

**Attachment A  
NRC3-09-0054**

**Report for RAI GE3.1-1  
(following 12 pages)**



November 17, 2009  
J-0584/R-0842.01

Mr. Douglas Timpe  
Black & Veatch Corporation  
11041 Lamar Avenue  
Overland Park, KS 66211

**RE: Report of Archaeological Field View, Proposed Meteorological Tower Site,  
Tentative Access Road, and Construction Laydown Area, Revised Site Layout,  
Fermi 3 Project, Monroe County, Michigan**

Dear Mr. Timpe:

On October 20, 2009, Commonwealth Cultural Resources Group, Inc. (CCRG) conducted additional archaeological survey of the proposed Meteorological (MET) Tower site, tentative Access Road corridor, and proposed Construction Laydown area identified on the revised Unit 3 Construction Impact Area (Black & Veatch Corporation [BV] 2009) (Figure 1). The proposed MET Tower site occupies about 4.5 ac (1.8 ha) in Section 28 (T6S/R10E), Monroe County. The proposed MET Tower will be a guy wire stabilized structure that will stand approximately 197 ft (60 m). Less than 1.0 ac (0.4 ha) will be permanently impacted by the proposed MET Tower. At the time of the survey, the location of the tentative Access Road corridor was not finalized. The proposed Construction Laydown area comprises approximately 24 ac (10 ha) in Sections 20 and 29 (T6S/R10E), Monroe County, bounded on the south by Pointe Aux Peaux Road and on the west by Quarry Lane.

In compliance with Section 106 of the National Historic Preservation Act and the regulations contained in NUREG 1555, the additional archaeological survey of the proposed MET Tower site and tentative Access Road corridor and the proposed Construction Laydown area was conducted to ensure that proposed construction did not affect prehistoric or historic archaeological sites that may be present in either project area. The proposed MET Tower site and tentative Access Road corridor and the proposed Construction Laydown area are situated within the original area of potential effect (APE) for above-ground resources; therefore, no additional survey was conducted for above-ground resources. All key staff assigned to this survey project meet or exceed the Secretary of the Interior's professional qualifications.

No survey was conducted within the proposed Construction Laydown area, because the area has been disturbed by past dumping and construction episodes (see "Current Land Use" and "Archaeological Field Methods and Survey Results," below). Fieldwork in the proposed MET

Main Office: 2530 Spring Arbor Road Jackson, Michigan 49203 • (517) 788-3550/Fax (517) 788-6594

New York Office: 2495 Main Street Room 448 Buffalo, New York 14214 • (716) 831-9003/Fax (716) 831-9003

Wisconsin Office: P.O. Box 1061 Minocqua, Wisconsin 54548 • (715) 358-5686/Fax (715) 358-6656

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Tower and Access Road survey area resulted in the identification of one previously unrecorded twentieth-century archaeological site (20MR825). Site 20MR825 is not recommended eligible for listing in the National Register of Historic Places (NRHP). No previously unrecorded or unidentified above-ground resources are located within or in the vicinity of the proposed MET Tower site, the tentative Access Road corridor, or the proposed Construction Laydown area.

### **Project Background**

Detroit Edison Company (DECo) proposes to construct and operate a new nuclear power plant at the existing Fermi site in Monroe County, Michigan. The proposed unit is to be designated as Fermi 3. In support of the Fermi 3 project, Commonwealth Cultural Resources Group, Inc. (CCRG), contracted by Black & Veatch Corporation (BV) of Overland Park, Kansas, conducted surveys of cultural resources (above-ground and archaeological) to identify historic resources in and near the Fermi site and to assess possible impacts to these resources. The cultural resources investigations for the Fermi 3 project began in November 2007 and continued into April 2008. An additional archaeological survey was conducted on one small parcel at the site on July 15, 2008. The results of these surveys of the Fermi site and vicinity are contained in Demeter et al. (2008). A preliminary NRHP evaluation of the Enrico Fermi Atomic Power Plant Unit 1 (Fermi 1) was conducted by Dean A. Doerrfeld and Ben Riggle of R. Christopher Goodwin and Associates, Inc., during the week of December 15, 2008 (see Doerrfeld et al. 2009). A maritime assessment was submitted to BV and DECo in March 2009 via a letter report addressed to Mr. Douglas Timpe, BV Environmental Manager (see Weir 2009). A cultural resources site file review was conducted for seven alternative sites in 2009 (Lillis-Warwick and Demeter 2009). The current archaeological survey was conducted to investigate two recently proposed impact areas located outside of the original archaeological APE (see Demeter et al. 2008).

### **Current Land Use**

Land use in the area of the proposed MET Tower and tentative Access Road is characterized primarily by low-density residential development, wooded undeveloped property, and cultivated farm fields that have obviously lain fallow for a number of years. The proposed Construction Laydown area, which is bisected by a gravel two-track road, has undergone long-term dumping of rubble and other construction waste material. The landscape in this area is extensively built up with spoil piles that contain this sort of debris and is, therefore, considered to be completely disturbed. Trees, grass, bushes, and other scrub vegetation cover much of this parcel.



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## **Pre-field Research**

Prior to initiating the original cultural resource survey for the Fermi 3 project, CCRG reviewed the archaeological site files maintained at the Michigan Office of the State Archaeologist (OSA) and the records of historic above-ground historic resources at the State Historic Preservation Office (SHPO) in Lansing (see Demeter et al. 2008). No additional site file research was conducted for this investigation.

CCRG's original review of the archaeological site files maintained at the OSA identified a four previously recorded archaeological sites within 1.0 mi (1.6 km) of the project area, one of which (20MR702), was recorded within the archaeological APE. Archaeological survey conducted for the Fermi 3 cultural resource investigations in 2007 and 2008 resulted in the identification of six additional archaeological sites within the archaeological APE. None of these newly recorded sites were recommended eligible for listing in the NRHP (Demeter et al. [2008] contains a detailed discussion of the previously recorded and the six newly recorded archaeological sites).

Historic atlases, aerial maps, and USGS topographic maps covering the project area from 1839 to 1973 were also analyzed for potential historic archaeological sites. These sources included the 1839-1841 *Map of Part of Ash, Monroe County* (Hubbard 1838-1841), the 1859 *Map of Monroe County, Michigan* (Geil, Harley & Siverd 1859), the 1876 *County Atlas Monroe County, Michigan* (Bartlett 1876), the 1896 *Standard Atlas of Monroe County, Michigan* (Ogle 1896), and the 1940, 1952, 1967, and 1973 USGS 7.5-minute Stony Point, Michigan, topographic maps. Aerial maps depicting the project area, including those dated 1949, 1957, and 1961, were also examined.

In general, the highest potential for prehistoric site occurrence depends on the availability of well-drained soils in close proximity to water resources, such as drainage or expansive wetland. Water sources and well-drained locations also played an important role in the choice of habitation spaces during the opening phases of pioneer settlement beginning in the early 1800s. Such choices were, however, also dependent on roadway and railroad development. Sandy hummocks within low poorly drained lands also indicate an increased chance for site occurrence, especially short-term prehistoric processing locales occupied by hunter-gatherer peoples. The early Hubbard (1838-1841) depiction of the area describes the area of the proposed MET Tower site and tentative Access Road corridor as "partly overflowed" and comprised of "marsh." Based on this description, there would be a low potential for prehistoric archaeological resources within the proposed MET Tower site or the tentative Access Road corridor. Dwellings and/or farmsteads are shown on the north side of Pointe Aux Peaux Road beginning after 1876 (Ogle 1896). The most recent USGS 7.5-minute Stony Point, Michigan, topographic data obtained



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from the Michigan Resource Information System (MIRIS) (based on the 1967 [1973 photorevised] USGS topographic map) depicts eight structures along the road between the 28/29 section line and Long Road and at least 17 structures along the northwest-trending leg of Long Road that is no longer extant (Figure 2). These structures on Pointe Aux Peaux Road and Long Road represent those in closest proximity to the proposed MET Tower site and tentative Access Road corridor locations.

### **Archaeological Field Methods and Survey Results**

The field survey of the proposed MET Tower site, the tentative Access Road corridor, and the proposed Construction Laydown area took place on October 20, 2009. The survey areas were identified on the Fermi revised site layout (see Figure 1); however, the areas were not marked in the field. DECo employee Craig Tylenda served as escort and identified the areas to be surveyed.

Areas of disturbance, topographic features, wetlands, and other components that have a bearing on the need for archaeological survey were documented. Planned survey methods included systematic pedestrian reconnaissance in areas exhibiting 50 percent or greater surface visibility. Shovel testing was planned in areas exhibiting less than 50 percent surface visibility and in those areas with a high potential to contain buried archaeological remains, as determined by the field archaeologist during the initial field view. At the time of survey, the location of the proposed Access Road was tentative; therefore, CCRG planned systematic survey within a 75 ft (23 m) corridor from the proposed MET Tower site to Pointe Aux Peaux Road. Initial walkover survey of the proposed MET Tower site revealed relatively flat property devoid of knolls or any other type of topographic relief. The ground cover was sufficiently open and exposed to permit a walkover visual reconnaissance of the area and, therefore, no shovel testing was necessary.

The proposed MET Tower location consists primarily of small stands of trees and fallow cultivated farm fields with 50 to 60 percent surface visibility. The fields have likely remained fallow for two years or more. As a result of the walkover survey, a thin surface scatter of twentieth-century artifacts was identified both in the open fields and within the two stands of trees (Figures 3 and 4). This debris, which has been assigned the state site number of 20MR825, consisted largely of non-diagnostic plastic, tires, bottle and jar glass, unidentified metal, concrete rubble, cinder blocks, and bricks, none of which was collected. In addition to the artifact scatter, three assumed pet burials were observed at 20MR825 which are marked by weathered wooden crosses with the name plaques of, "ROCKY," "...NIP," and "K D" (or "KID") (Figure 5). Site 20MR825 covers an area of about 100 ft (30 m) in diameter and is situated approximately 800 ft (244 m) north of Pointe Aux Peaux Road, several hundred feet north of an existing Frenchtown



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Township water tower (see Figure 3; the water tower is visible in the background of Figure 4). The site sits at an elevation of 565 ft (172 m) above mean sea level in the northwest quarter of the northwest quarter of Section 28 (T6S/R10E) (Figure 2).

It is clear that 20MR825 was once associated with a structure on either Pointe Aux Peaux Road to the south or Long Road to the east. Aerial photographs dating to 1949, 1957, and 1961 show residential development along Long Road and the Lake Erie shoreline. These dwellings are no longer extant. In addition, some of the farms and dwellings that once occupied the north side of Pointe Aux Peaux Road in the vicinity of 20MR825 have been removed. Consequently, no specific source of the archaeological material at 20MR825 could be readily identified. Given the largely non-diagnostic nature of the cultural material, the lack of structural components associated with the site, and the absence of any prehistoric archaeological material, it is CCRG's opinion that 20MR825 does not meet the criteria for listing in the NRHP and, therefore, no additional archaeological testing of the site is required.

Survey of the tentative Access Road corridor revealed the area to be chiefly fallow farm fields with 50 to 60 percent surface visibility. An area of hedges/small trees was located at the north end of the survey corridor (at the intersection with the proposed MET Tower survey area), which exhibited at least 50 percent visibility. A fence demarking the Fermi property boundary was located approximately 200 ft (61 m) north of Point Aux Peaux Road; lawn lay between Pointe Aux Peaux Road and the fence. CCRG was not authorized to survey property outside of the Fermi property fence; therefore, the survey corridor terminated at the fenceline. The tentative Access Road corridor within the Fermi property was investigated through systematic pedestrian reconnaissance. No historic or prehistoric archaeological material was evident.

The 24 ac (10 ha) property proposed for the Construction Laydown area was accessed via a gravel two-track road that bisects the area southeast-northwest. Reconnaissance of the laydown area suggests that it has undergone extensive dumping of rubble and, presumably, other construction waste material over several years. The landscape in this area is extensively built up from the natural surface with large spoil piles containing this sort of debris (Figures 6 and 7). The entire Construction Laydown area is considered to be completely disturbed and, therefore, no systematic survey was conducted,

### **Summary and Conclusions**

In summary, the proposed Construction Laydown area was determined completely disturbed and no systematic survey was conducted in the area. The tentative Access Road corridor was surveyed via pedestrian reconnaissance. No archaeological sites were identified within the



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surveyed corridor. The proposed MET Tower site produced a single historic archaeological site (20MR825) that consisted of non-diagnostic twentieth-century debris and three assumed pet burials. The lack of diagnostic artifacts, the absence of structural indicators (foundations, cellars, cisterns), and the lack of prehistoric archaeological material suggests that site 20MR285 is not eligible for listing in the NRHP.

CCRG recommends no further testing for archaeological resources at the current proposed MET Tower site or the tentative Access Road corridor within the Fermi property. If the proposed MET Tower site or tentative Access Road corridor locations are changed, archaeological survey would be required in the new APE. Further, because CCRG did not have access to property outside the Fermi fenceline and was, therefore, unable to survey that property, CCRG recommends that survey be conducted between Point Aux Peaux Road and the Fermi property fenceline when the final MET Tower access road location is established.

Based on the result of the survey, no NRHP-eligible archaeological resources would be impacted by ground-disturbing activities at the proposed Construction Laydown area. The extensive disturbance that characterizes the proposed Construction Laydown area has more than likely destroyed, or at least permanently encased, any archaeological resources that may have existed at that site and, therefore, no further archaeological fieldwork is recommended for the area.

A copy of this letter should be forwarded to DECo and, ultimately, to the SHPO for review. If we can provide any further, information please contact either me or Nancy Demeter at this office.

Sincerely,

Kent C. Taylor  
Project Archaeologist

#### References

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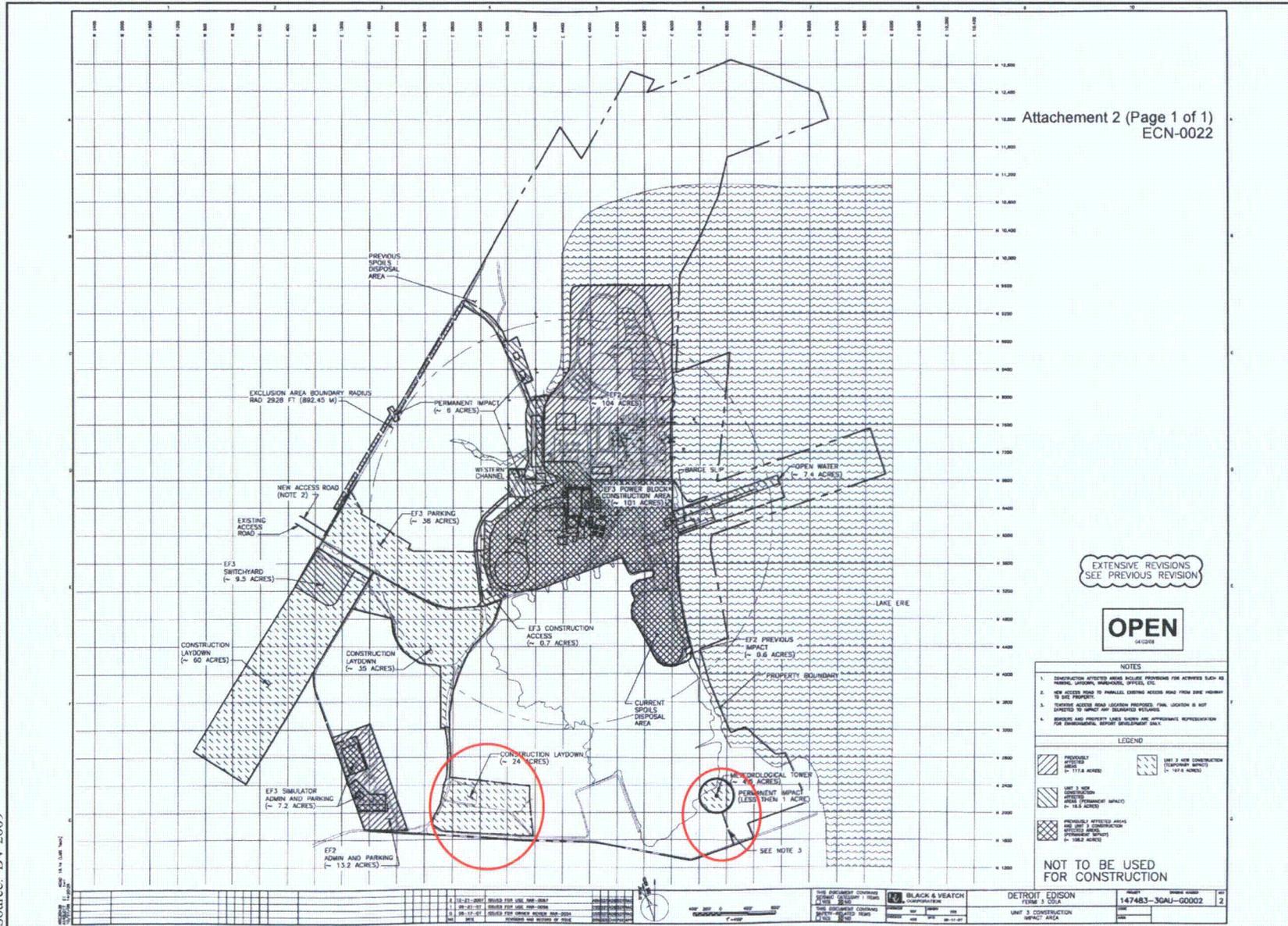
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Source: BV 2009

Figure 1. Revised Fermi 3 Site Layout



Source: MIRIS 2009

Figure 2. Survey Area Location and Newly Identified Site 20MR825 Location

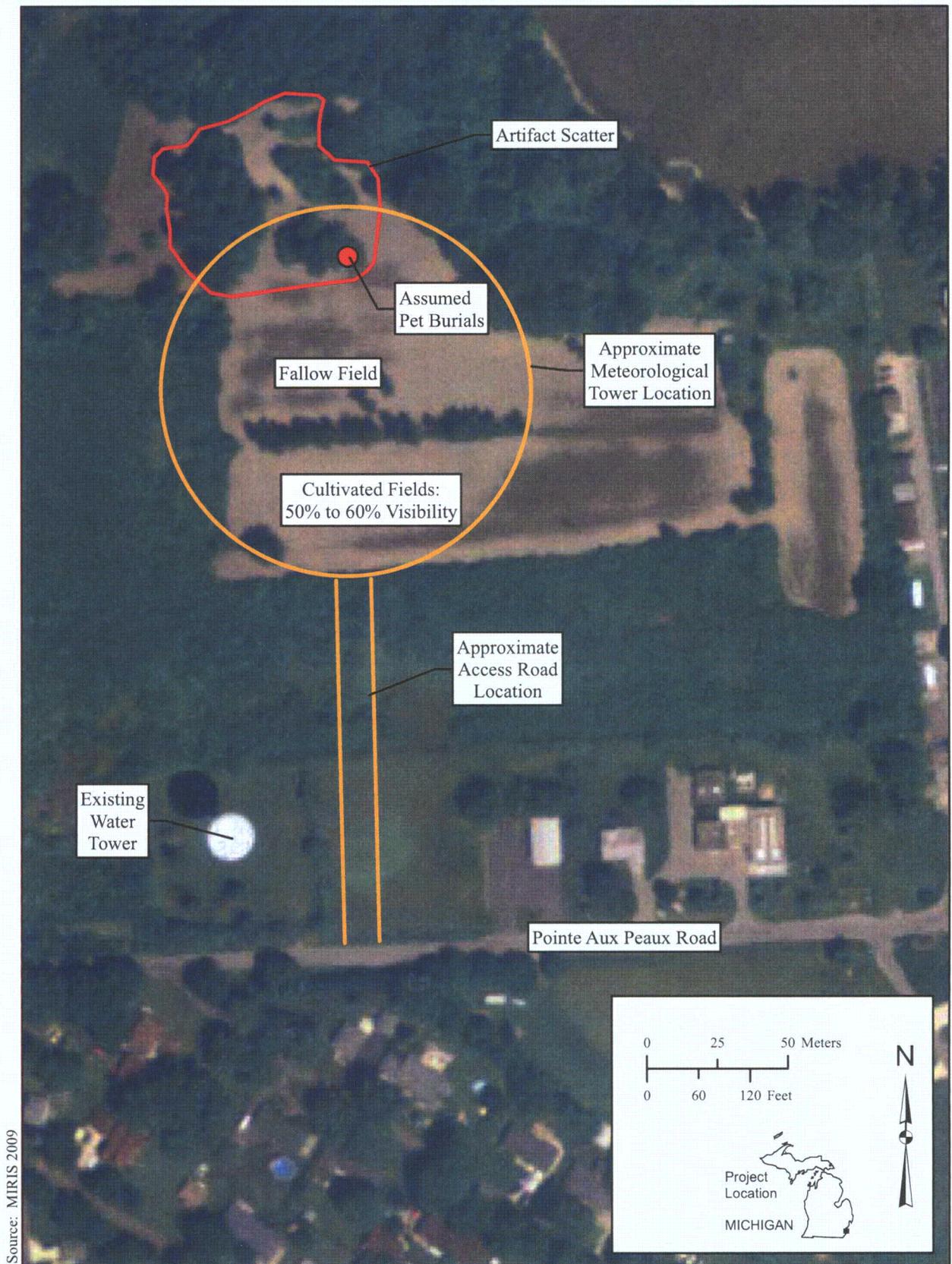


Figure 3. Proposed Meteorological Tower and Tentative Access Road Survey Areas and Site 20MR825 Location



Figure 4. Site 20MR825/Proposed Meteorological Tower Site Area, View South



Figure 5. Presumed Pet Burial Sites, Site 20MR825/Proposed Meteorological Tower Site



Figure 6. Proposed Construction Laydown Area, View West



Figure 7. Proposed Construction Laydown Area, View South