



DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER



October 25, 2019

Christipher N. Gierke
Remedial Project Manager
AFCEC/CZO
506 N. Air Commando Way
Cannon AFB, NM

Mr. John E. Kieling
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe NM 87505-6313

Dear Mr. Kieling

Cannon Air Force Base (AFB) initiated field work in support of the approved work plan at DP034; "Approval with modifications RCRA Facility Investigation (RFI) work plan at DP034 Revision 1", dated July 3, 2019. The geophysical survey was crucial in determining the area of the debris pit. The geophysical survey revealed the debris pit to be larger than 15 feet by 15 feet by 5 feet deep (GPR and EMI results attached for reference).

In accordance with the approved work plan, the subsequent step is to install borings to determine the nature and extent of the potential impact to the subsurface soils in the area. After reviewing the data provided by the GPR and EMI survey, it was determined an additional 4 borings would be needed, increasing the installed borings from 6 to 10. In addition, to determine the potential existence of any additional radiological material, downhole gamma logging will be conducted at each of the borings. With NMED concurrence, the field work is estimated to commence in November for the installation of the 10 borings and downhole gamma logging.

Cannon AFB appreciates the valued working relationship established with you and your department. If you have any further comments or questions pertaining to the referenced document, please contact me at (575) 904-6744 or at christipher.gierke@us.af.mil.

Sincerely

C.N. GIERKE, GS-12, AFCEC
Remedial Project Manager

Attachment: GPR-EMI results and proposed boring locations

cc:
NMED, Gabriel Acevedo
NMED, David Cobrain
NMED, Benjamin Wear

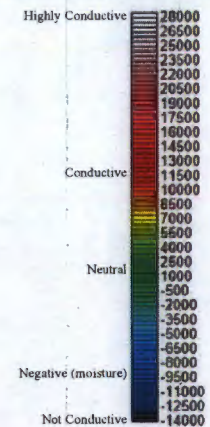
Figure 1
Geophysical Survey Results
Historical Debris Pit DP034

Legend

- ⊕ Power Pole
- ⊙ Locations with Highest Conductivity
- ⬡ Anomalies Detected with GPR
- ⬢ Approximate Geophysical Survey Area

EM61 Response

(hotter colors indicate higher conductivity)



Notes:

Areas inside survey area without EM61 contours indicate the area was filtered out due to metal reinforcement in concrete or other aboveground metallic objects.

GPR=ground-penetrating radar

\\gat-srv-01\HGL\GIS\Cannon_Holloman_AFB_MSI\WP\Cannon_AFB\ATI_WP\01\GPR_Results.mxd
8/26/2015 AJ
Source: HGL, ESRI, U.S. Census Bureau TIGER
ArcGIS Online Imagery

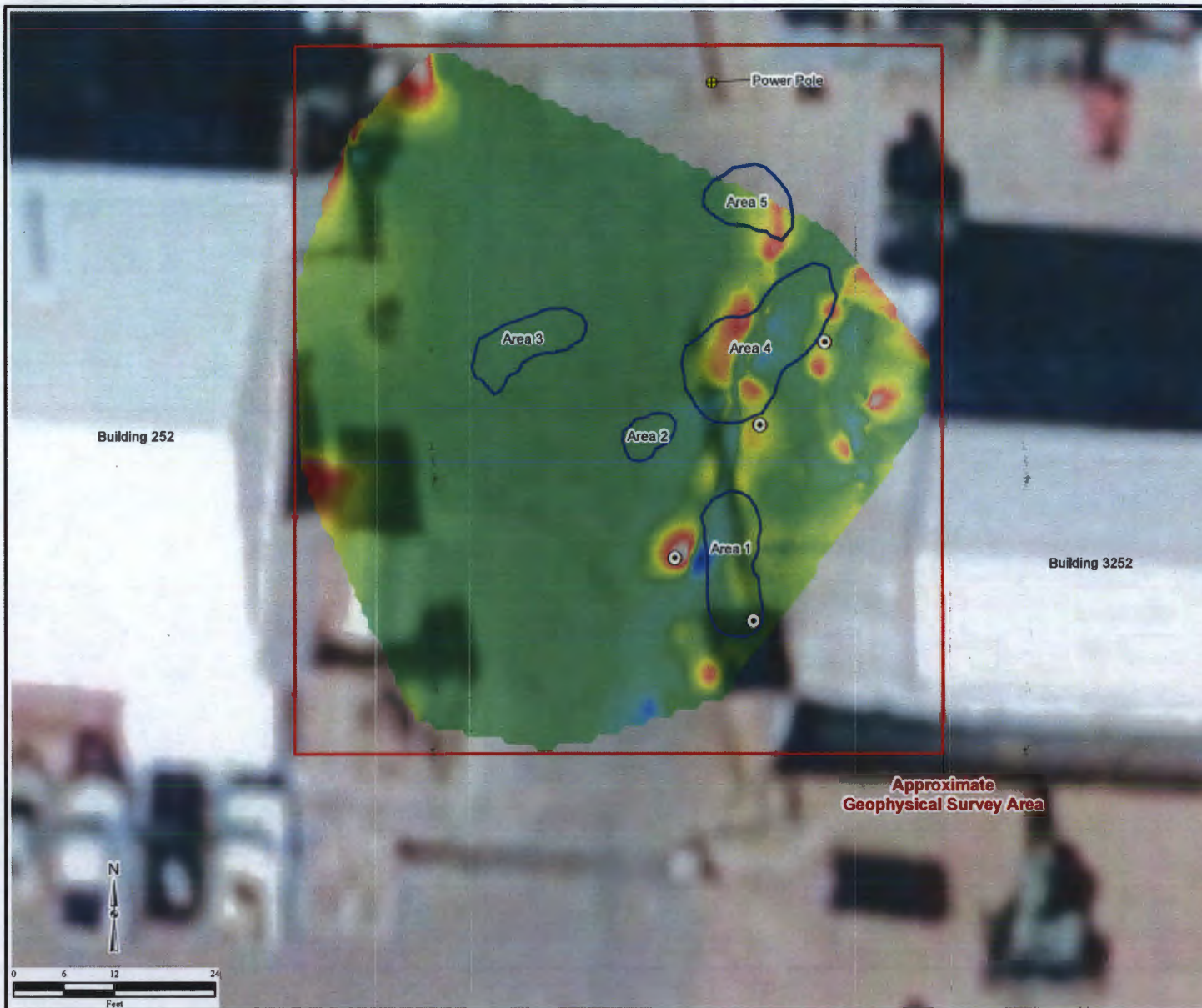






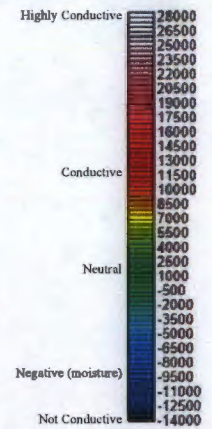
Figure 2
Geophysical Survey Results
Historical Debris Pit DP034

Legend

-  Power Pole
-  Locations with Highest Conductivity
-  Anomalies Detected with GPR
-  Approximate Geophysical Survey Area

EM61 Response

(hotter colors indicate higher conductivity)

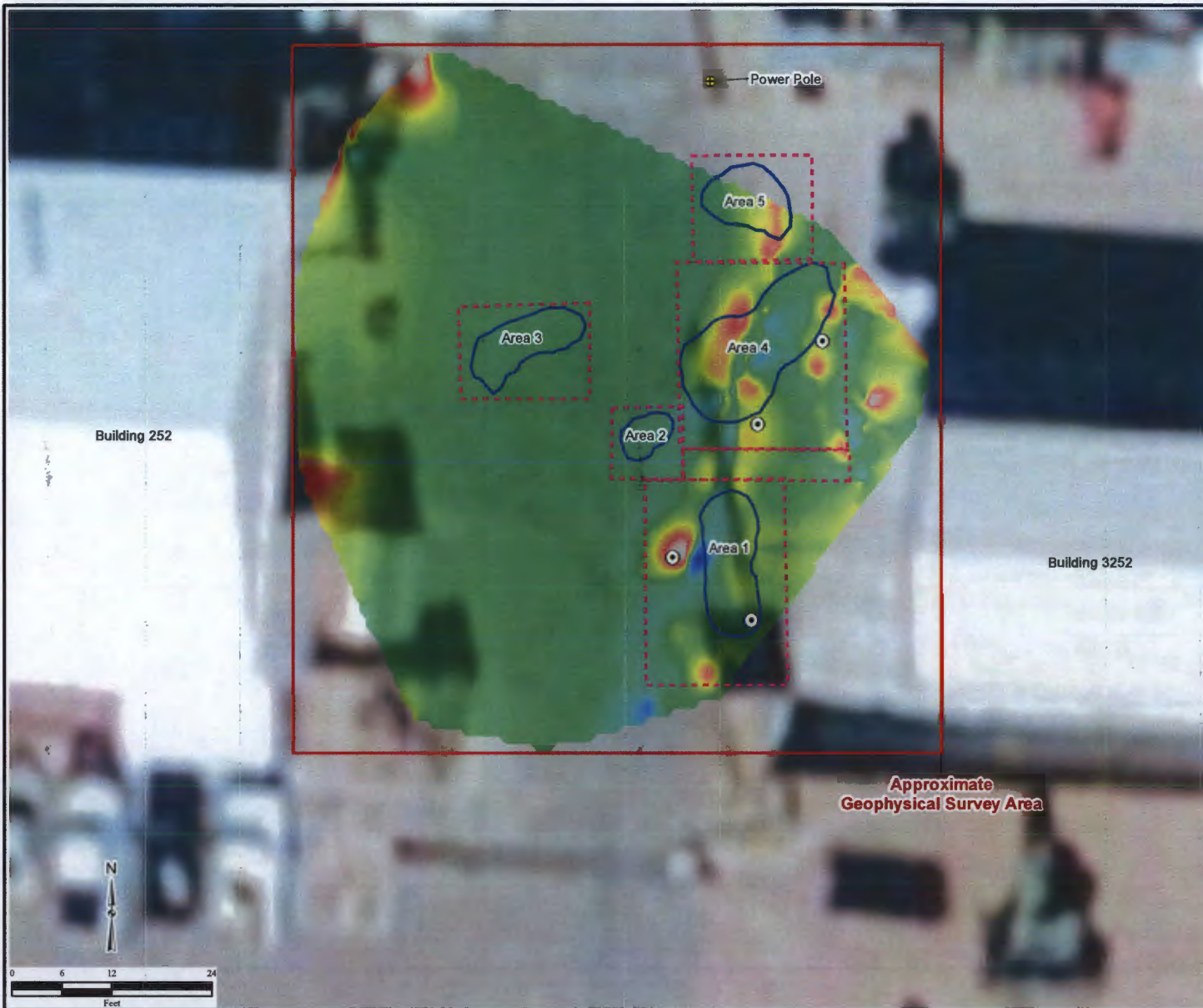


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GPR=ground-penetrating radar

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Source: HGL, ESRI, U.S. Census Bureau TIGER
ArcGIS Online Imagery



Pink square = possible SB location

Work Plan
Cannon AFB, New Mexico

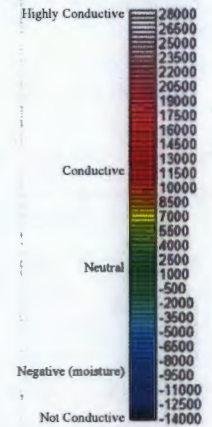
Figure 3
Geophysical Survey Results
Historical Debris Pit DP034

Legend

- ⊕ Power Pole
- ⊙ Locations with Highest Conductivity
- ⬡ Anomalies Detected with GPR
- ⬢ Approximate Geophysical Survey Area

EM61 Response

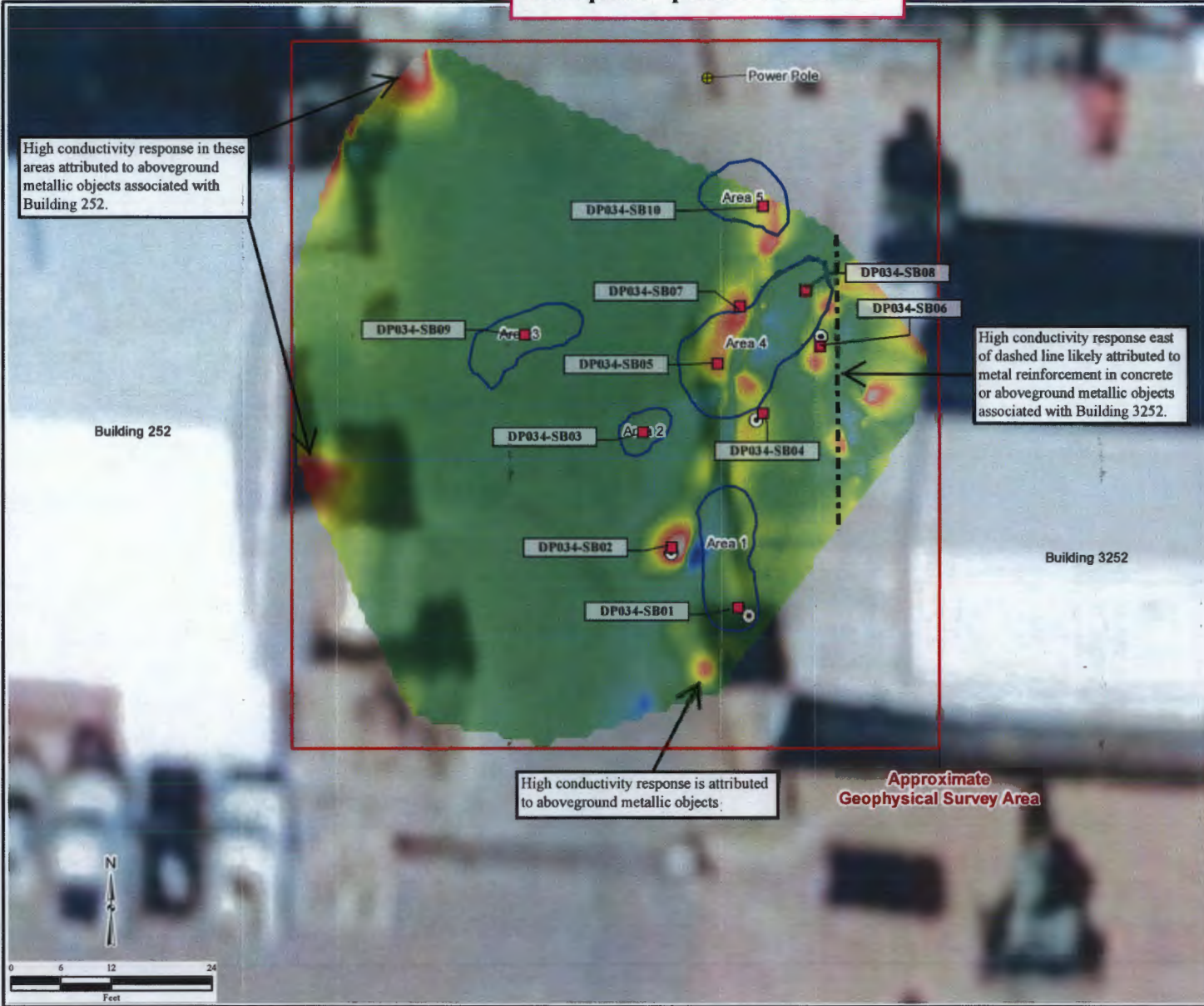
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Notes:
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GPR=ground-penetrating radar

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8/26/2019 AT
Source: HGL, ESRI, U.S. Census Bureau TIGER
ArcGIS Online Imagery



High conductivity response in these areas attributed to aboveground metallic objects associated with Building 252.

High conductivity response east of dashed line likely attributed to metal reinforcement in concrete or aboveground metallic objects associated with Building 3252.

High conductivity response is attributed to aboveground metallic objects.

Approximate Geophysical Survey Area