depth of excavation EX-1 is at least 4.6 meters (15 feet). Shallower depths are located in the northern part of the excavation and the deepest sections are located in the central and southern part of excavation EX-1, where surface runoff collects. The northern part of excavation EX-1 is actively being mined. Mining activity has slowed or ceased in the southern part of excavation EX-1. At this location, areas of vegetation (not annotated) are present atop the sand and gravel, and vegetation is present on parts of the dirt road. Probable standing liquid (SL) is present in the western part of the excavation.

Excavation EX-2, located along the northern site boundary, is likely being mined. Excavation EX-2 appears to be a component of the established mining operation located north of the Leeds Metal site. The depth of excavation EX-2 is at least 4.6 meters (15 feet) below grade of the area immediately to the north. Light-toned mounded material (LTMM; likely sand or gravel) has been deposited at two locations.

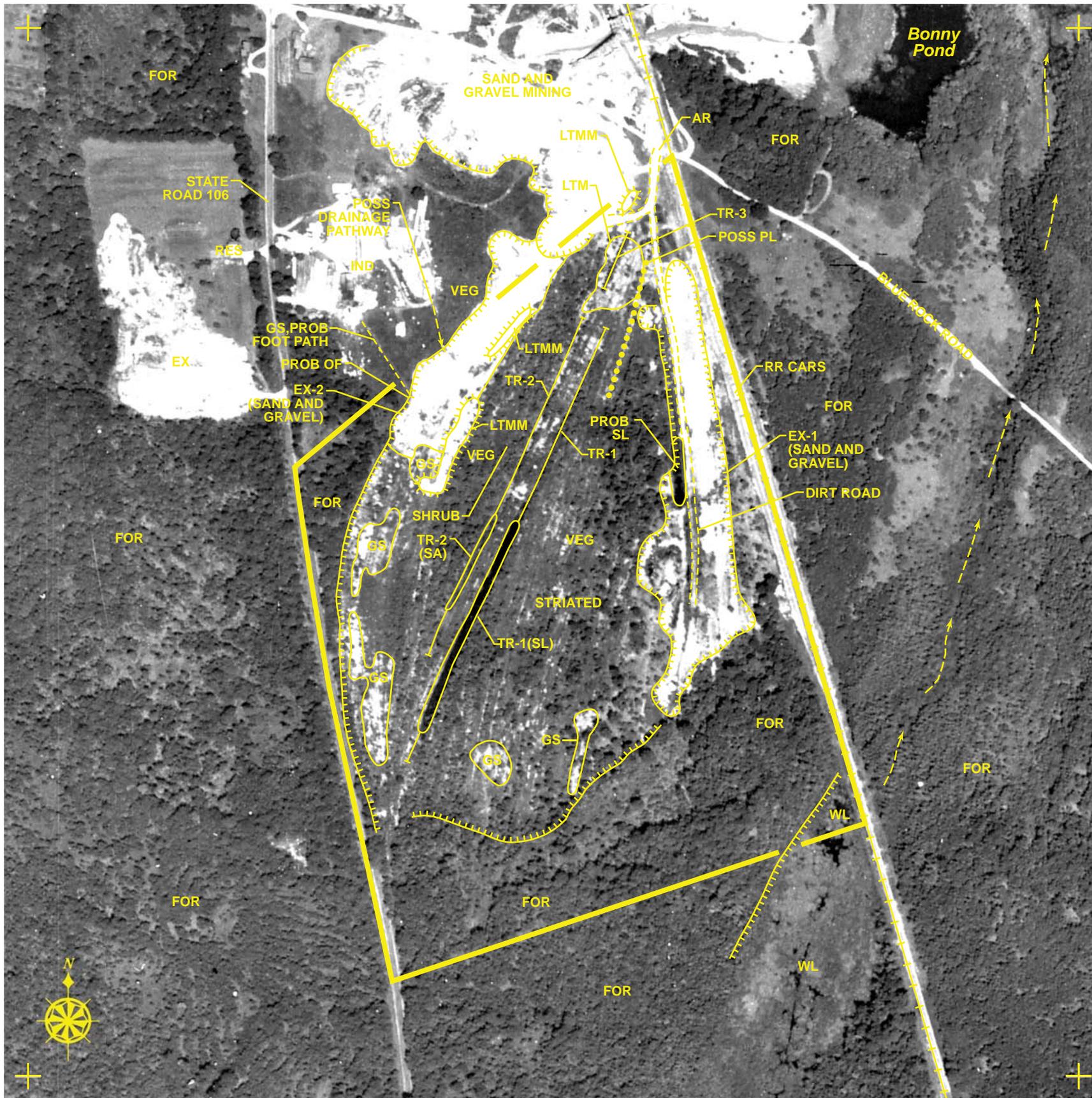
On the ground surface immediately northwest of excavation EX-2 is a near-linear ground scar (possible subsurface pipeline) or probable foot path, which extends from near the offsite industrial facility (IND) to the ledge of the excavation. At the ledge of excavation EX-2, the ground scar/probable foot path, terminates at a probable outfall (OF). Beneath the location of the probable outfall, a relatively small area on the northwestern face of excavation EX-2 is darkened (not annotated). Just to the northeast is a possible drainage pathway. The possible drainage pathway extends from an offsite open storage area (not annotated) affiliated with the offsite industrial facility, to the ledge of excavation EX-2. A relatively small area on the northwestern face of excavation EX-2, beneath the possible drainage pathway, is darkened (not annotated).

A total of three trenches (TR) are present on the Leeds Metal site. The trenches are oriented northeast to southwest. Trench TR-1 is approximately 400 meters (1,312 feet) long and nearly 10 meters (33 feet) wide. Standing liquid is present in a section of the trench. The remaining sections of trench TR-1 are vegetated with grass and shrubs. Trench TR-2, located immediately west of trench TR-1, is approximately 175 meters (574 feet) long and almost 7 meters (23 feet) wide. A short section of trench TR-2 is saturated (SA). The remaining sections of trench TR-2 are vegetated with grass and shrubs. Trench TR-3, located immediately northeast of trenches TR-1 and TR-2, is approximately 50 meters (164 feet) long and nearly 7 meters (23 feet) wide. Trench TR-3 is mostly vegetated with shrubs. A man-made bank of light-toned material (LTM), likely sidecast material, separates trench TR-2 and trench TR-3. No activity of environmental significance is observed near the trenches.

A possible aboveground pipeline (PL) is located between the trenches and excavation EX-1. The possible pipeline originates near the access road; the possible pipeline extends south for a short distance before terminating where onsite vegetation is denser. The possible pipeline is not seen connecting to the trenches or other features on the site.

Numerous areas containing ground scars and striations (grooves) are present on the ground surface of the Leeds Metal site (not all areas annotated). The striated ground surface extends east-west, from excavation EX-1 to excavation EX-2, and south, to near the southern site boundary. The ground scars and striations have likely resulted from the use of mining equipment. The striated area had been clear-cut as well. Mining operations have ceased in the central part of the site, allowing for the growth of grass, shrubs, and small trees (VEG). The striations are not nearly as deep as the trenches.

A wetland (WL) is located in the extreme southeastern portion of the site. The wetland drains beneath the railroad and into an offsite drainage channel which empties into Bonny Pond. No activity of environmental significance is observed on the wetland.



LEGEND

	SITE BOUNDARY
	DRAINAGE DIRECTION
	RAILROAD
	ACCESS ROAD
	FENCE
	PIPELINE
	EXCAVATION/PIT
	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
-	APPROXIMATE

Figure 4. Leeds Metal site, July 24, 1943. Approximate scale 1:3,810.

APRIL 24, 1953 (FIGURE 5)

Mining activity on the Leeds Metal site appears to have ceased since 1943. However, a new building (B-1) has been constructed near the access in the extreme northeastern part of the site. Two dirt roads are present nearby.

The profile of excavations EX-1 has not significantly changed since 1943. However, possible trench TR-4 is near to where probable standing liquid was identified in 1943. Possible trench TR-4 is approximately 80 meters (262 feet) long and about 7 meters (23 feet) wide. The possible trench and adjacent areas are saturated.

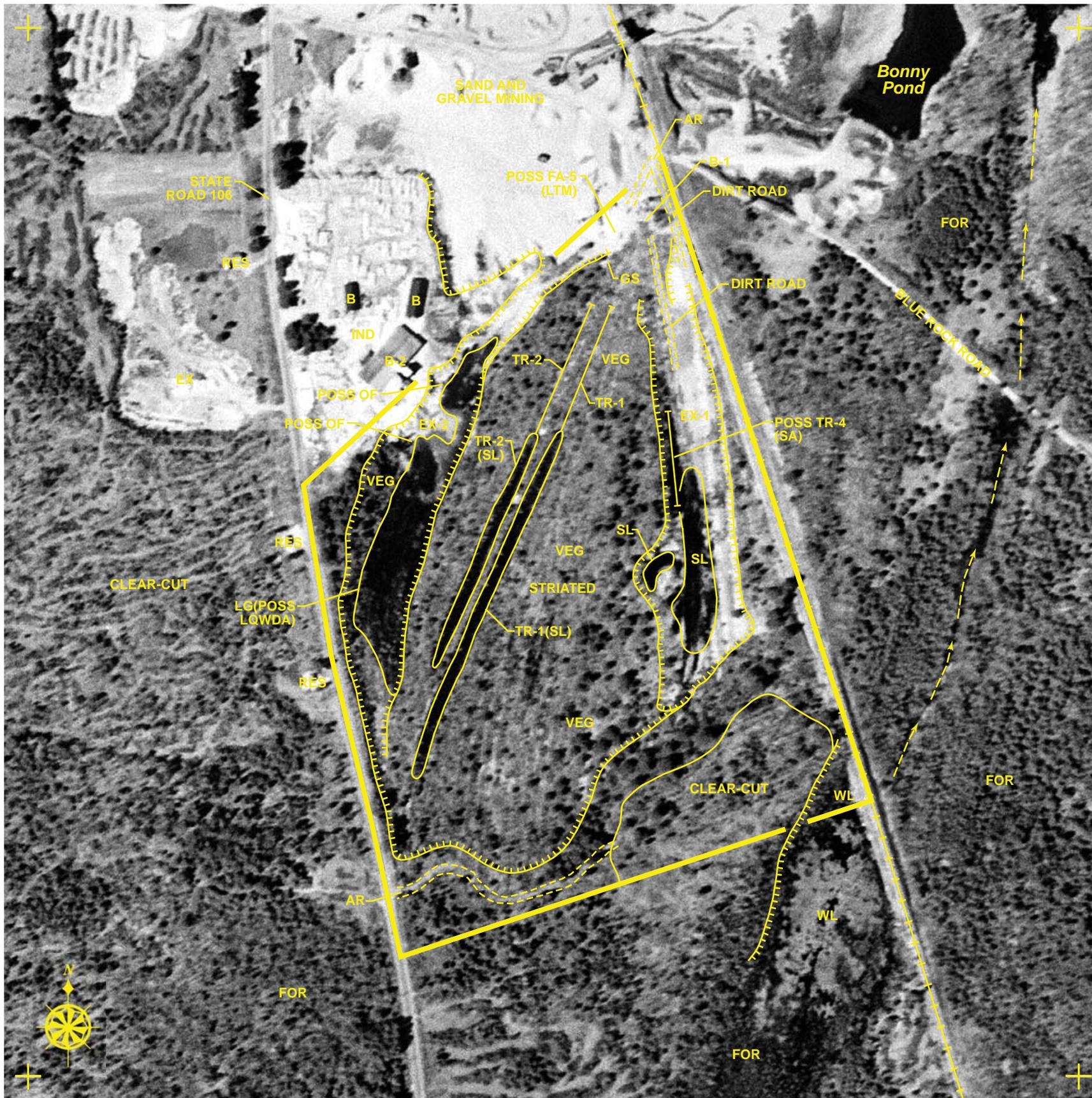
Several pools of standing liquid are now present on the base of excavation EX-1. Most of the dirt road, located on the western part of the excavation in 1943, is no longer discerned. This is likely due to inactivity at the excavation and the growth of vegetation. Most of the remaining surface area at excavation EX-1 is now covered with vegetation (not annotated), and does not appear to have been recently disturbed.

A lagoon (LG) containing possible liquid waste (LQWDA) is now present in excavation EX-2. Two possible outfalls, located near the base of the excavation, are likely discharging probable liquid waste into the lagoon. The possible liquid waste is likely associated with the offsite industrial facility, which has expanded since 1943. Building B-2 and other structures (not all structures are annotated) have been constructed at the offsite facility since 1943. The probable outfall and possible drainage pathway seen in 1943 are no longer observed due to expansion of the industrial facility. However, relatively small areas on the northwestern face of excavation EX-2 remain darkened (not annotated).

Trench TR-3 is no longer visible. A relatively small ground scar and vegetation (not annotated) are located near to where the southern portion of trench TR-3 was observed in 1943. The location of the northern portion of trench TR-3 has likely been filled (possible fill area FA-5) with light-toned material and graded since 1943.

The possible aboveground pipeline, in place in 1943 between the trenches and excavation EX-1, is no longer observed. The location of the possible pipeline may now be obscured by vegetation, or the possible pipeline has been removed.

A section of the forest in the southern portion of the site, near the wetland, has been clear-cut since 1943. An access road, extending east from State Road 106, leads to the clear-cut area.



LEGEND

—	SITE BOUNDARY
← - - -	DRAINAGE DIRECTION
+ + + +	RAILROAD
== ==	ACCESS ROAD
x x x x x	FENCE
• • • • •	PIPELINE
⊖	EXCAVATION/PIT
⊕	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
- - -	APPROXIMATE

Figure 5. Leeds Metal site, April 24, 1953. Approximate scale 1:3,800.

MAY 27, 1960 (FIGURE 6)

The 1960 photographs have less resolution than other photographic coverages used in this report. Therefore, features visible on photographs from the other coverages may not be discernible on the 1960 photographs and the following analysis is not as detailed.

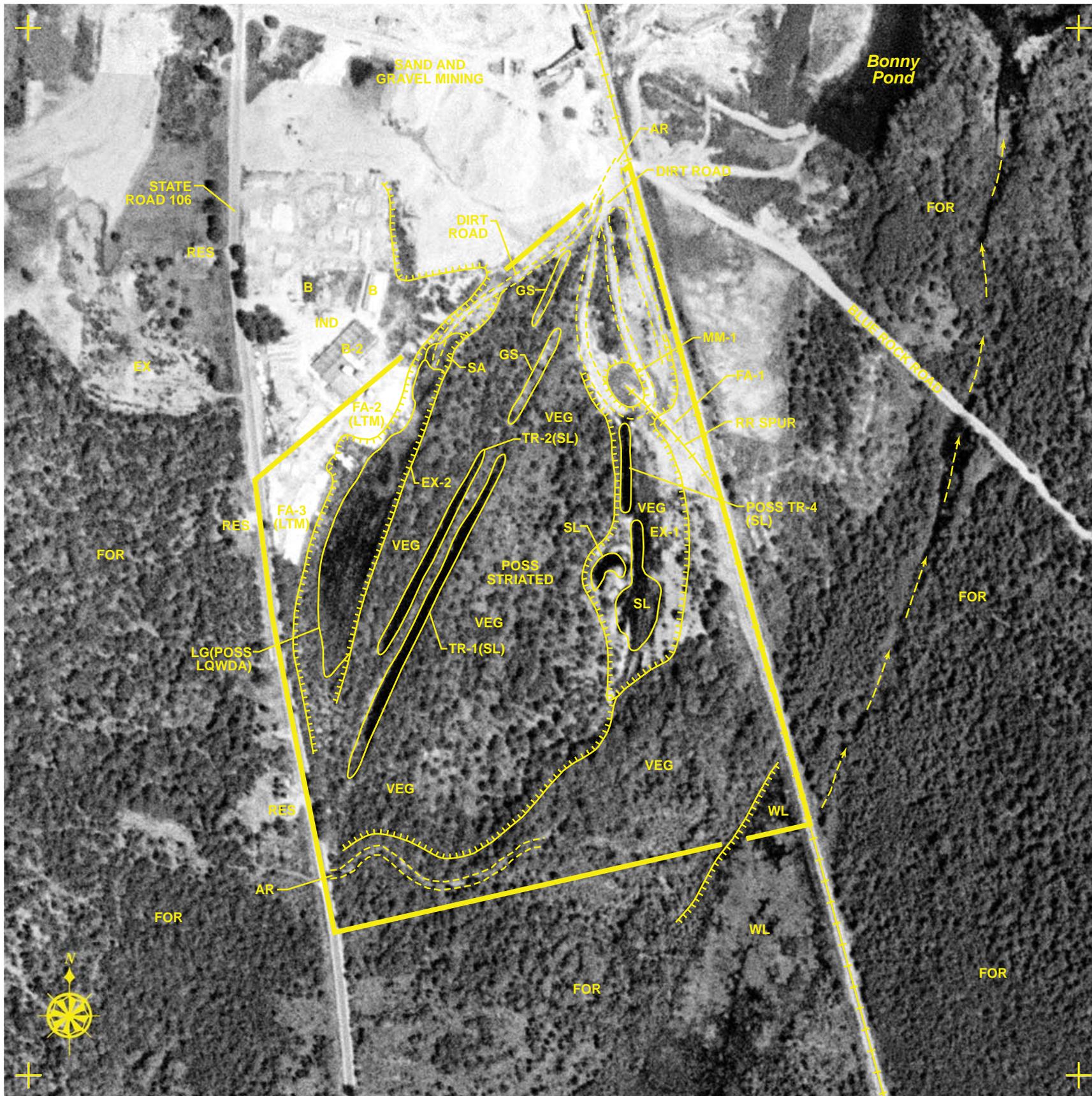
Building B-1, in place near the access road in 1953, has been removed from the extreme northeastern part of the site. Several dirt roads now extend south into the central portion of excavation EX-1; two of the dirt roads then come together at a new mound of material (MM-1), which has been deposited (constructed) since 1953. Mound MM-1 appears to be constructed from earthen material. Atop mound MM-1 is the terminus of a railroad spur which has been constructed since 1953. The area near mound MM-1 is used for the transfer of raw materials from nearby mining operations. The transfer area appears to be in use. A railroad spur has been placed atop fill area FA-1, which is located on the eastern side of excavation EX-1. Fill area FA-1 is composed of light-toned material (not annotated). The southern portion of excavation EX-1 appears to have remained undisturbed since 1953.

The lagoon containing possible liquid waste is present in excavation EX-2. The areal extent of the possible liquid waste has decreased slightly since 1953. The two possible outfalls, seen in 1953, are no longer observed.

Light-toned material (fill areas FA-2 and FA-3), deposited since 1953, has expanded the graded surface area south of building B-2. The deposits of light-toned material may obscure the location of the possible outfalls. However, small areas on the northwestern face of excavation EX-2 remain darkened (not annotated).

A dirt road, connecting with the access road, extends into the northern section of excavation EX-2. The dirt road terminates at a saturated area adjacent to the lagoon.

Trenches TR-1 and TR-2 remain filled with standing liquid. The northern parts of the trenches are no longer observed. Linear-shaped ground scars are located where, earlier in the analysis, the northern part of trench TR-1 and trench TR-3 were identified.



LEGEND

—	SITE BOUNDARY
← — —	DRAINAGE DIRECTION
+ + + +	RAILROAD
== ==	ACCESS ROAD
x x x x x	FENCE
• • • • •	PIPELINE
⊖	EXCAVATION/PIT
⊕	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
~	APPROXIMATE

Figure 6. Leeds Metal site, May 27, 1960. Approximate scale 1:3,800.

NOVEMBER 1, 1964 (FIGURE 7)

The access road and several dirt roads continue to be observed in the northeastern part of the site. Near the junction of the access road and dirt roads are a small pile of possible debris (DB) and a possible derelict storage tank (DER TK). Several dirt roads extend south into the central portion of excavation EX-1. One dirt road terminates near possible trench TR-4, where standing liquid is present. Possible stained (ST) ground is observed alongside the railroad spur. Numerous empty, open-bed railroad cars are parked on the sidetrack of the railroad, likely waiting for material pick-up.

The northern portion of excavation EX-2 has been expanded eastward. Since 1964, earthen-material (light-toned material, not annotated) has been extracted from the southeastern face of the excavation. The removed material may have included the northern portion of trench TR-2 and areas immediately adjacent to it. Earthen-material appears to have been placed in the northern part of the excavation, atop the lagoon, where an open storage area (OS) is now present.

Open storage area OS-1 contains numerous neatly arranged different-sized crates (CR). The southernmost part of open storage area OS-1, near to where the dirt road terminates, appears saturated (not annotated). The saturated area, in previous years of the analysis, was identified as a lagoon containing possible liquid waste.

The remaining portion of the lagoon, seen in previous years of the analysis, is now vegetated. No liquid is seen in the former lagoon and possible discharges from the industrial facility are no longer observed. Darkened areas on the northwestern face of excavation EX-2 are no longer seen. Areas of vegetation (not annotated) now cover several sections of the northwestern face of excavation EX-2. Two cylinder-shaped objects (CYL OBJ), each nearly the size of an automobile, are observed at the location of the former lagoon. The objects appear to have been discarded.

Fill areas FA-2 and FA-3 are now inactive. Fill area FA-3 is used as an open storage area. Neatly arranged different-sized crates and containers (CONT) are housed at open storage area OS-2. Several of the crates or containers are as large as automobiles. Open storage areas OS-1 and OS-2 are utilized by the industrial facility north of the Leeds Metal site.

MAY 7, 1973 (FIGURE 8)

Since 1964, three new buildings (B-3, B-4, and B-5) have been constructed proximal to the railroad. These buildings are part of the ore processing facility on the site. Building B-3, located near the access road and dirt roads in the northeastern part of the site, is comprised of three small conjoined structures. Near building B-3 are several parked vehicles (VEH), and a collection solid waste (SW) and possible tires. Stained ground is noted near the solid waste. A small pile of probable solid waste and several refuse containers (REF CONT), one filled with solid waste, are located just to the south of building B-3.

South of mound MM-1, excavation EX-1 has been filled (FA-4) since 1964. The tone of the surface material on fill area FA-4 varies from light-tone to medium-tone (not annotated), and the mound is probably stained. Atop a section of fill area FA-4 is an active scrap metal processing facility; an extensive stockpile of scrap metal (SM) is present at the facility. Two cranes (not annotated), near the building, appear to be maneuvering the scrap metal to building B-4. Fine-textured solid waste, likely processed scrap metal, is located on the eastern side of the building. The ground surface near the solid waste is stained. A conveyor is transferring the fine-textured solid waste into waiting open bed railroad cars parked on the railroad. Solid waste and medium-toned material (MTM) are located adjacent to the railroad.

Building B-5 is located alongside the railroad in the southeastern part of the Leeds Metal site. Near the building are a crane (not annotated), and a pile of solid waste, likely including scrap metal, and coarse-textured medium-toned mounded material.

West and southwest of building B-5, a large area of trees, seen on previous photographs, has been clear-cut since 1964. Deposited in the cleared area are light-toned material, which is being graded (not annotated), several areas of fine-textured medium-toned material, and tightly-packed piles of coarse-textured medium-toned mounded material (MTMM). The medium-toned material near building B-5 appears to have been

recently been spread. Also present on the cleared area is PIT-1. PIT-1 is a possible disposal pit where dark-toned material (DTM) has been deposited.

A saturated area is present in excavation EX-2, southwest of open storage area OS-1. A source of the saturated condition is not observed. Solid waste has been deposited atop and adjacent to the saturated area. In addition, solid waste has been pushed over the ledge of former fill area FA-3 and into excavation EX-2.

Open storage area OS-1 remains in use. The areal extent of the open storage area has remained approximately the same since 1964; however, the quantity of storage material has increased. Numerous neatly arranged different-sized crates and probable cylinder-shaped objects (each no larger than one-half the size of an automobile) are housed at the open storage area. Portions of the ground surface on the open storage area are saturated (not annotated).

The areal extent of open storage area OS-2 has expanded since 1964 and the quantity of housed material has increased. Open storage area OS-2 consists of neatly-arranged crates, containers, and cylinder-shaped objects. The size of the crates and containers vary significantly; several containers are nearly two-times the size of an automobile. The cylinders range in diameter is approximately 1 to 2.5 meters (3.2 to 8.2 feet).

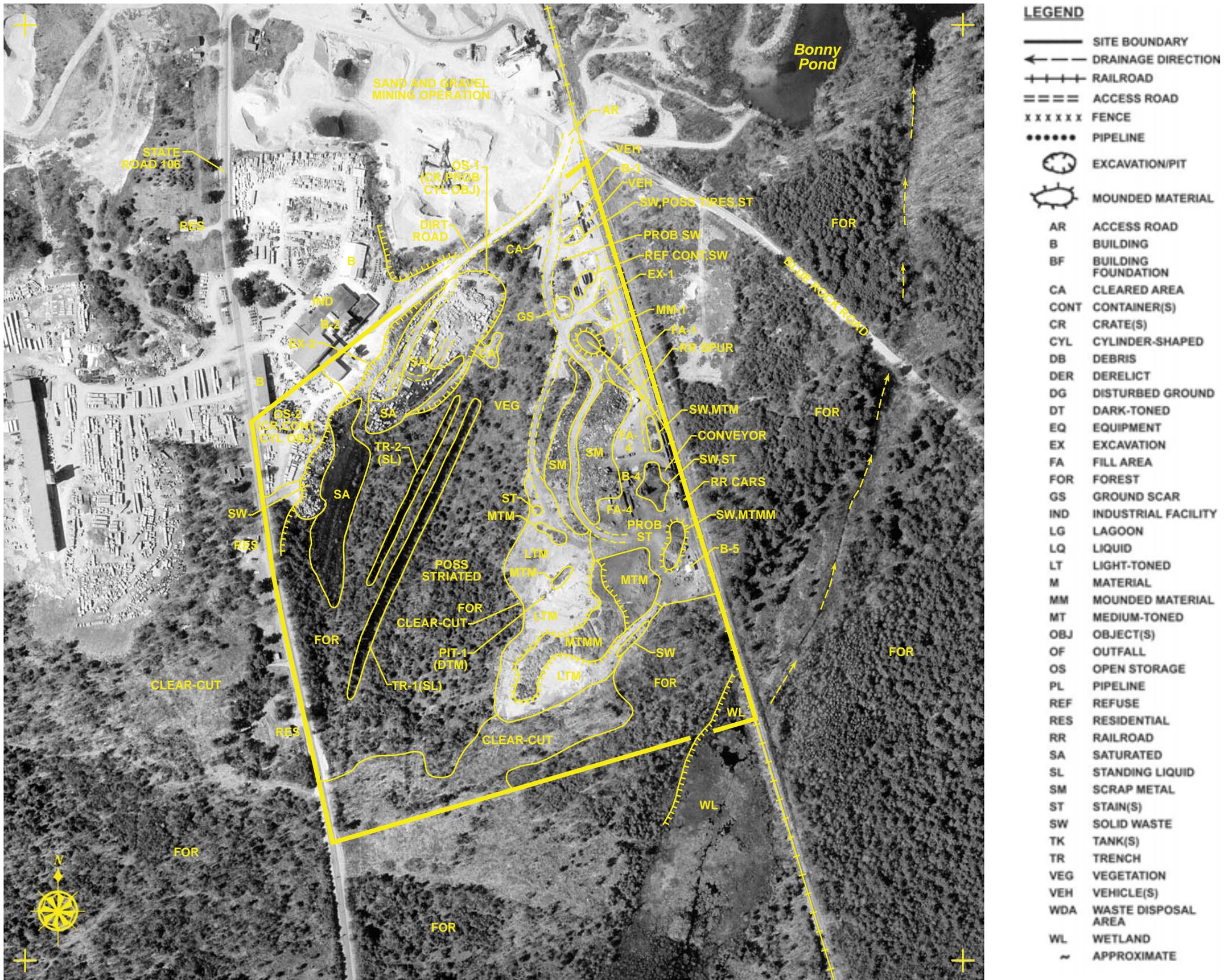


Figure 8. Leeds Metal site, May 7, 1973. Approximate scale 1:3,810.

NOVEMBER 17, 1980 (FIGURE 9)

Scrap metal processing is ongoing at Leeds Metal site. Near building B-3, part of the metal processing facility, are stained ground, possible stained ground, and a small area of light-toned material. Several parked vehicles are present nearby. A new dirt road, established since 1973, now connects the scrap metal processing facility to open storage area OS-1. A portion of the dirt road appears to traverse over the northern section of trench TR-2. A probable light-toned object (not annotated), approximately one-fourth the size of an automobile, is present on the "elbow-shaped" turn of the dirt road.

The railroad spur that extended from the railroad to mound MM-1 has been removed since 1973. North of mound MM-1 are light-toned material, ground scars, and medium-toned mounded material. Immediately to the southwest of mound MM-1 is the large area of scrap metal. Areas of stained ground are also observed. The areal extent of the scrap metal stock-piled on the metal processing facility has decreased since 1973.

Since 1973, scrap metal processing building B-6 has been constructed near building B-4. A possible building pad (PAD) is also present, buildings B-4 and B-6 are on the possible pad. The cranes and conveyor system seen in 1973 have been removed from the Leeds Metal site. Near the buildings, located atop fill area FA-4, are areas of stained ground and probable stained ground, probable and possible solid waste, and dark-toned mounded material.

New deposits of material (MM-3 and MM-4) are present to the west of fill area FA-4. The areal extent of mound MM-3 is approximately 50 square meters (538 square feet). Mound MM-3 is composed of possible solid waste (not annotated). Mound MM-4 is composed of fine-textured medium-toned material (not annotated) and appears to be material excavated to dig a nearby disposal pit. The areal extent of mound MM-4 is approximately 100 square meters (1,076 square feet). Mounds MM-3 and MM-4 are each approximately 1 to 1.5 meters (3.3 to 5 feet) tall. Liquid waste disposal pit PIT-2 abuts mound MM-4 to the north. A possible derelict storage tank

and stained ground (features are not annotated) are present on the base of liquid waste disposal pit PIT-2. A ground scar is adjacent to the southern face of mound MM-4.

Southeast of mound MM-4, in the central part of the site, possible liquid waste is located in PIT-3, a possible disposal pit. Mound MM-5, composed of dark-toned probable solid waste (not annotated), is located just south of PIT-3. The areal extent of mound MM-5 is approximately 350 square meters (3,767 square feet) and the mound is approximately 2.5 meters (8.2 feet) tall. Mound MM-5 has been placed near to where, in 1973, PIT-1 was located. PIT-1 is no longer observed and has been covered by mound MM-5. Mound MM-6, deposited since 1973, is composed of fine-textured probable solid waste (not annotated). The areal extent of mound MM-6 is approximately 3,300 square meters (35,521 square feet) and it is nearly 2.5 meters (8.2 feet) tall along the western face. The surface of the mound gradually slopes to grade at the eastern extent of the mound. Atop mound MM-6 are several widely-spaced pieces of probable scrap metal (not annotated), very similar in appearance to the scrap metal present in and around excavation EX-1. South of mound MM-6, probable solid waste is present in PIT-4, a probable disposal pit.

Two mounds (MM-7 and MM-8), deposited since 1973, are on the south-central part of the Leeds Metal site. Mound MM-7 is composed of fine-textured, medium-toned solid waste (not annotated). The areal extent of the mound is approximately 700 square meters (7,535 square feet). The western face of mound MM-7 is nearly 3.5 meters (11.5 feet) tall; the height of the mound gradually decreases to grade on the eastern perimeter of the mound. Adjacent to mound MM-7 are an area of dark-toned material and a possible trench (TR-5), which appears empty. Possible trench TR-5 is approximately 12 meters (39.4 feet) long.

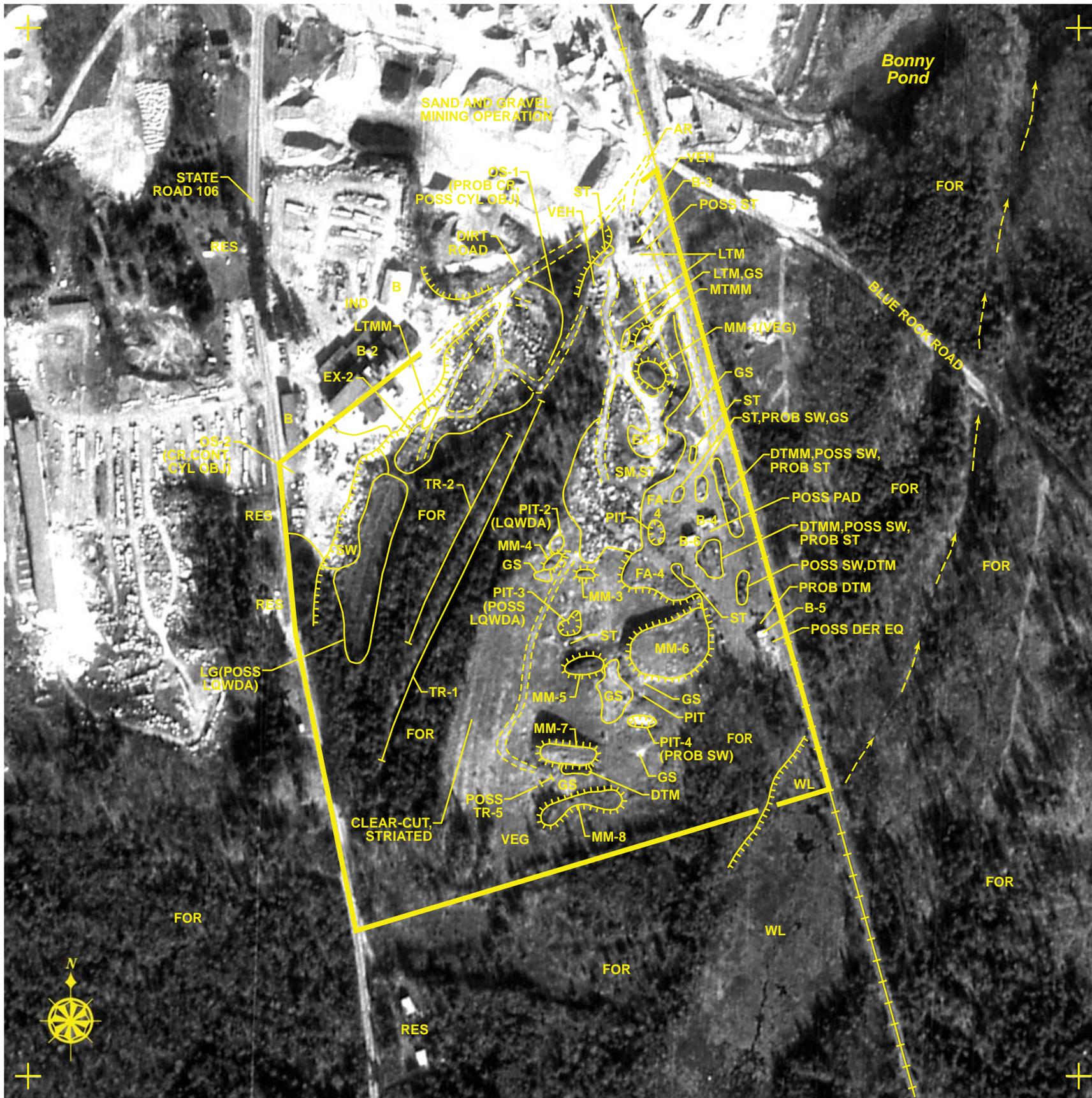
Mound MM-8 is located to the south of mound MM-7. The areal extent of mound MM-8 is approximately 850 square meters (9,149 square feet) and the mound is nearly 1.5 meters (4.9 feet) tall. Mound MM-8 and is composed medium-textured dark-toned material.

Near building B-5 are probable dark-toned material and possible derelict equipment (DER EQ).

Possible liquid waste is again present in the lagoon southwest of open storage area OS-1. Adjacent to the lagoon is the large area of solid waste seen in 1973. The quantity and areal extent of the solid waste have not changed significantly since 1973.

Open storage area OS-1 remains in use. The areal extent of the open storage area has remained approximately the same since 1973; however, the quantity of stored material has decreased and is now widely-spaced. Numerous, neatly arranged, different-sized probable crates and possible cylinder-shaped objects (each no larger than one-half the size of an automobile) remain housed at the open storage area. Much of the ground surface on the open storage area is now saturated and vegetation is present (features are not annotated).

Open storage area OS-2 remains in use; however, the areal extent of the open storage area has decreased slightly since 1973. The quantity of stored material has also decreased and the material is now widely dispersed. Open storage area OS-2 consists of neatly-arranged crates and containers and cylinder-shaped objects. The size and dimensions of the stored material is very similar to the material stored in 1973.



LEGEND

	SITE BOUNDARY
	DRAINAGE DIRECTION
	RAILROAD
	ACCESS ROAD
	FENCE
	PIPELINE
	EXCAVATION/PIT
	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
-	APPROXIMATE

Figure 9. Leeds Metal site, November 17, 1980. Approximate scale 1:3,800.

NOVEMBER 1, 1985 (FIGURE 10)

The 1985 photographs have less resolution than other photographic coverages used in this report. Therefore, features visible on photographs from the other coverages may not be discernible on the 1985 photographs and the following analysis is not as detailed.

Scrap metal processing on the Leeds Metal site has ceased since 1980. The stockpile of scrap metal, seen in 1980, is no longer visible on the site. No vehicles, cranes, or other pieces of heavy equipment can be discerned near buildings B-3, B-4, B-5, or B-6.

Several dirt roads remain in and near excavation EX-1; however, portions of the roads are now covered with vegetation (not annotated). A dirt road west of building B-3, connecting the former scrap metal processing facility to open storage area OS-1, is no longer discerned. The location of the road is now vegetated and a portion of a possible dirt road is noted at this location.

Since 1980, possible deposits (MM-2) of medium-toned material (not annotated) have been placed just to the west of buildings B-4 and B-6. The areal extent and the height of possible mound MM-2 cannot be established due to the film resolution. Approximate measurements of the areal coverage and height of mound MM-2 are provided with the analysis for the 1991 aerial photographs.

Probable mound MM-4, composed of medium-toned material (not annotated), has not changed significantly since 1980. A possible ground scar is located immediately north of mound MM-4 where, in 1980, liquid waste disposal pit PIT-2 was identified. PIT-2 is no longer visible. Deposits of medium-toned material (not annotated) appear to have been added to mound MM-6 since 1980. The areal extent and height of mound MM-6 may have increased slightly. Solid waste noted on mound MM-6 in 1980 cannot be identified. The dark-toned material adjacent to mound MM-7 is no longer observed.

Mound MM-3 is not discerned. Possible vegetation (not annotated) is located where, in 1980, mound MM-3 was observed. The possible vegetation may be obscuring the mound or the mound has been removed. Possible trench TR-5 is no longer observed. Possible vegetation (not annotated) covers the area where, in 1980, the possible trench was noted.

PIT-3 contains standing liquid. Near the pit is probable dark-toned material. PIT-4 appears to be empty; the probable solid waste seen in 1980 cannot be identified within PIT-4.

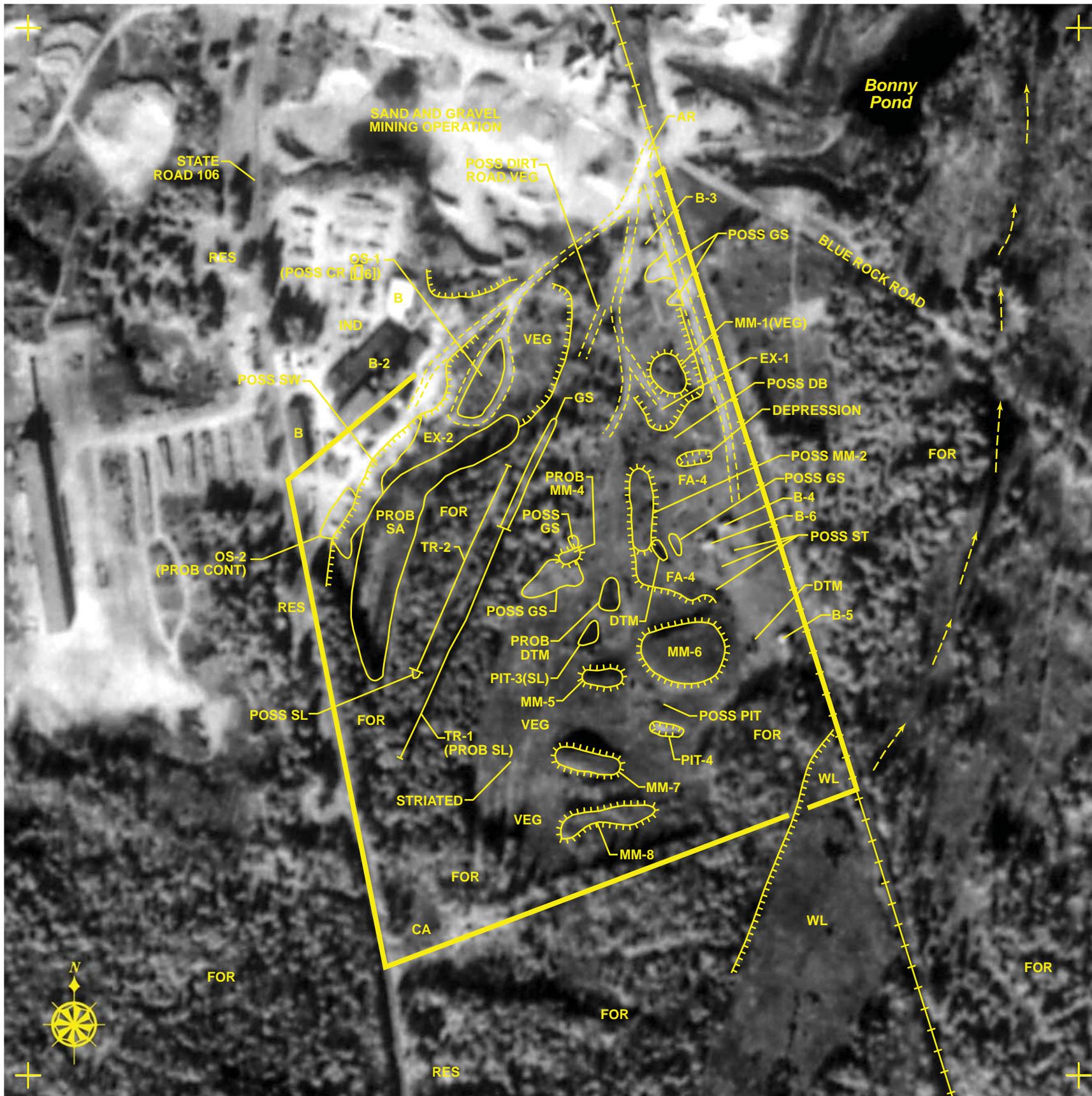
The possible derelict equipment seen near building B-5 in 1985 is no longer visible on the site. The probable dark-toned material located near the building is no longer discerned and may be obscured by possible vegetation (not annotated).

A probable saturated area is present where, in 1980, a lagoon containing possible liquid waste was identified.

Use of open storage area OS-1 has diminished considerably since 1980. Most of the probable crates and possible cylinder-shaped objects located at the open storage area have been removed. Approximately six possible crates remain. Vegetation (not annotated) now covers parts of the dirt roads and ground surface of the open storage area.

Open storage area OS-2 remains in use; however, the areal extent of the open storage area has decreased since 1980. The quantity of stored material has significantly decreased; several probable containers are now present at the open storage area. Industrial activity at the facility just north of the Leeds Metal site appears to have slowed since 1980.

A cleared area is located in the extreme southwestern corner of the site.



LEGEND

—	SITE BOUNDARY
← — —	DRAINAGE DIRECTION
+ + + +	RAILROAD
== ==	ACCESS ROAD
x x x x x	FENCE
•••••	PIPELINE
	EXCAVATION/PIT
	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
~	APPROXIMATE

Figure 10. Leeds Metal site, November 1, 1985. Approximate scale 1:3,790.

JULY 22, 1991 (FIGURE 11)

The 1991 photographs have less resolution than other photographic coverages used in this report. Therefore, features visible on photographs from the other coverages may not be discernible on the 1991 photographs and the following analysis is not as detailed.

Numerous dirt roads are now present on the eastern and central portions of the Leeds Metal site. A dirt road now traverses the site from near the access road, southwest between the mounds and the trenches, terminating near the tree-line in the southwestern portion of the site. Since 1985, dumping has occurred on the site. Alongside the dirt road that traverses the site are ground scars and areas where relatively small amounts of possible debris have been deposited.

Buildings B-4, B-5, and B-6 remain on the site; however, building B-3 has been removed since 1985. Building B-4 and B-6 are atop a building pad. The building pad was likely in place earlier in the analysis but could not be identified on the aerial photography.

Widely scatter probable debris, and probable light-toned material are noted within excavation EX-1.

The areal extent of mound MM-2 is approximately 500 square meters (5,380 square feet) and approximately 1.0 meter (3.3 feet) tall at the southern part of the mound. Portions of the mound are now vegetated.

Probable mound MM-4 and mound MM-8, seen in 1985, are no longer observed. A ground scar is located near to where, earlier in the analysis, probable mound MM-4 was identified. Material from mound MM-4 may have been spread around the area. Vegetation is now present where, earlier in the analysis, mound MM-8 was identified.

The industrial facility, north of the Leeds Metal site, has ceased operating since 1985. Open storage areas OS-1 and OS-2, utilized by the industrial facility, are no longer in use. All housed material at the open storage areas has been removed.

A residence (RES) has been constructed on the cleared area located in the extreme southwestern corner of the site Leeds Metal site.

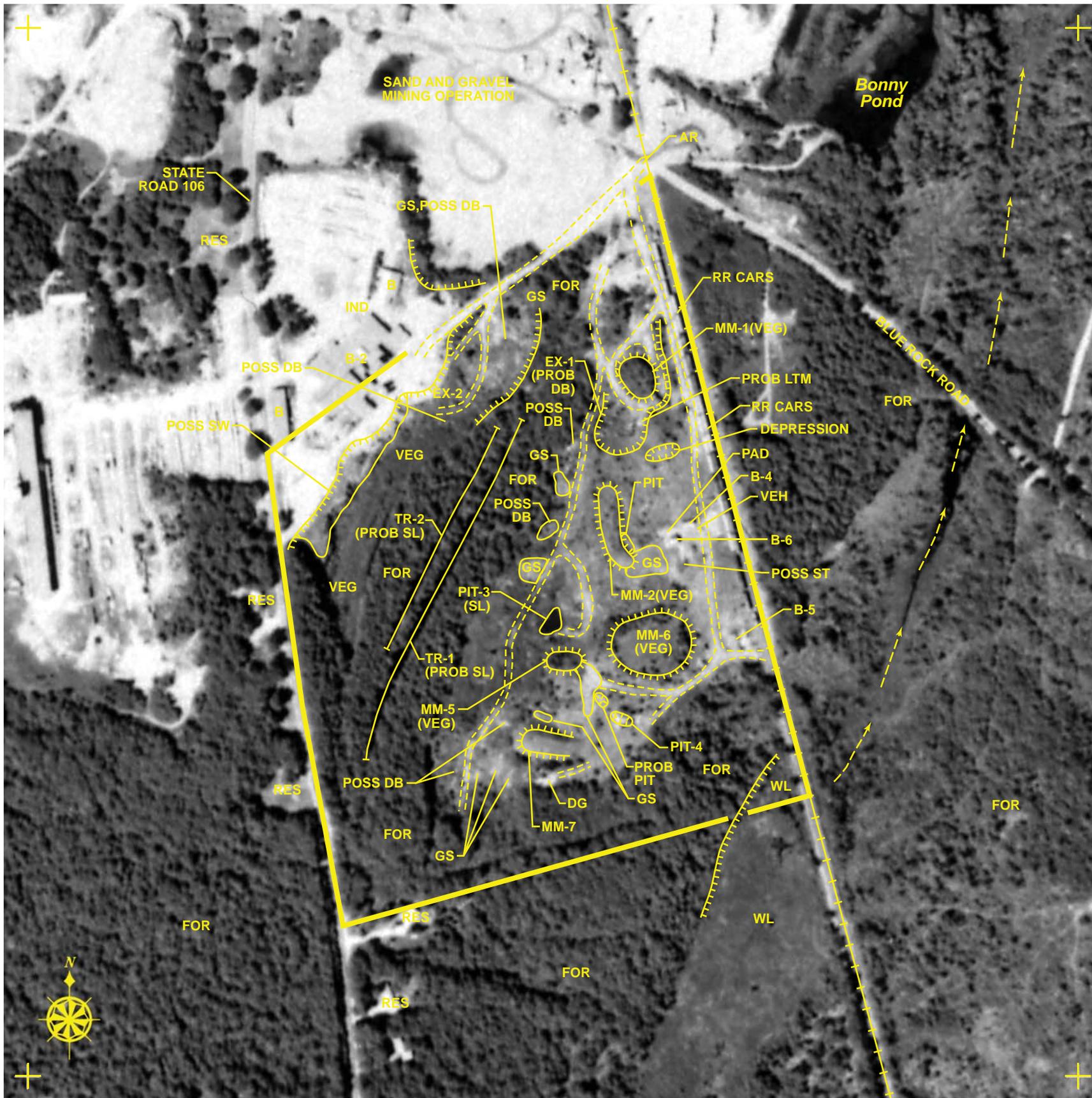


Figure 11. Leeds Metal site, July 22, 1991. Approximate scale 1:3,930.

APRIL 30, 2003 (FIGURE 12)

Dumping has continued on the Leeds Metal site since 1991. Solid waste, probable solid waste, possible solid waste, debris, tires, and ground scars are present at numerous locations on the site.

In the extreme northeastern portion of the site, several vehicles are parked near the access road. Solid waste is located adjacent to the building foundation (BF; former location of building B-3).

Building B-4, onsite since 1973, is in ruins. Debris, likely remnants of the building, is scattered on and near the building pad. A derelict storage tank and a sump filled with possible liquid are located on the building pad. A tire pile and a collection of scattered solid waste and debris are located southwest of the building pad. Building B-5, onsite since 1973, is in ruins. On and near the building foundation are scattered debris and tires.

Mound MM-8 is again visible; in 1991, the location of mound MM-8 was obscured by dense vegetation.

PIT-5, a possible disposal pit located in the northeastern part of the site, contains possible liquid waste. Immediately to the south is PIT-6, a probable disposal pit containing probable solid waste. A relatively small amount of solid waste is located within a depression south of mound MM-1. Vegetation (not annotated) covers the location where, in earlier years of the analysis, PIT-4 was identified.

Widely scattered solid waste and debris has been deposited within the northern portion of excavation EX-2 since 1991. Solid waste, debris, and possible drums (DR) remain at the base of excavation EX-2, adjacent to the northwestern face of the excavation.

No features or conditions of environmental significance are observed at the industrial facility north of the Leeds Metal site. The facility remains inactive.

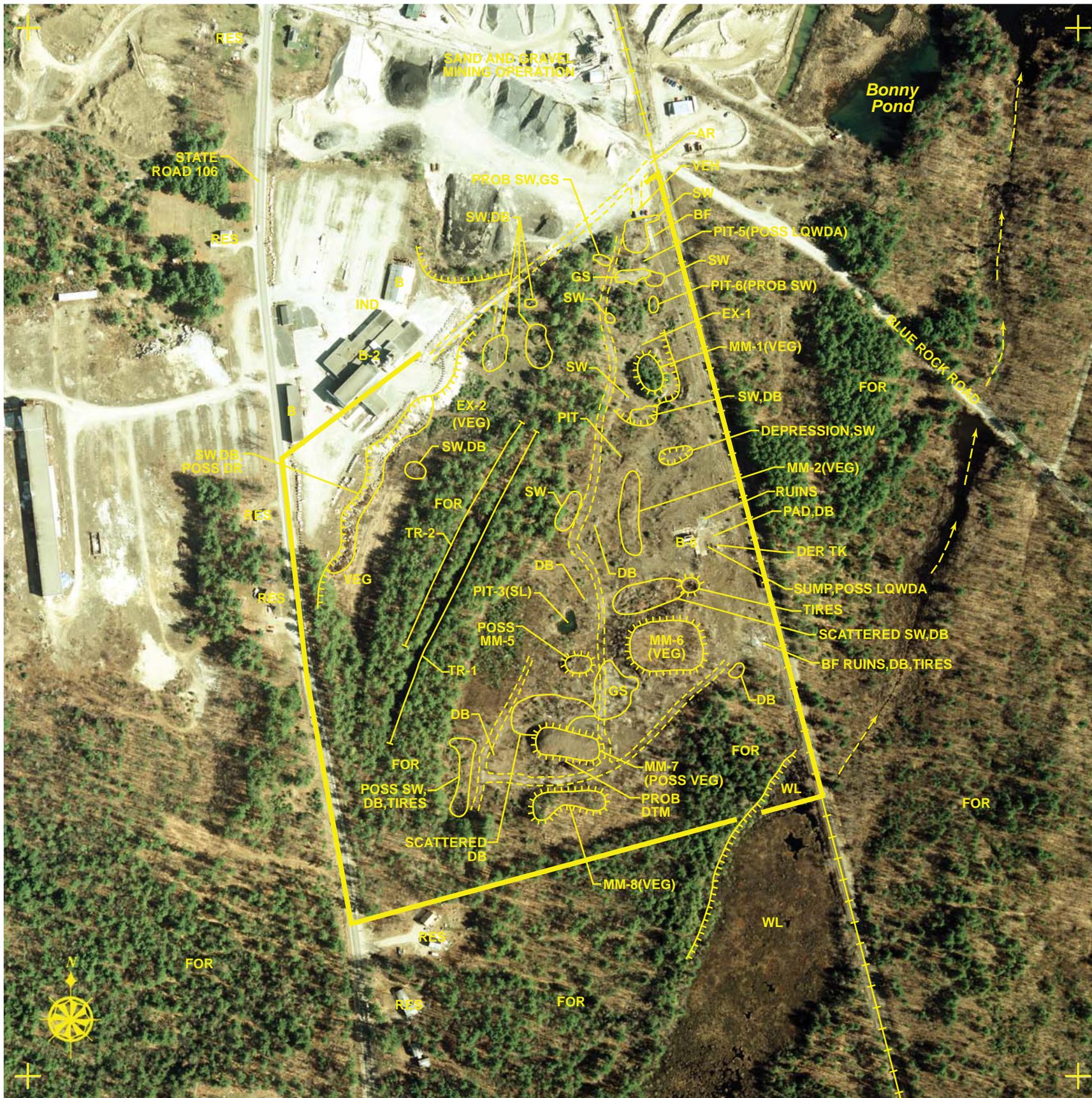


Figure 12. Leeds Metal site, April 30, 2003. Approximate scale 1:3,850.

AUGUST 19, 2011 (FIGURE 13)

Monoscopic photographic coverage was used to perform the 2011 analysis. Because stereoscopic coverage was not used, the features and conditions visible on photographs from other years of analysis may not be discerned on the 2011 photograph, and the following analysis may not be as detailed.

The Leeds Metal site is not active. There is no evidence of dumping on the site since 2003. Most of the site is now covered with vegetation. In 2003, areas of solid waste, probable solid waste, possible solid waste, debris, and tires were present on the site. These areas can no longer be identified; the vegetation may obscure waste that remains.

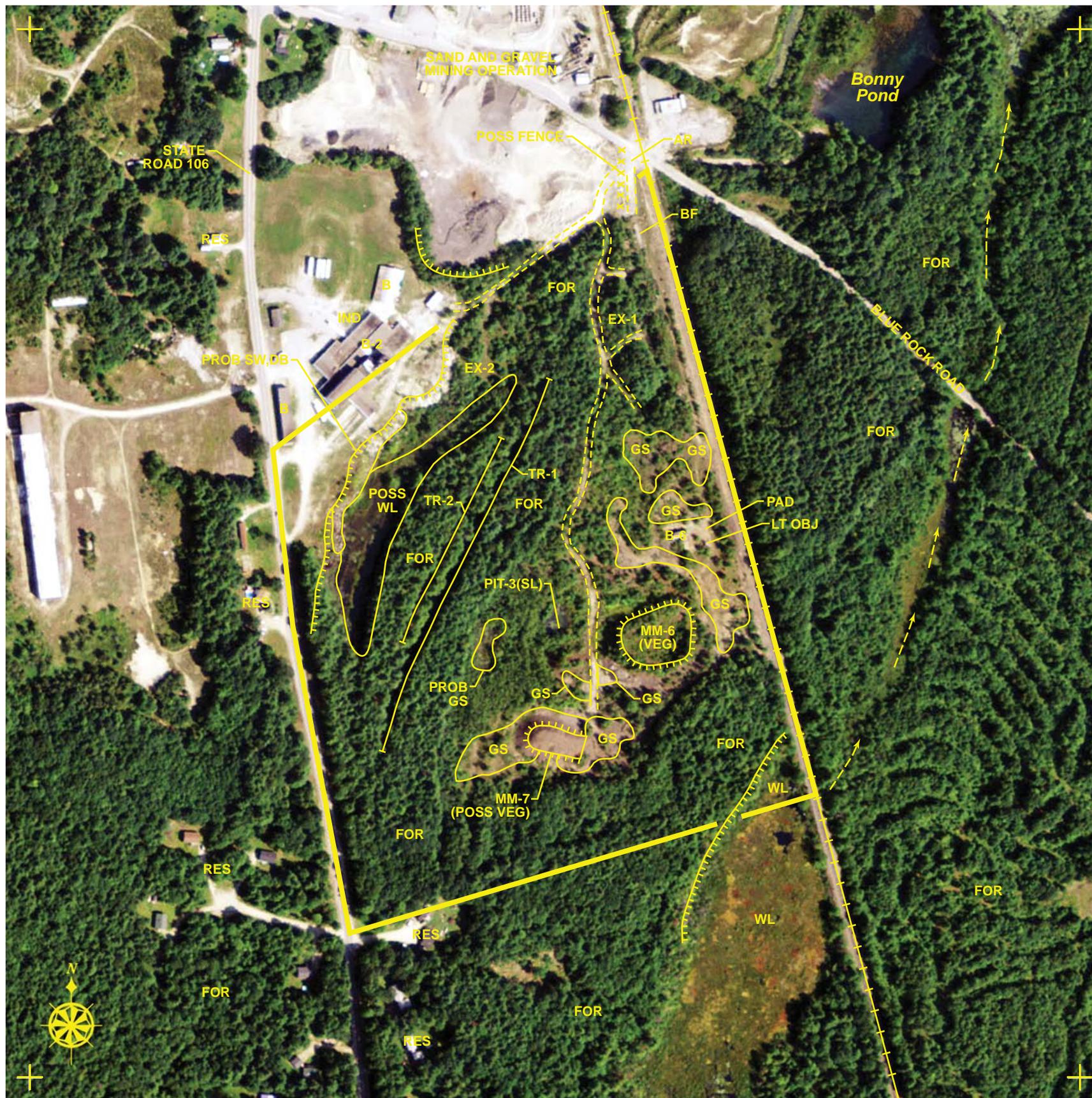
A light-toned object is located where, in 2003, a derelict storage tank was identified. Tree shadows obscure the area where, in 2003, a sump filled with possible liquid was identified. Numerous ground scars are present near the building foundation. A ground scar is present near to where, in earlier years of the analysis, mound MM-2 was observed.

Two mounds of material remain on the Leeds Metal site. Mound MM-6 is covered with vegetation. Mound MM-7 is covered with possible vegetation. Vegetation is located where, in 2003, possible mound MM-5, and mounds MM-1 and MM-8 were observed.

Vegetation is present where, in earlier years of the analysis, pits, probable and possible pits, and a depression were identified. The vegetation may obscure these features.

A possible wetland is now located at the base of excavation EX-2.

No activity or conditions of environmental significance are observed at the industrial facility north of the Leeds Metal site.



LEGEND

—	SITE BOUNDARY
← — —	DRAINAGE DIRECTION
—+—+—+—	RAILROAD
====	ACCESS ROAD
XXXXXX	FENCE
●●●●●	PIPELINE
⊖	EXCAVATION/PIT
⊖	MOUNDED MATERIAL
AR	ACCESS ROAD
B	BUILDING
BF	BUILDING FOUNDATION
CA	CLEARED AREA
CONT	CONTAINER(S)
CR	CRATE(S)
CYL	CYLINDER-SHAPED
DB	DEBRIS
DER	DERELICT
DG	DISTURBED GROUND
DT	DARK-TONED
EQ	EQUIPMENT
EX	EXCAVATION
FA	FILL AREA
FOR	FOREST
GS	GROUND SCAR
IND	INDUSTRIAL FACILITY
LG	LAGOON
LQ	LIQUID
LT	LIGHT-TONED
M	MATERIAL
MM	MOUNDED MATERIAL
MT	MEDIUM-TONED
OBJ	OBJECT(S)
OF	OUTFALL
OS	OPEN STORAGE
PL	PIPELINE
REF	REFUSE
RES	RESIDENTIAL
RR	RAILROAD
SA	SATURATED
SL	STANDING LIQUID
SM	SCRAP METAL
ST	STAIN(S)
SW	SOLID WASTE
TK	TANK(S)
TR	TRENCH
VEG	VEGETATION
VEH	VEHICLE(S)
WDA	WASTE DISPOSAL AREA
WL	WETLAND
~	APPROXIMATE

Figure 13. Leeds Metal site, August 19, 2011. Approximate scale 1:3,860.

GLOSSARY

Access Road (AR) - A paved or unpaved route of vehicular access.

Building (B) - A relatively permanent, essentially boxlike construction having a roof.

Cleared Area (CA) - An area from which man has removed trees, shrubs, or other natural vegetative cover.

Clear-Cut Area - Removal of all the trees in a stand of timber.

Container (CONT) - Any portable device in which material is stored, transported, handled, or disposed.

Dark- (DT), Medium- (MT), or Light-Toned (LT) - Tones of features in question are compared with the darkest and lightest tones of gray (if using B&W photography) on the print.

Debris (DB) - The remains of anything that can be identified as being broken down, destroyed, demolished, or dismantled.

Depression - A landform sunken or depressed below the surrounding surface.

Drums (DR) - Metal cylinders used for the storage, transportation, or disposal of materials.

Excavation Area (EX) - An area where earth or other material is being removed in order to alter the ground level (e.g., building construction).

Face - The wall or slope of a mine, extraction, excavation, landfill, or fill area at which work is progressing (e.g., working face, fill face).

Fill Area (FA) - An area where material is being deposited to fill a depression; or area where materials have been added, altering the elevation of the ground surface.

Ground Scar (GS) - An area of bare soil, apparently the result of human activity.

Lagoon (LG) - A liquid containment area that is apparently used for waste storage, disposal and/or treatment. A lined lagoon has an artificial barrier or liner to prevent migration of waste material into the soil.

Liquid (LQ) - Used when discussing impoundments, lagoons, catchment basins, or features that contain a liquid or when discussing discharge from outfalls, at storm drains, or tank trucks.

Material (M) - Raw or waste materials on or in the vicinity of the site.

Mounded Material (MM) - Piles of raw or waste materials on or in the vicinity of the site.

Open Storage Area (OS) - An area of open-air (outdoor) storage of containerized, raw or waste materials, within industrial or manufacturing sites.

Outfall (OF) - The place where an effluent is discharged into the environment.

Pad - A surface upon which a building is placed.

Pit - A steep-sided hole in the ground surface.

Sidecast - The excess earthen material pushed over the side of roads or dumped along the side of excavated ditches. This practice refers to relatively small quantities of soil created through earthmoving activities.

Solid Waste (SW) - Any discarded material other than fluids, including solid or semi-solid material resulting from industrial, commercial, mining, and agricultural operations, and from community activities.

Stain (ST) - A residue or discoloration resulting from a spill, discharge, or removed/dispersed materials.

Standing Liquid (SL) - A small, shallow, temporary collection of liquid, not necessarily waste.

Tanks - Vertical tanks (VT), horizontal tanks (HT), pressure tanks (PT), tank farms, and solid waste management units. A large receptacle, container, or structure for holding liquid or gas.

Trench (TR) - A long, narrow excavation unrelated to drainage.

Wetlands (WL) - Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

REFERENCES

MAPS

Source ^a	Figure	Name	Scale	Date
USGS	1	United States	1:2,500,000	1972
USGS	2	Monmouth, ME	1:24,000	1979
USGS	2	Wayne, ME	1:24,000	1966

COLLATERAL INFORMATION

EPA. 2009. Collateral data and site map supplied by EPA Region 1 as an attachment to Remote Sensing Services Request Form.

AERIAL PHOTOGRAPHS

Photo source ^a	Figure ^c	Date of acquisition	Original scale	Film type ^b	Mission I.D.	Source frame #	EPIC ID #
NAS/VIP	3	11-27-39	1:22,000	B&W	M155A	54-56	-
NAS/VIP	4	07-24-43	1:24,000	B&W	KE	13,14	-
USGS ^d	5	04-24-53	1:28,400	B&W	GS-PC	115,116	-
USGS ^d	6	05-27-60	1:60,000	B&W	VM534	10565,10566	-
USDA/FSA	7	11-01-64	1:20,000	B&W	EOI	113-115	-
USGS ^d	8	05-07-73	1:19,000	B&W	GS-VCYV	215,216	-
USDA/FSA	9	11-17-80	1:40,000	B&W	23001	157,158	-
USDA/FSA	10	11-01-85	1:60,000	B&W	447016	192,193	-
USDA/FSA	11	07-22-91	1:40,000	B&W	NAPP	53,54	-
USDA/FSA	-	05-01-98	1:40,000	B&W	NAPP	18-20	-
USGS ^d	12	04-30-03	1:12,000	CC	GS-VFOM	90-92	-
USDA/FSA ^d	13	08-19-11	1:24,000	CC	NAIP11	DOQQ	-

- ^aNAS/VIP National Aerial Survey Center Corp./Visual Image Presentations, Silver Spring, Maryland
- USDA/FSA U.S. Department of Agriculture, Farm Service Agency, Salt Lake City, Utah
- USGS U.S. Department of Interior, U.S. Geological Survey, Washington, D.C.
- ^bB&W Black-and-white
- CC Conventional color
- ^cPhotographs listed with no figure number were analyzed but not placed in this report.
- ^dDigital diapositive (see Methodology section)