

**MILWAUKEE COUNTY**  
**Interoffice Memorandum**

**DATE:** April 11, 2017

**TO:** John Dargle/Parks

**FROM:** Steve Keith/AE&ES  
Tim Detzer/AE&ES

**SUBJECT:** Caterpillar Site

Our Environmental Services Unit has performed a review of the environmental conditions of the 2-acre parcel (Figure 1) owned by Milwaukee County Parks which has been encroached upon by Caterpillar and the previous land owner, Bucyrus-Erie. Caterpillar has expressed interest in purchasing the parcel from Milwaukee County. Our review included a tour of the site on Monday January 23<sup>rd</sup> and a review of the WDNR file records on January 30<sup>th</sup>. This memo summarizes our findings and provides several recommendations.

The landfilled area lies predominately over property owned by Caterpillar, and extends on to the 2-acre County-owned parcel. Filling by Bucyrus-Erie began decades ago, presumably with waste materials generated from their on-site industrial operations. The site was not a licensed landfill and so considered an 'historic fill site' by WDNR.

According to a deed obtained from the Milwaukee County Register of Deeds, the parcel was transferred in August 1950 from Bucyrus-Erie to Milwaukee County for the amount of \$1.00. Aerial photos of the property from 1937, 1951 and 1956 appear to indicate there was grading and perhaps filling on the County-owned parcel after the property was transferred. While these photos might not prove that filling occurred after Milwaukee County took possession, they certainly cast doubt as to any claim that all filling occurred prior to Milwaukee County taking possession. Specifically when the filling occurred on the County land may be a moot point if the parcel is sold back to Caterpillar. However, if this can be substantiated it might provide Milwaukee County some added leverage in final negotiations.

On January 23<sup>rd</sup> John Osborne of GZA provided Steve Keith (Milwaukee County Environmental Services) a tour of the parcel. During the walking tour of the site the following were observed:

- There appeared to be a swath (roughly 10 feet) of flat land between the fence and the toe of slope along most of the eastern face of the landfill. However, there is one section (perhaps 50 feet) of the eastern slope of the landfill where the toe of the

slope comes very close to the fence line. Presuming the fence represents the parcel property line, then there is little or no buffer between the landfill and the property line in this area. Moreover, in this area of the landfill, the slope of the face looked to be steeper than 2:1 (horiz:vert), and so potentially represents a slope that may be unstable or may be prone to erosion. A 3:1 slope is often used as a rule-of-thumb maximum slope for landfill design (WDNR requires 4:1 maximum for new landfills, but other states allow 3:1). If the property is transferred to Caterpillar, we would recommend as a condition of sale, that the toe of the slope be moved back to at least 10 feet from the property line, and that side slopes be no steeper than 3:1. This buffer strip will provide access to vehicles to inspect the slope and effect repairs if needed in the future. The slope control should help prevent erosion of the face and, if any erosion does occur, help contain that erosion on Caterpillar land.

- No seepage of water from the face of the landfill was observed. However, according to reports in the WDNR project file, the US EPA noted seeps during their inspections in the 1990's. Inspection for seeps, which could drain onto parkway land, should be performed periodically.
- A corrugated metal pipe was observed to be projecting out of the east slope of the landfill. There was no flow coming from the pipe at that time, but there was evidence (some erosion below) that there has been discharge from this pipe, and it appears that discharges could flow onto parkway land. John Osborne was uncertain about the source of this discharge. If the property is transferred to Caterpillar, we would recommend a condition of the transfer be that the source of the discharge be researched and identified and either be (a) redirected to one of their storm water ponds, or (b) sampled and tested to show it does not contain contaminants of concern.
- As noted by John Osborne during the tour, an area of the landfill plateau, just west of the southwestern corner of the 2-acre parcel (Figure 2), drains storm water runoff down the east slope. The amount of flow appears to be sufficient to erode the slope, as evidenced from rivulets in the surface soil on the slope there. John Osborne indicated that, as part of the agreement, Caterpillar intends to re-direct this surface flow away from the east slope and to the storm water pond to the south.

Our review of WDNR databases and project file indicates there are several open Environmental Repair (ERP) cases on the Caterpillar property, including the landfill. The WDNR's BRRTS database indicates correspondence between WDNR and Caterpillar requiring them to perform some soil sampling and cap repair. John Osborne also said that the US EPA had been performing a reassessment of the CERCLA status of the site, but had not yet provided them with a report or final determination of their review. Apparently, the site had been evaluated back in the 1980's and did not score high enough to be listed as a Superfund site.

Our review of site maps indicates the landfill lies just outside the 100-year floodplain.

Our experience working with WDNR on issues related to contaminated property has been that the WDNR typically assigns responsibility for releases of contamination to the property owner. Their position has been to hold the property owner responsible, i.e., the owner gets the responsible party (RP) letter and then lets the parties involved resolve questions of fiscal responsibility amongst themselves. With some exceptions, this has been confirmed on the vast majority of instances we have been involved in. Therefore, from a liability standpoint, Milwaukee County would likely reduce its liability significantly by transferring the parcel to Caterpillar, who the WDNR would view as the responsible party. However, the transfer might not protect the County from actions by the US EPA if the site were to be listed as a Superfund site. Because Superfund liability is retroactive, joint and several, and can include past owners, Milwaukee County could be named a PRP even if it were to sell the land back to Caterpillar and afterward becomes a listed site. In the unlikely event that the site was added to the Superfund list, the question of when fill was placed on the parcel in relation to the 1950 sale could become more important.

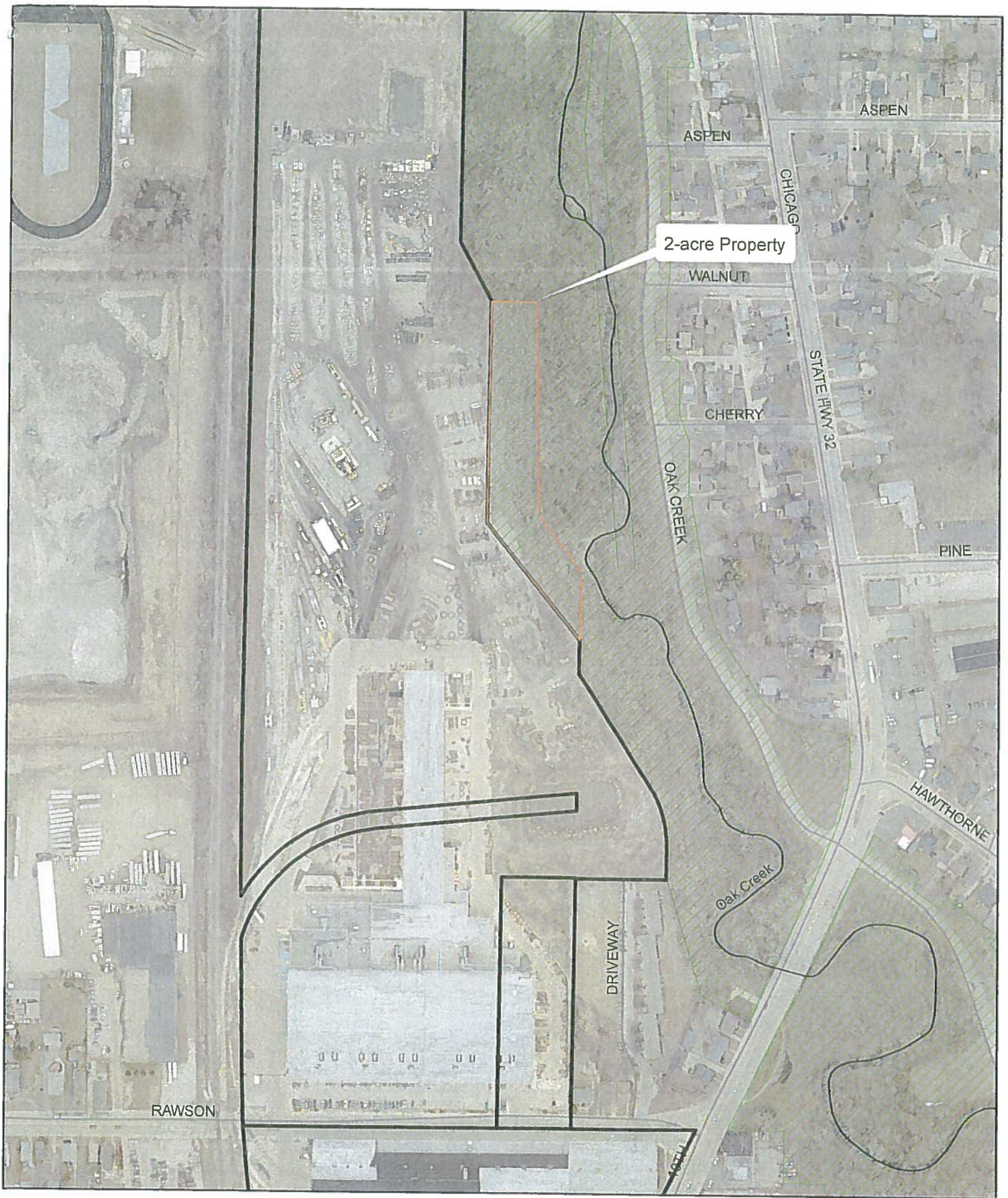
The amount of fill and contents of the fill on the subject parcel is not well known. Information found in the WDNR project file suggests it includes foundry sands, brick, metal, slag and other industrial byproducts produced on site. We estimate the volume of material on the 2-acre parcel to be in excess of 30,000 cubic yards. To remove and relocate that material somewhere else on the Caterpillar site would be an expensive endeavor, likely costing over \$1 million. The high cost of relocation relative to the value of land improvements is one reason why pursuing a full remedial action option could be difficult to negotiate.

## **Summary**

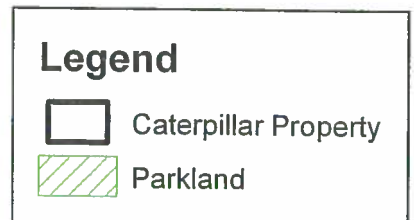
Transferring the parcel to Caterpillar will reduce Milwaukee County's potential liability for enforcement action by the WDNR. Requiring Caterpillar to fully remediate the parcel could prove difficult and time-consuming given the high cost to move the large fill volume.

Conditions of an agreement to transfer the parcel should require Caterpillar to make improvements to the side slope (provide buffer zone and maximum slope and vegetate), investigate the corrugated pipe outfall and redirect flow, redirect runoff from the plateau area to storm pond, and agree to perform regular inspections of the slope for erosion and seepage and effect prompt repairs to these if found.

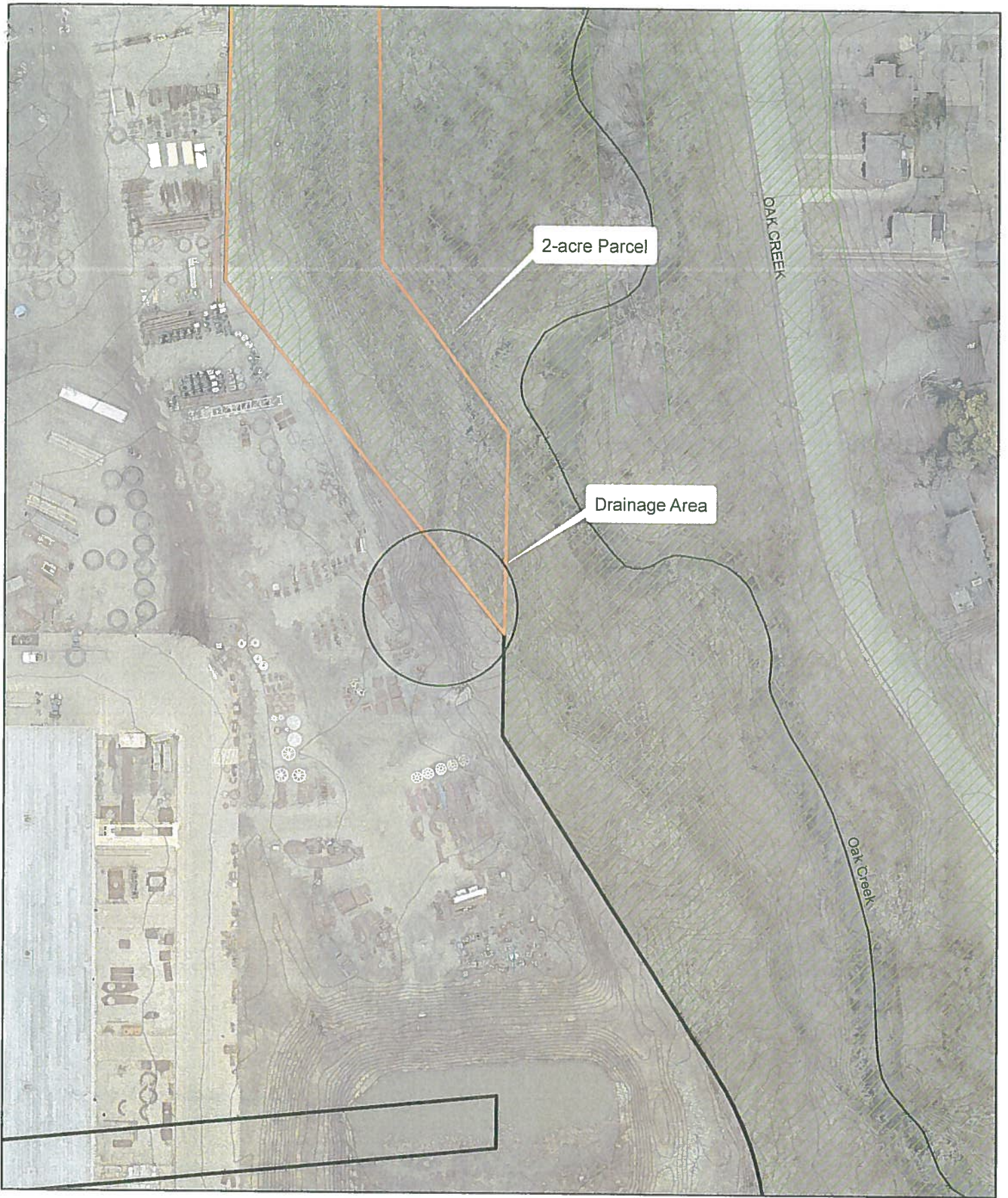




Location of Proposed Parkland Transfer  
Figure 1







Area of Surface Water Drainage  
Figure 2

