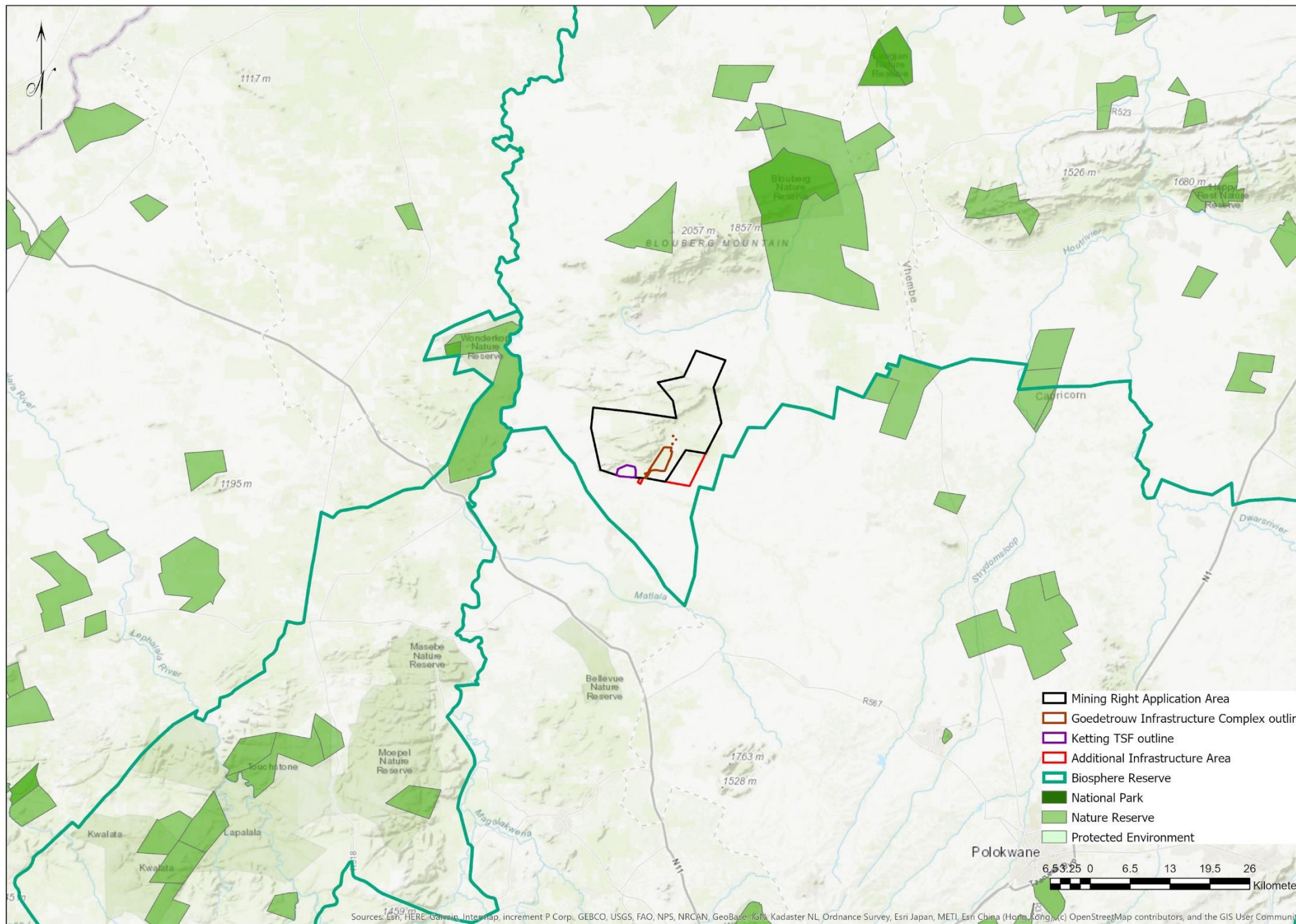
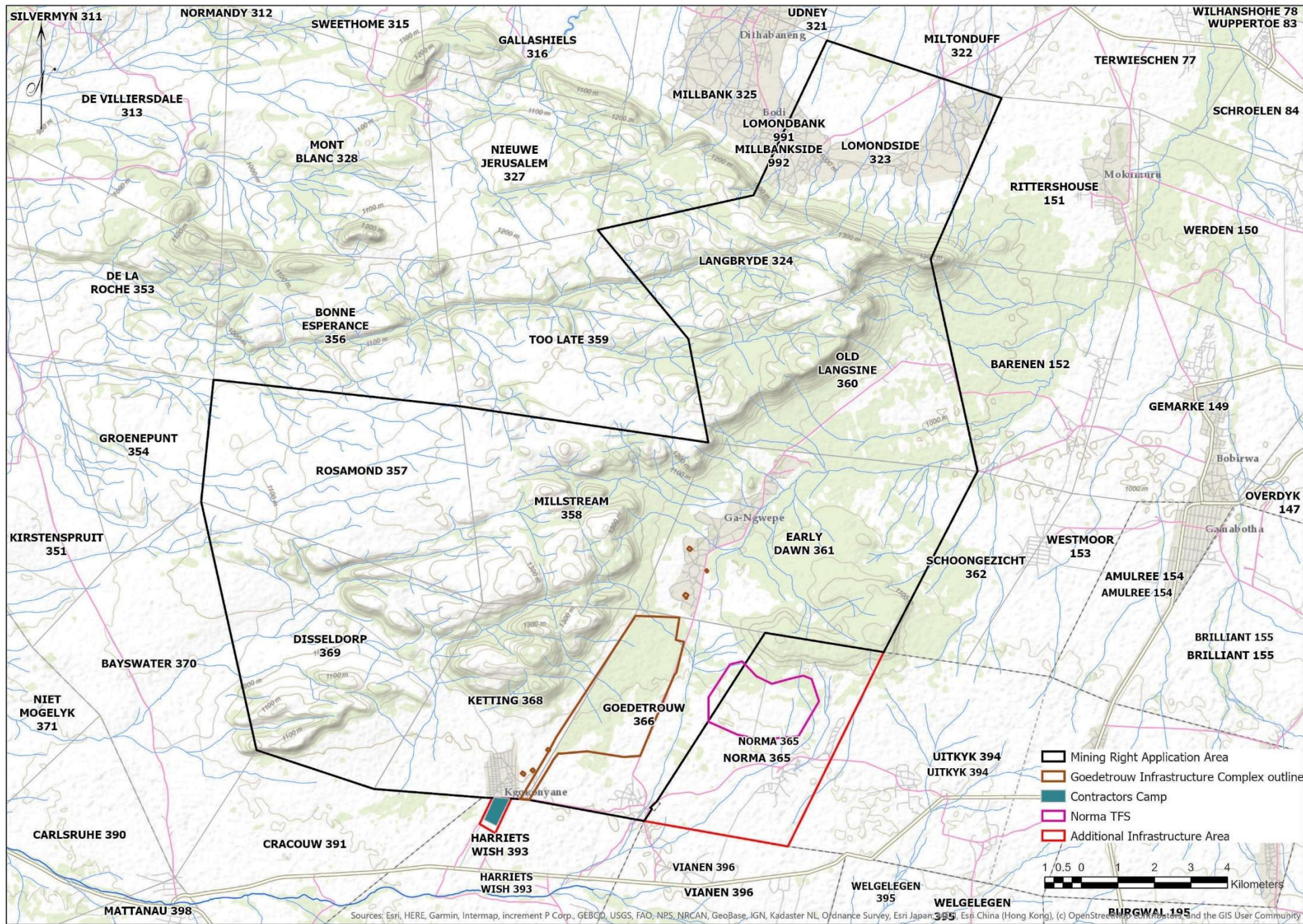
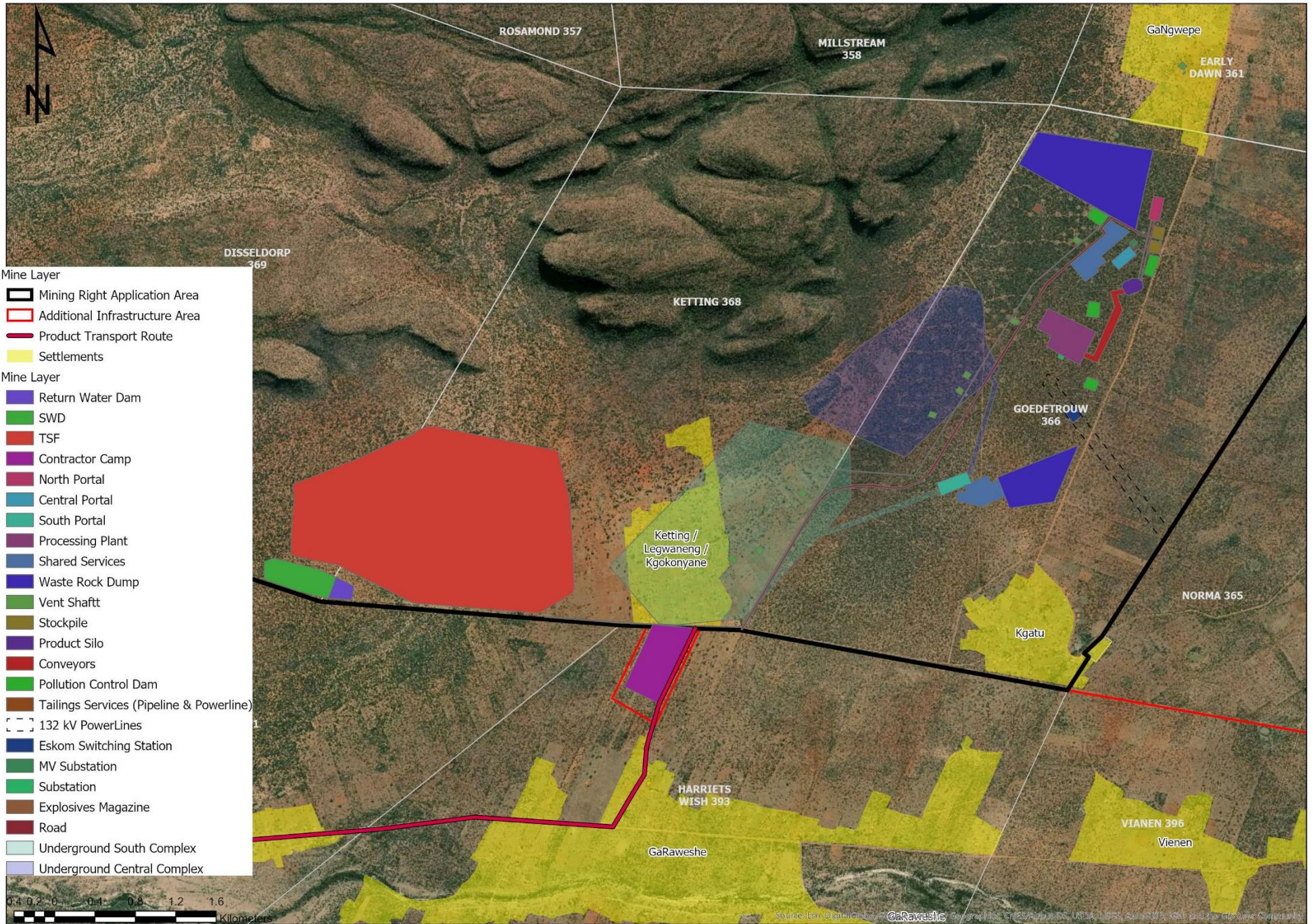


APPENDIX A: MAPS





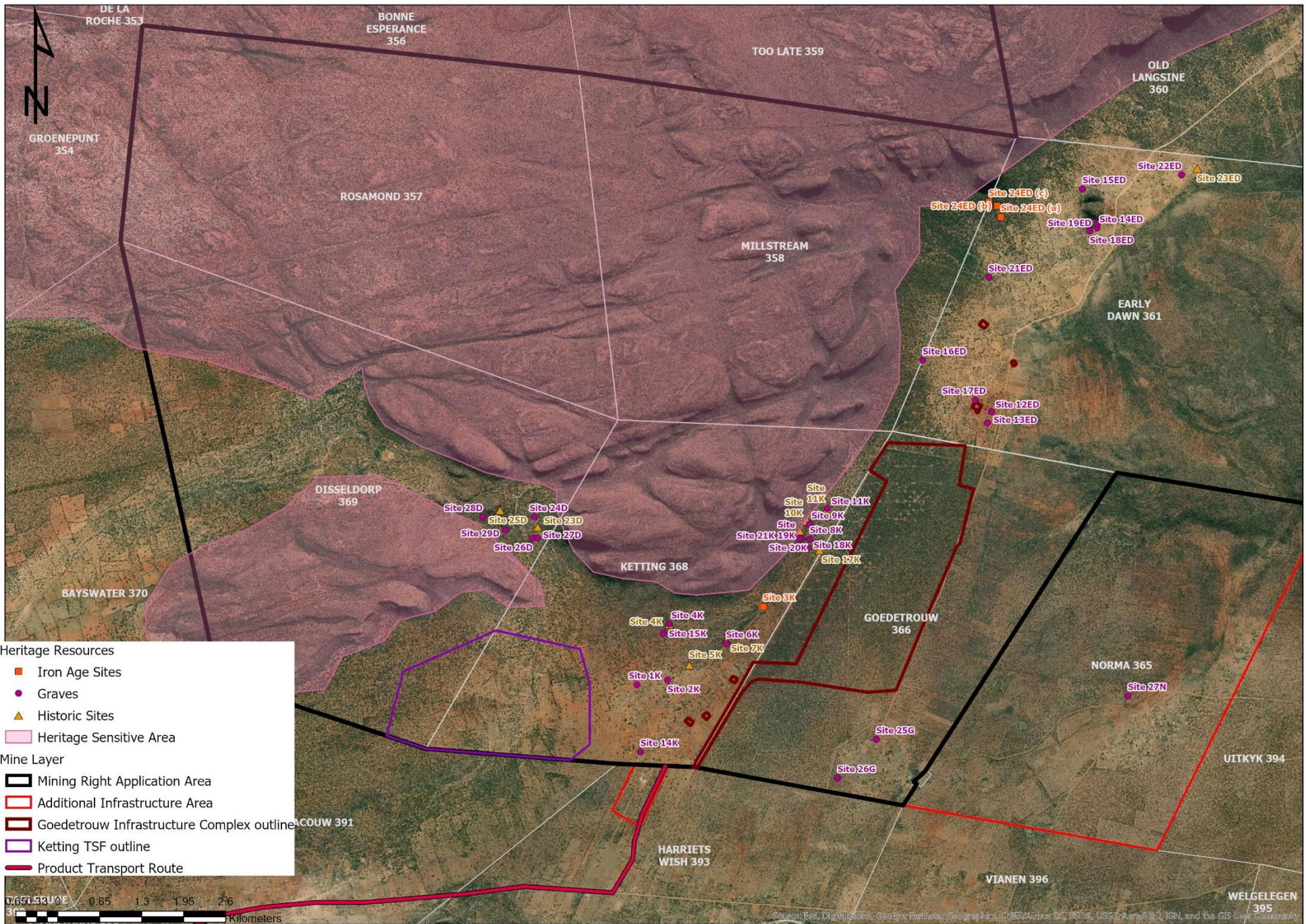
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, Swisstopo, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



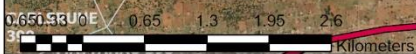
- Mine Layer
- Mining Right Application Area
 - Additional Infrastructure Area
 - Product Transport Route
 - Settlements
- Mine Layer
- Return Water Dam
 - SWD
 - TSF
 - Contractor Camp
 - North Portal
 - Central Portal
 - South Portal
 - Processing Plant
 - Shared Services
 - Waste Rock Dump
 - Vent Shaftt
 - Stockpile
 - Product Silo
 - Conveyors
 - Pollution Control Dam
 - Tailings Services (Pipeline & Powerline)
 - 132 kV PowerLines
 - Eskom Switching Station
 - MV Substation
 - Substation
 - Explosives Magazine
 - Road
 - Underground South Complex
 - Underground Central Complex

0.4 0.2 0 0.4 0.8 1.2 1.6
Kilometers

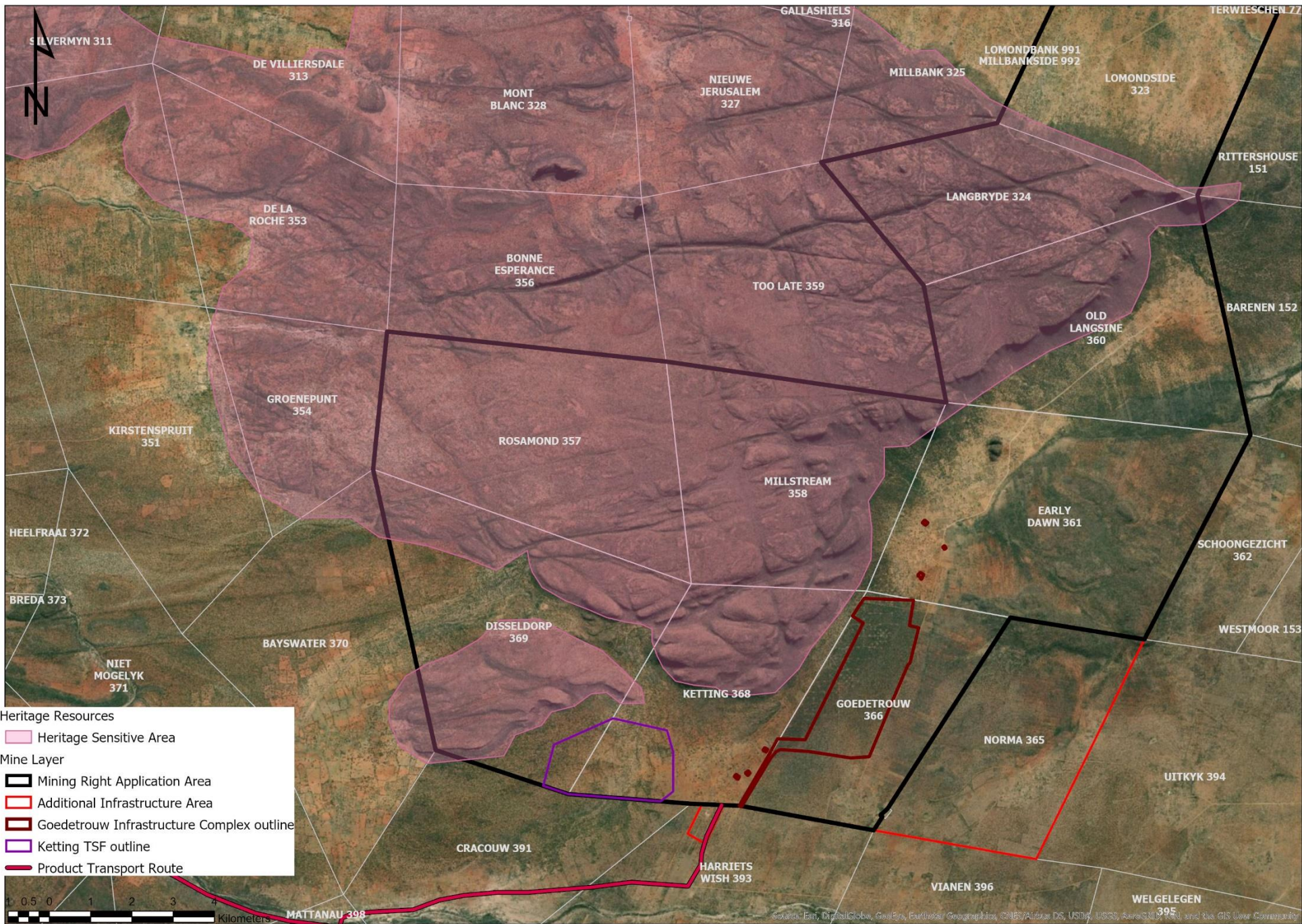
Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, USGS, AeroGRID, IGN, and the GIS User Community



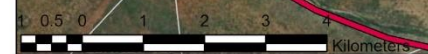
- Heritage Resources**
- Iron Age Sites
 - Graves
 - ▲ Historic Sites
 - Heritage Sensitive Area
- Mine Layer**
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - ▭ Goedetrouw Infrastructure Complex outline
 - ▭ Ketting TSF outline
 - ▭ Product Transport Route



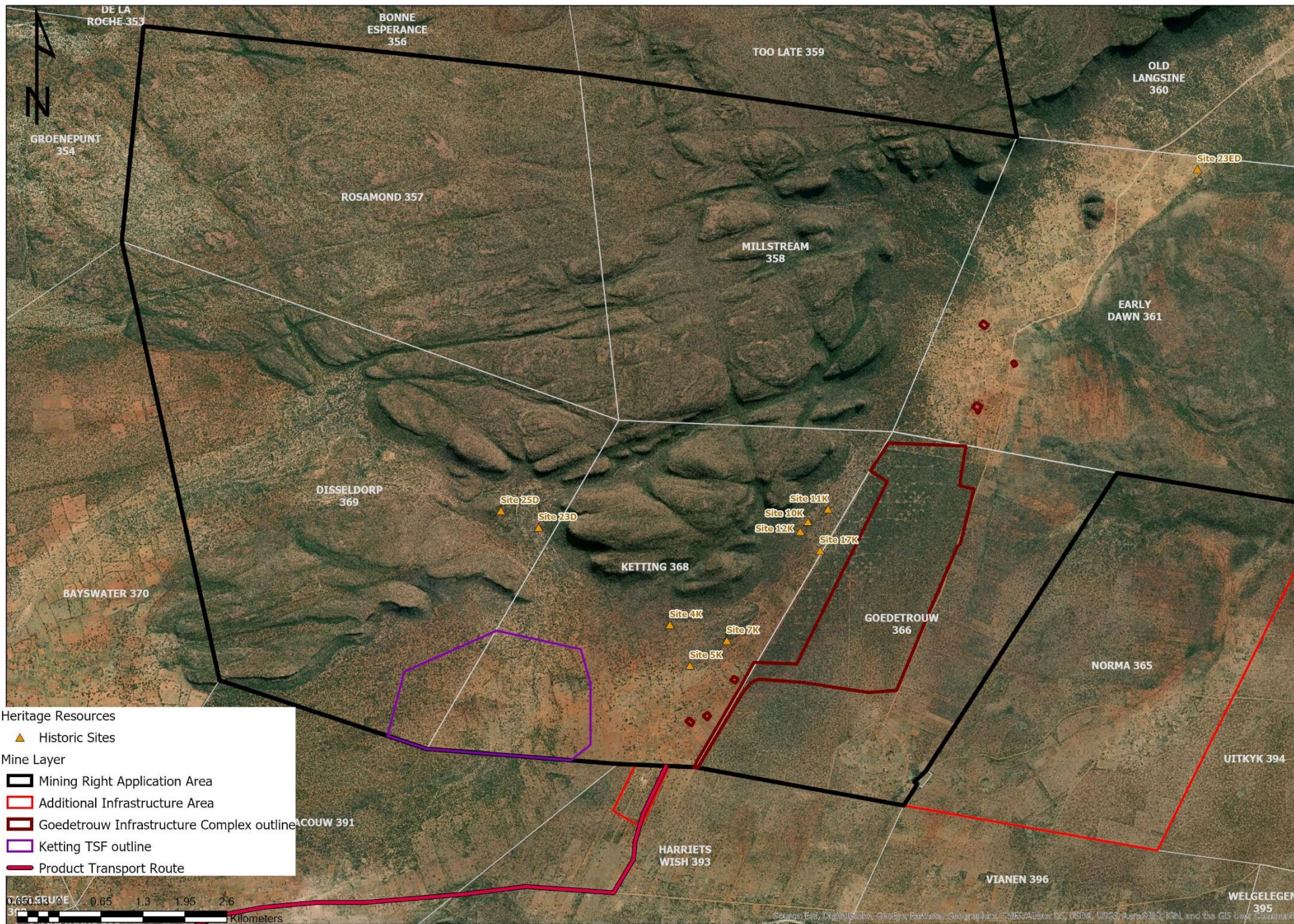
Source: Bar, Digital Globe, GeoEye, Earthstar, GeoGraphics, IGN, Airbus, IGN, USA, USGS, AeroGRID, IGN, and the GIS User Community



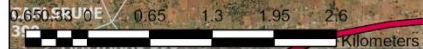
- Heritage Resources**
- Heritage Sensitive Area
- Mine Layer**
- Mining Right Application Area
 - Additional Infrastructure Area
 - Goedetrouw Infrastructure Complex outline
 - Ketting TSF outline
 - Product Transport Route

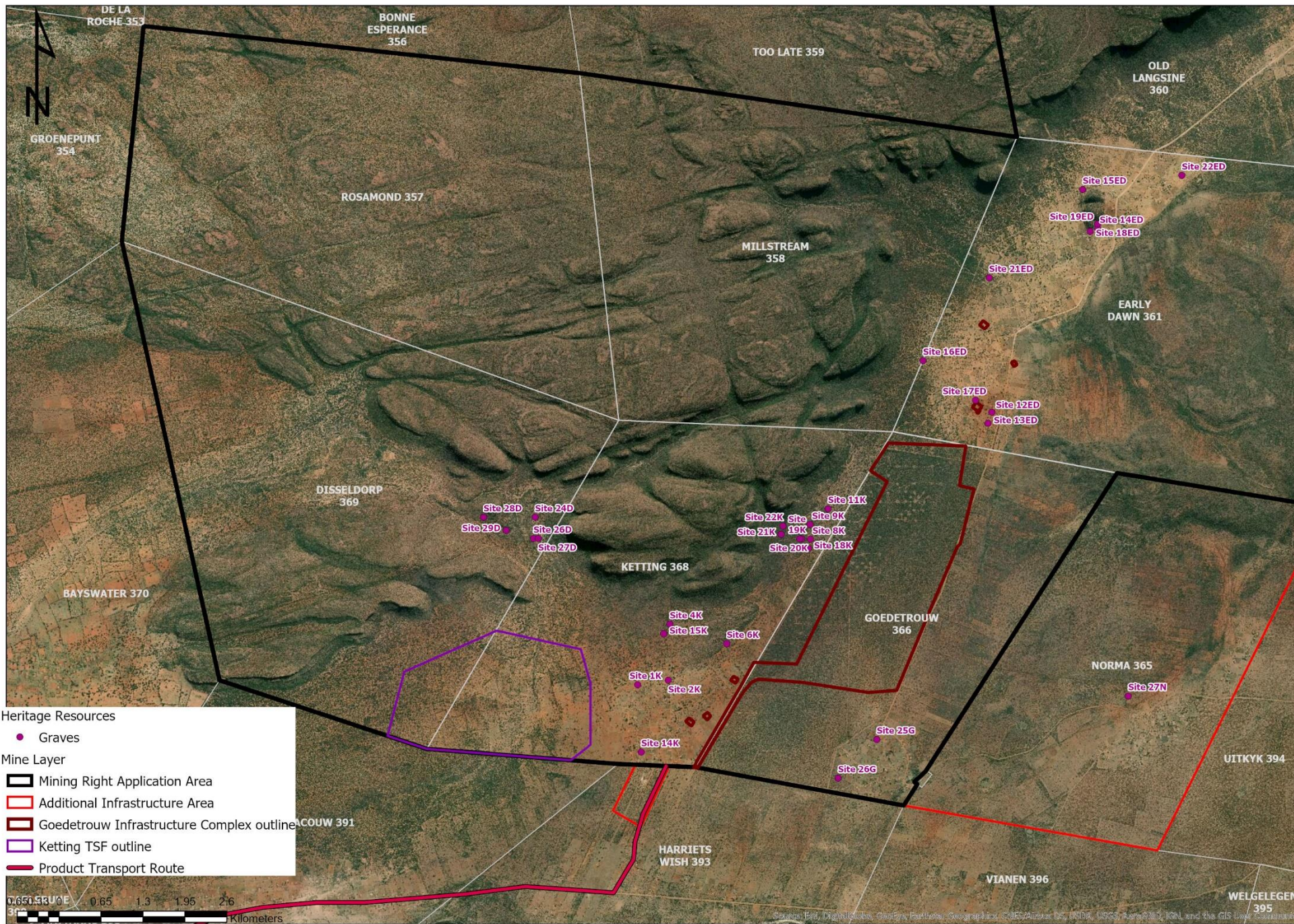


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

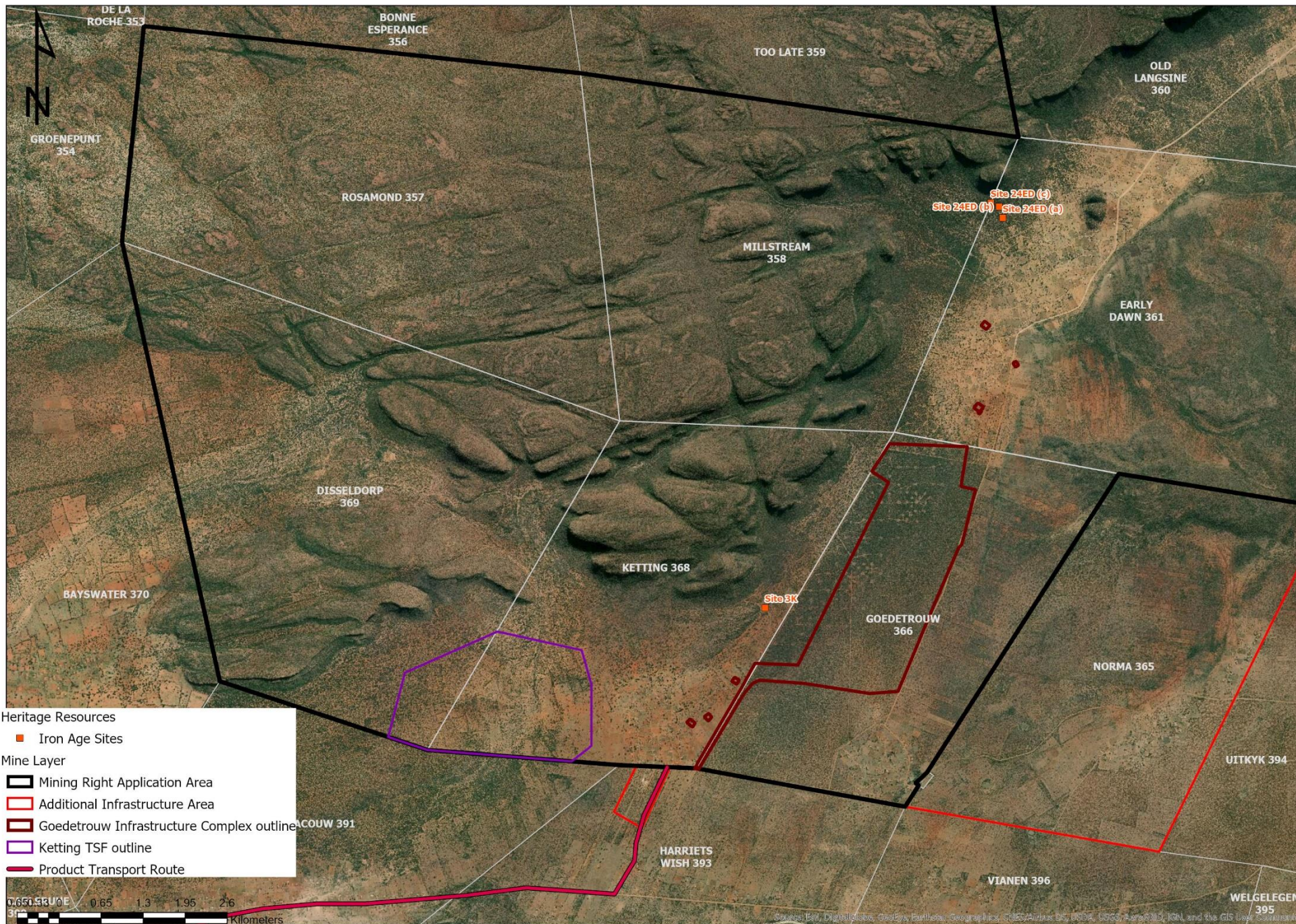


- Heritage Resources
- ▲ Historic Sites
- Mine Layer
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - ▭ Goedetrouw Infrastructure Complex outline
 - ▭ Ketting TSF outline
 - ▬ Product Transport Route



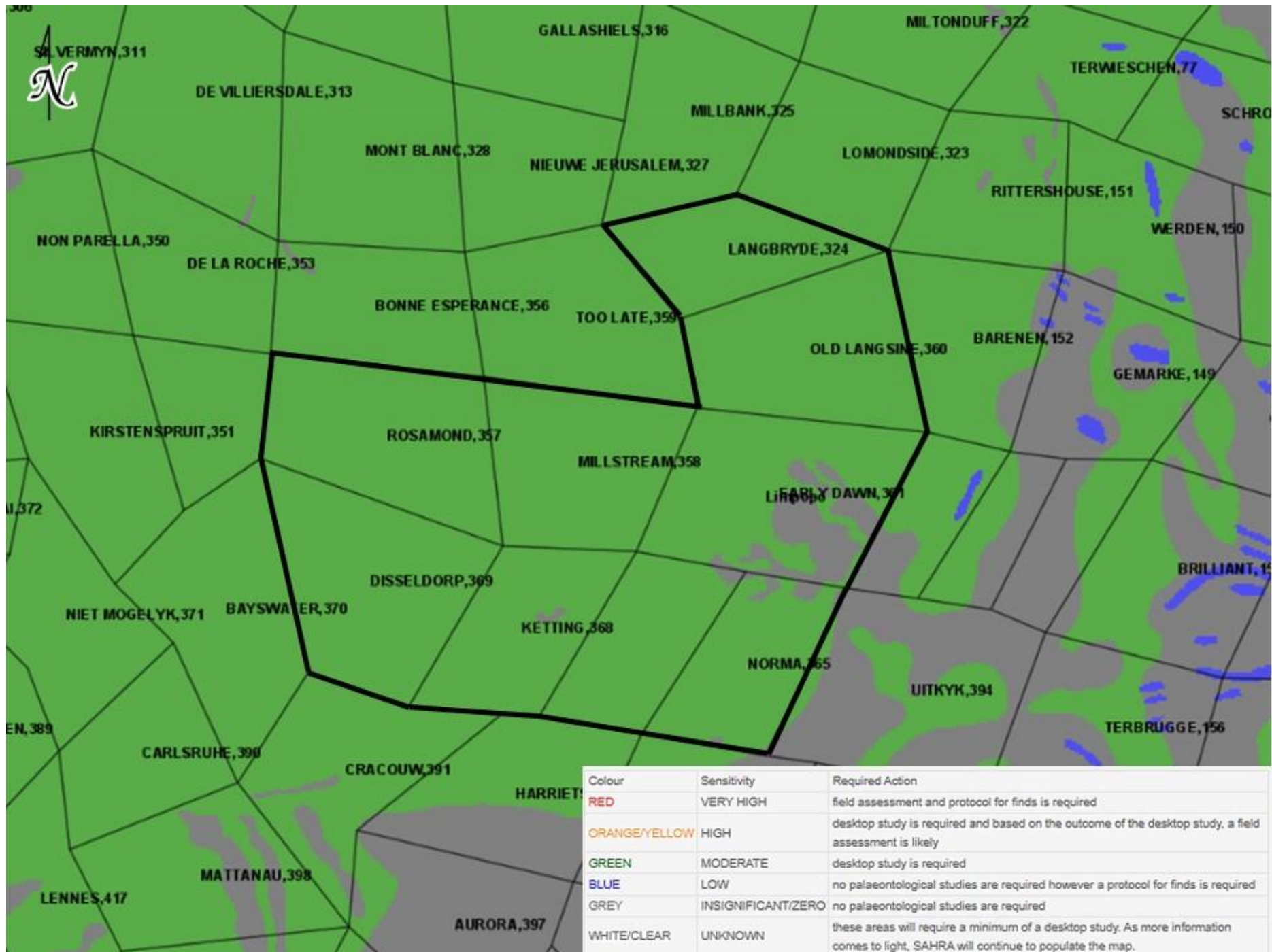


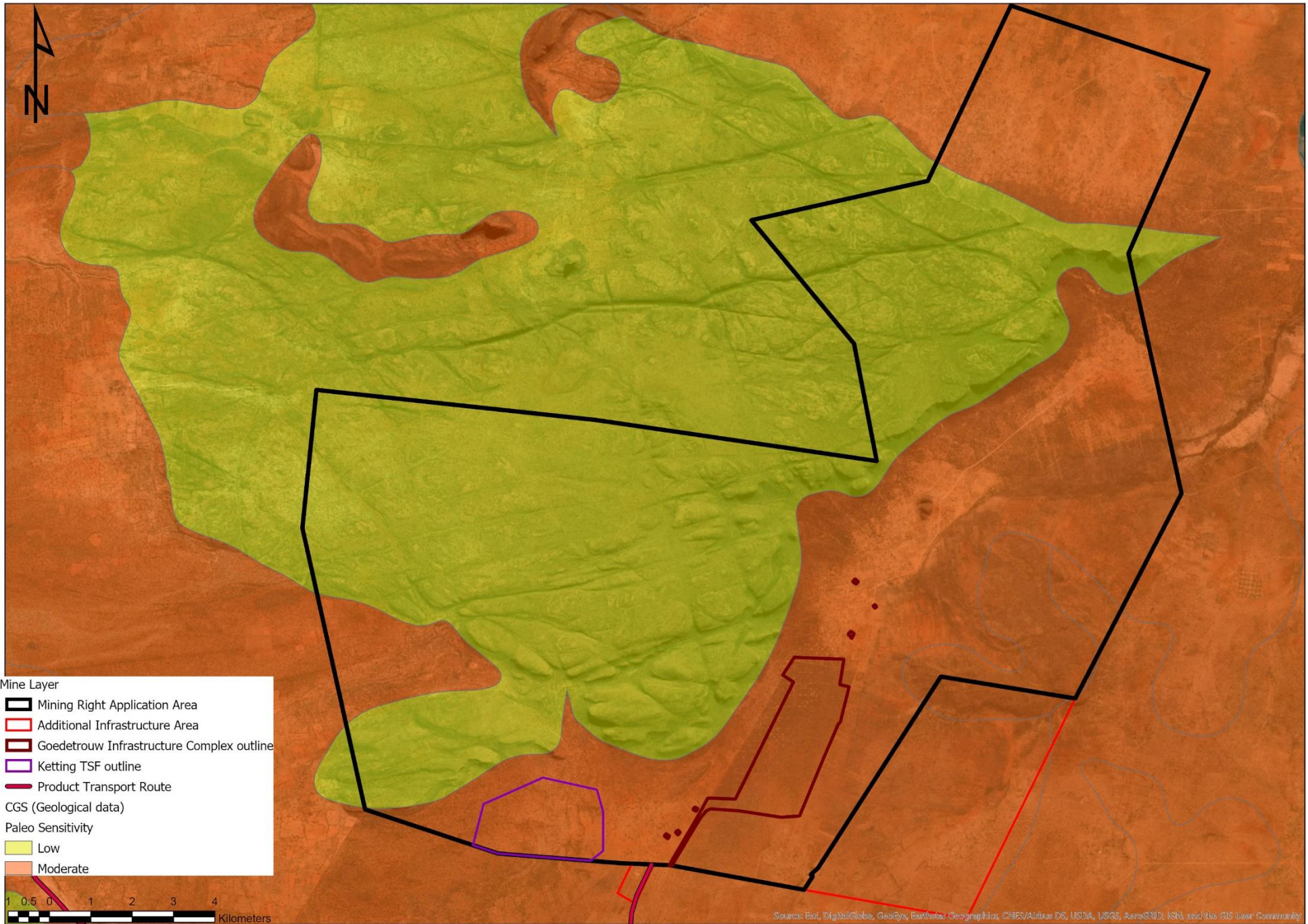
Source: Esri, DigitalGlobe, GeoEye, Earthstar, GeoEye, IGN, Aeris, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- Heritage Resources
- Iron Age Sites
- Mine Layer
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - ▭ Goedetrouw Infrastructure Complex outline
 - ▭ Ketting TSF outline
 - ▭ Product Transport Route

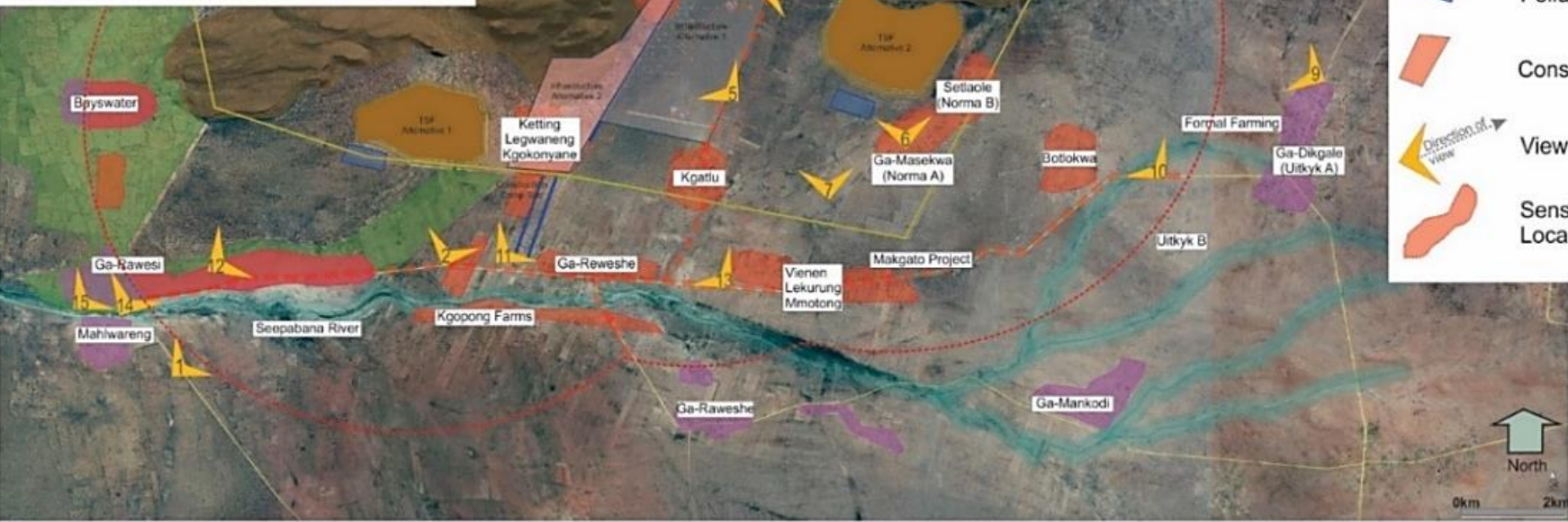
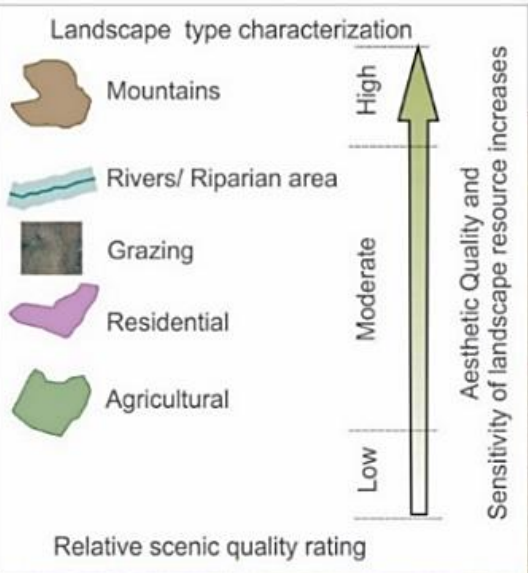




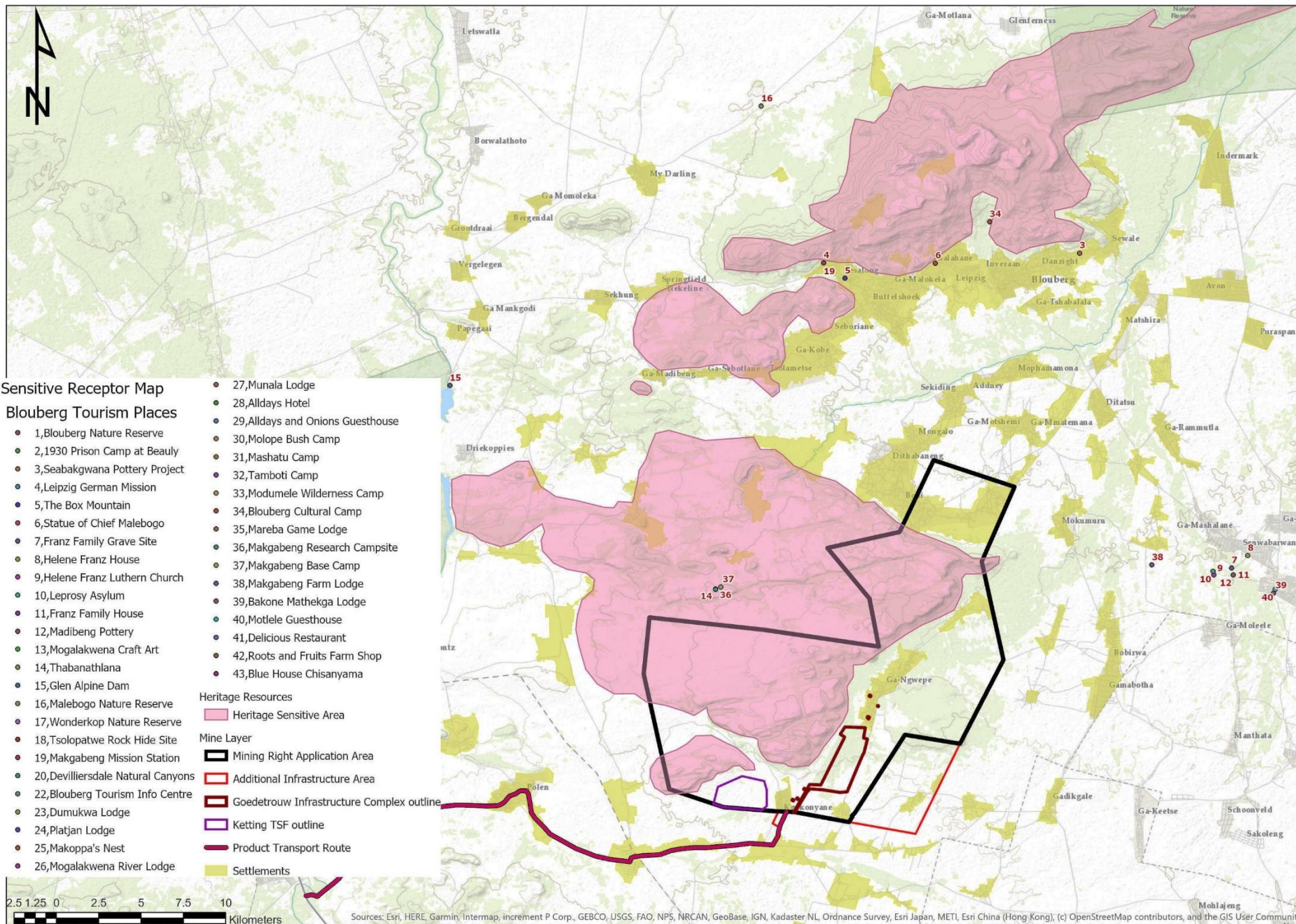


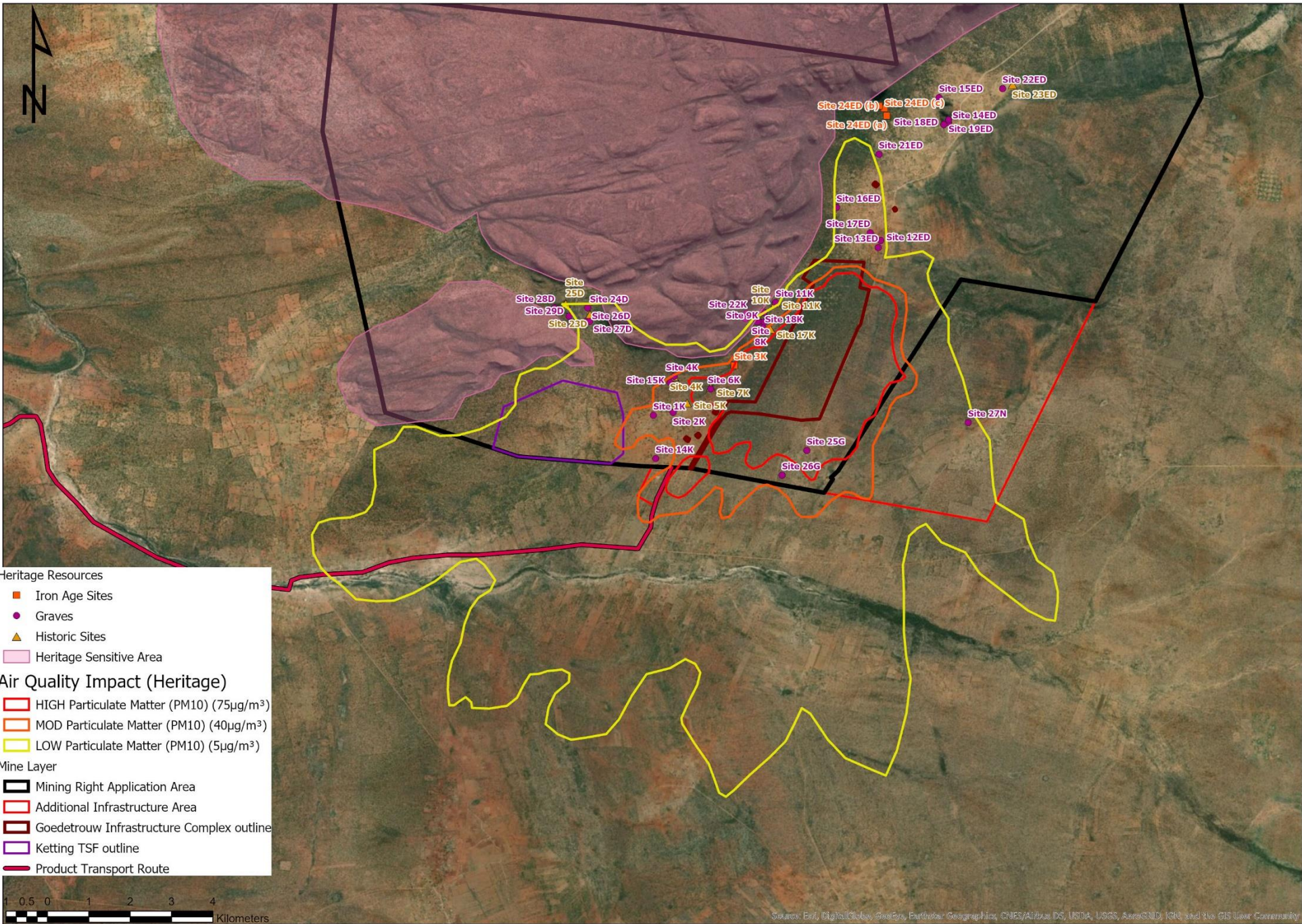
- Mine Layer
-  Mining Right Application Area
 -  Additional Infrastructure Area
 -  Goedetrouw Infrastructure Complex outline
 -  Ketting TSF outline
 -  Product Transport Route
- CGS (Geological data)
- Paleo Sensitivity
-  Low
 -  Moderate

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

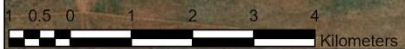
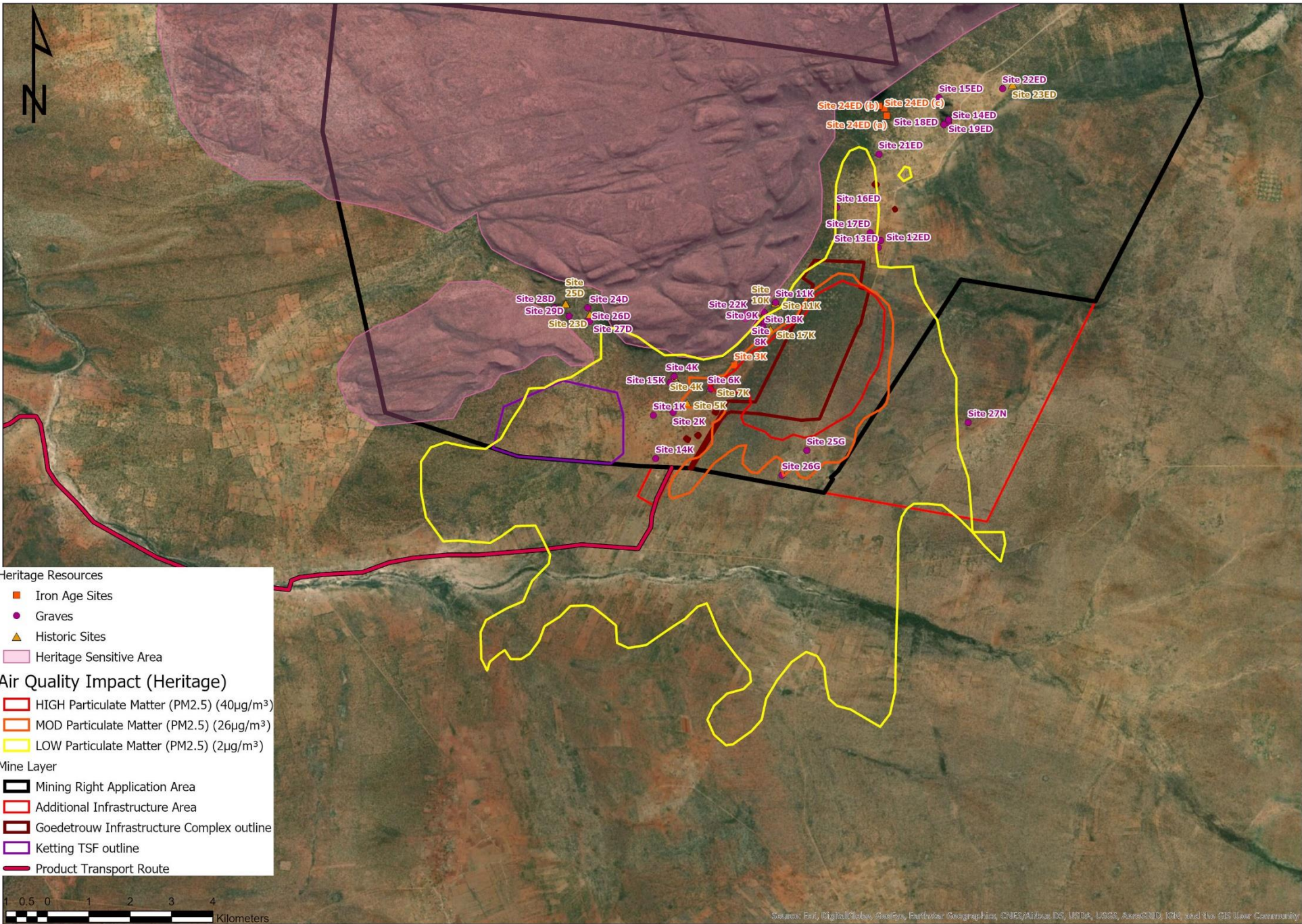


Potential sensitivities are indicated in **red**

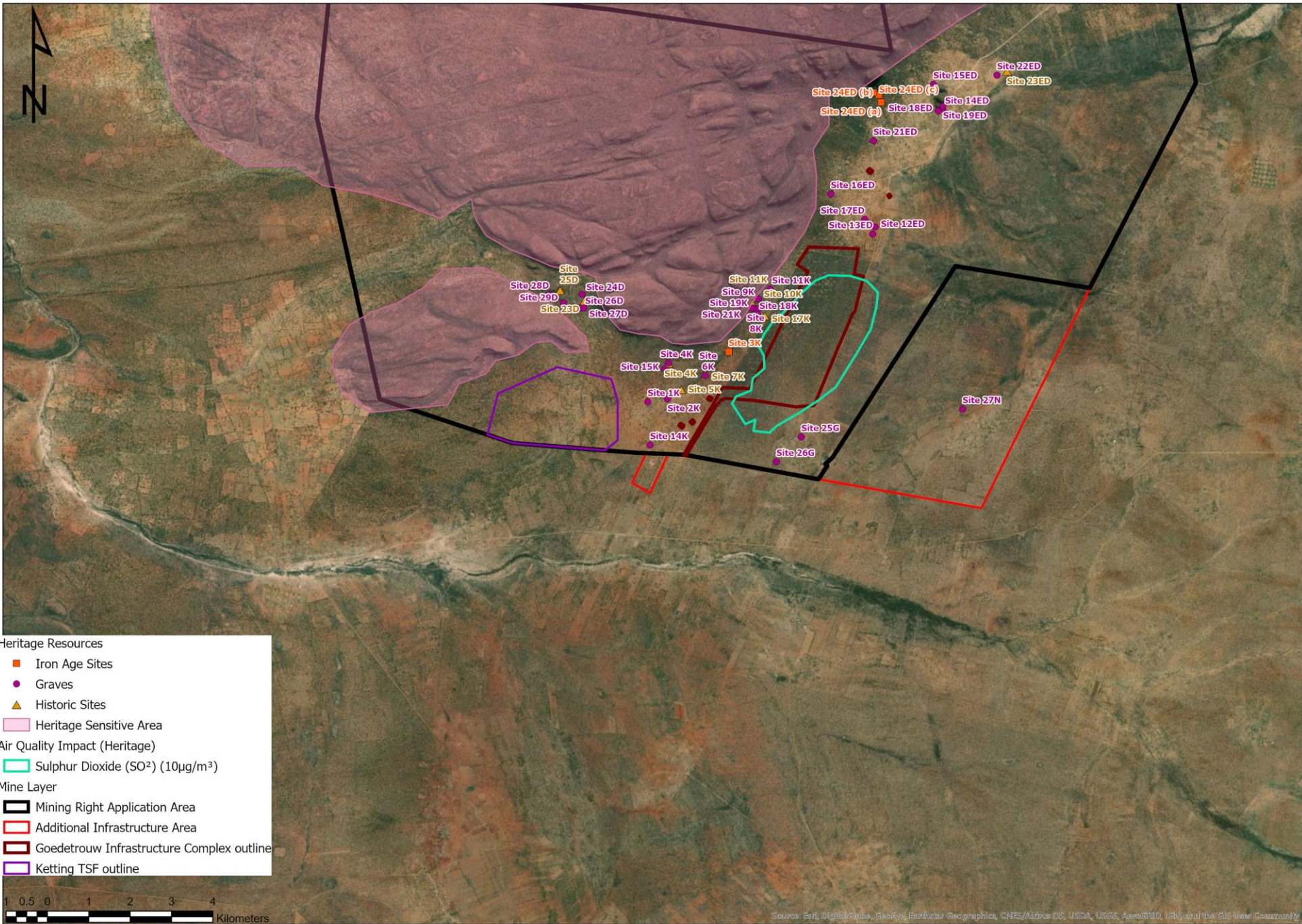




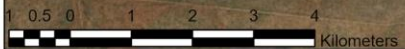
Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



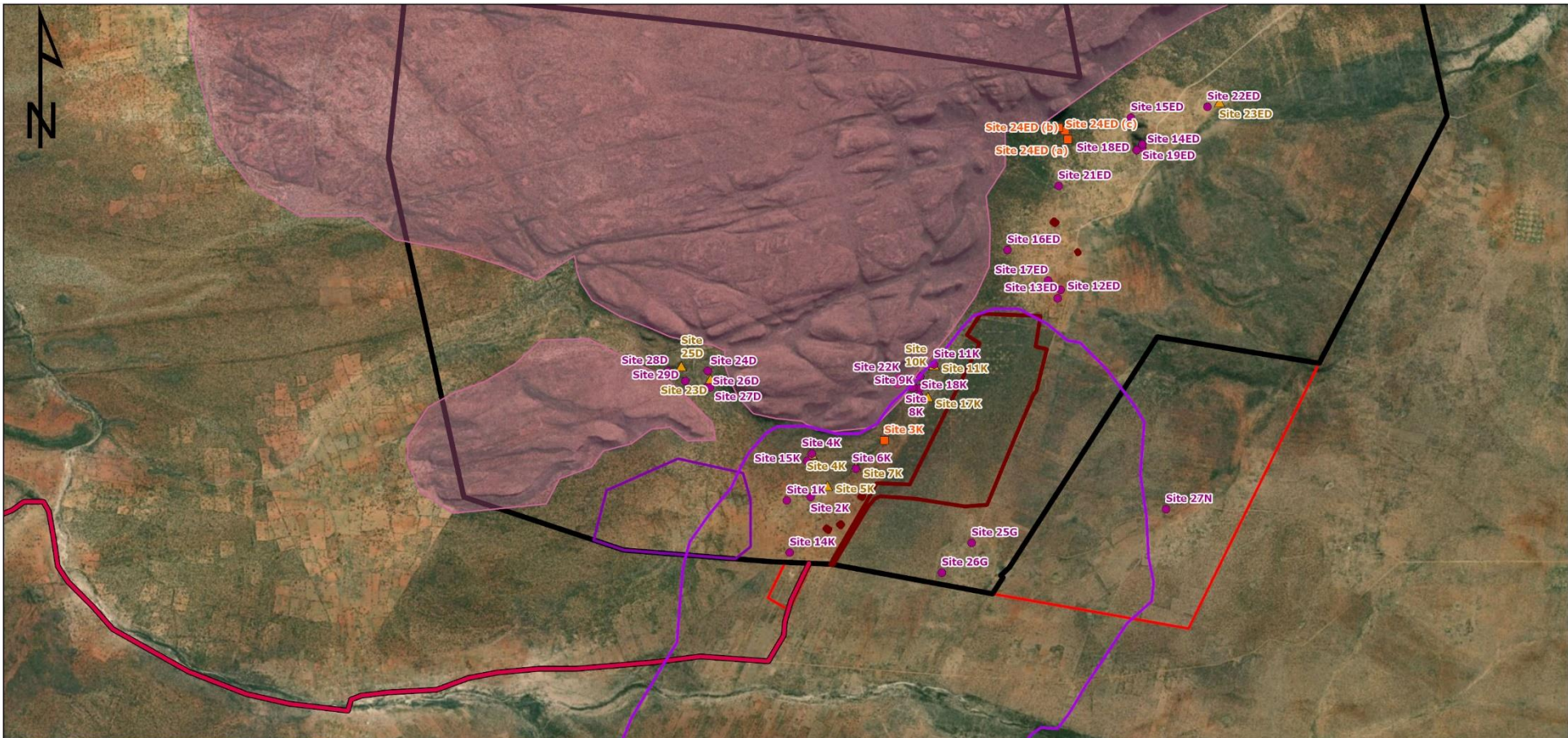
Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



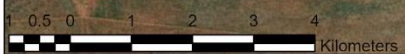
- Heritage Resources
- Iron Age Sites
 - Graves
 - ▲ Historic Sites
 - Heritage Sensitive Area
- Air Quality Impact (Heritage)
- Sulphur Dioxide (SO₂) (10µg/m³)
- Mine Layer
- Mining Right Application Area
 - Additional Infrastructure Area
 - Goedetrouw Infrastructure Complex outline
 - Ketting TSF outline



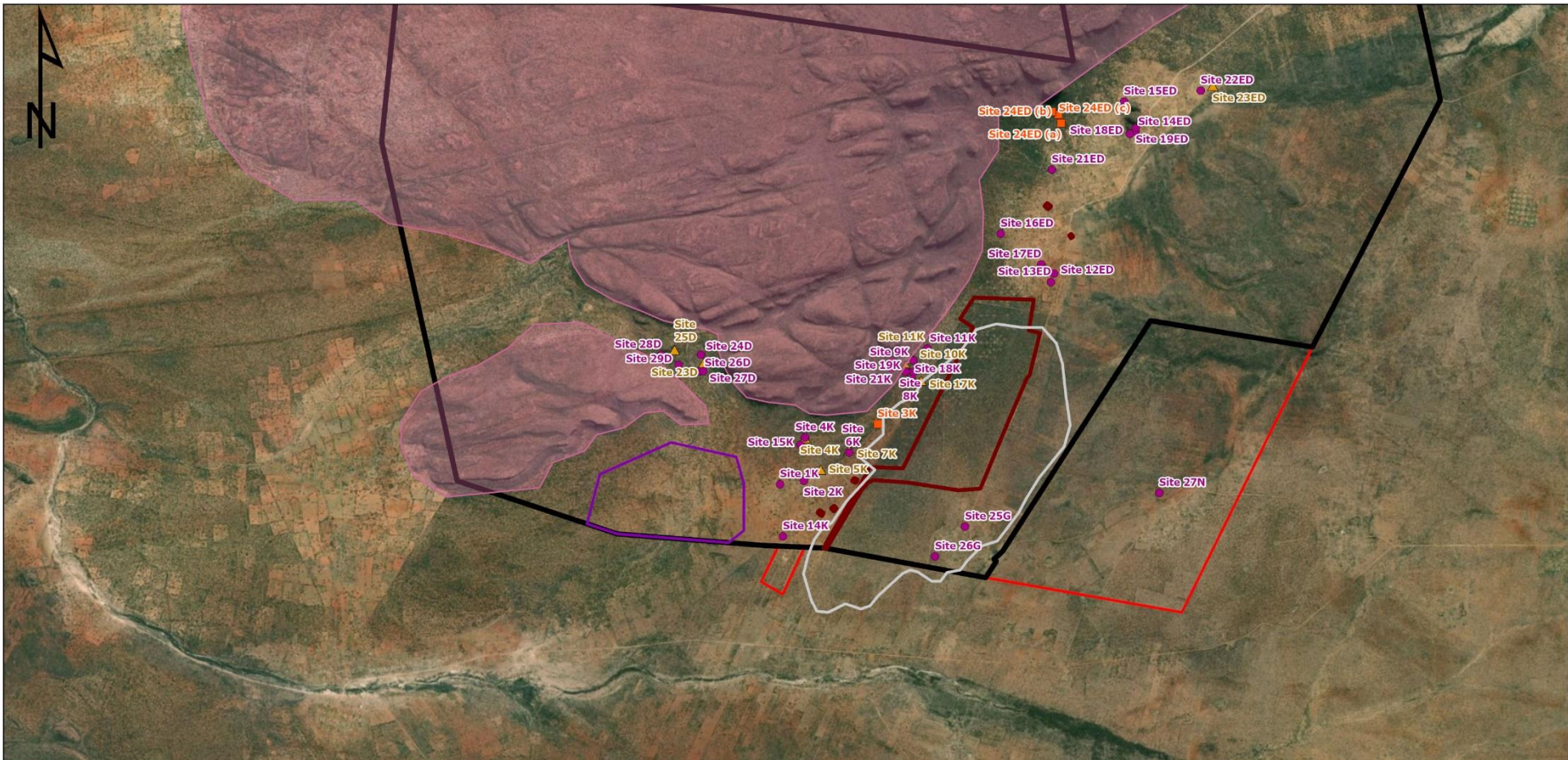
Source: Earth Digital Globe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



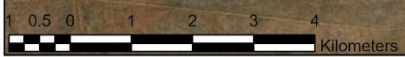
- Heritage Resources
- Iron Age Sites
 - Graves
 - ▲ Historic Sites
 - Heritage Sensitive Area
- Air Quality Impact (Heritage)
- Nitrogen Dioxide (NO₂) (4µg/m³)
- Mine Layer
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - ▭ Goedetrouw Infrastructure Complex outline
 - ▭ Ketting TSF outline
 - ▭ Product Transport Route

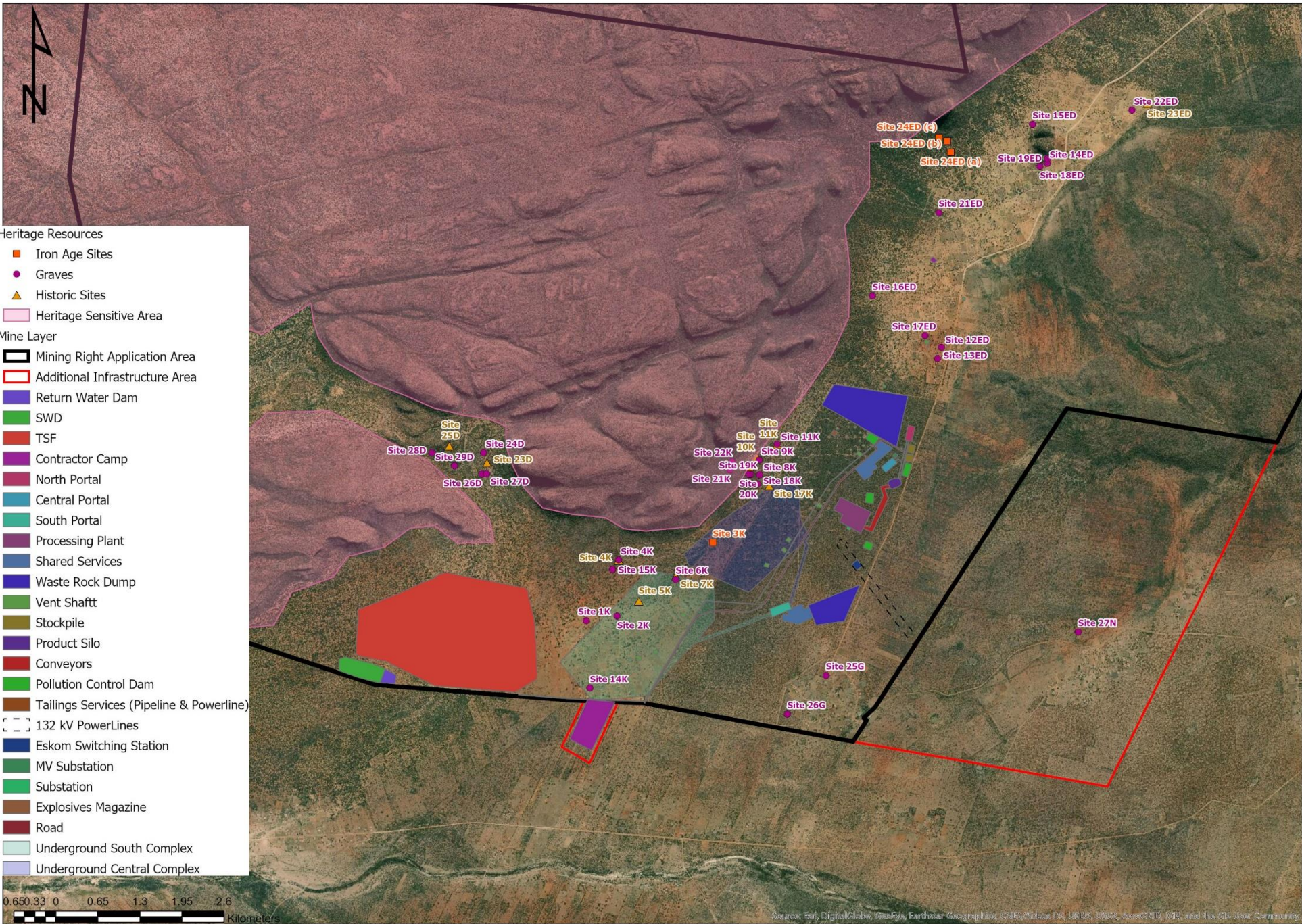


Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- Heritage Resources**
- Iron Age Sites
 - Graves
 - ▲ Historic Sites
 - Heritage Sensitive Area
- Air Quality Impact (Heritage)**
- Carbon Monoxide (CO) (100µg/m³)
- Mine Layer**
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - ▭ Goedetrouw Infrastructure Complex outline
 - ▭ Ketting TSF outline

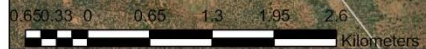
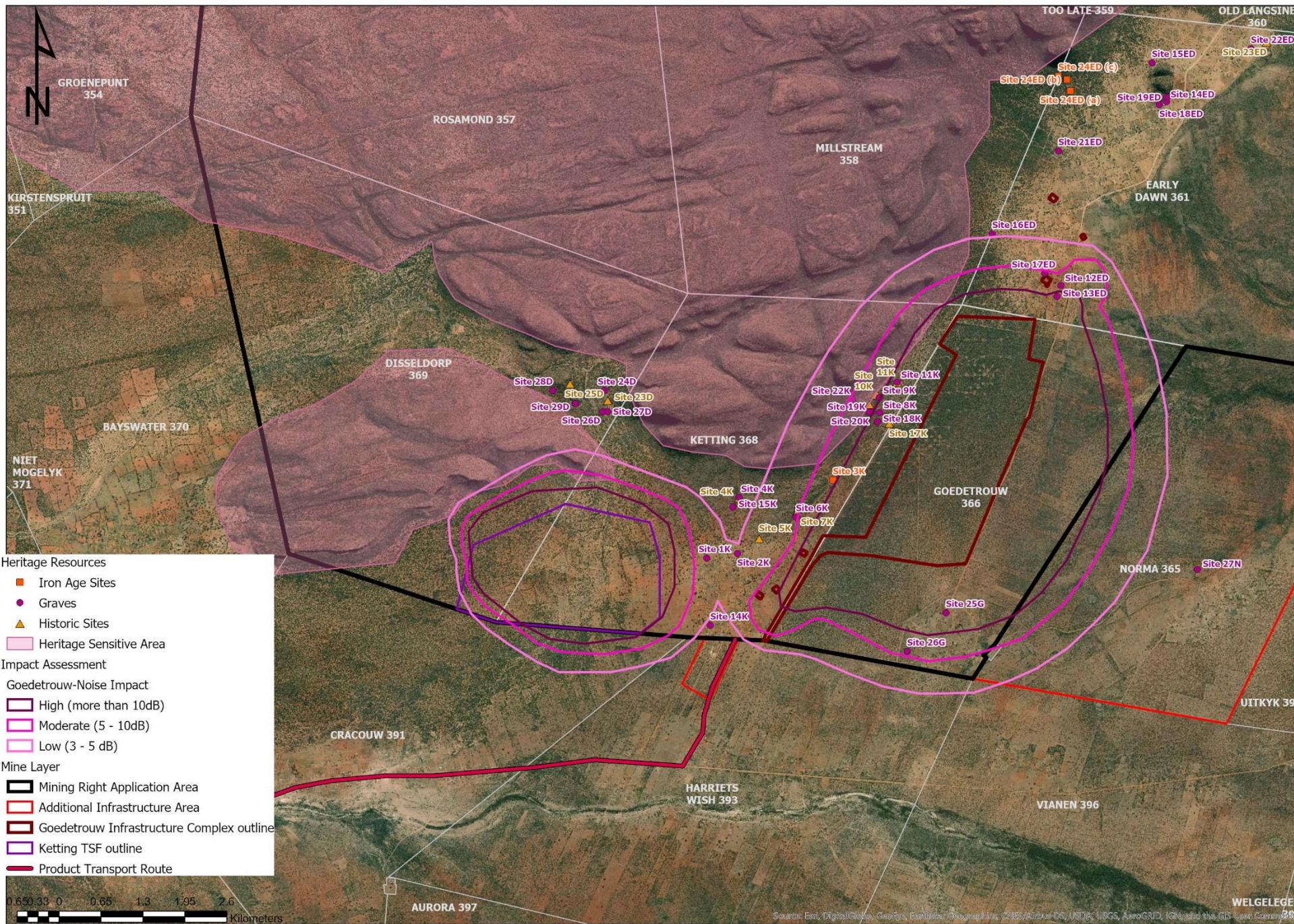




- Heritage Resources**
- Iron Age Sites
 - Graves
 - ▲ Historic Sites
 - Heritage Sensitive Area
- Mine Layer**
- ▭ Mining Right Application Area
 - ▭ Additional Infrastructure Area
 - Return Water Dam
 - SWD
 - TSF
 - Contractor Camp
 - North Portal
 - Central Portal
 - South Portal
 - Processing Plant
 - Shared Services
 - Waste Rock Dump
 - Vent Shaftt
 - Stockpile
 - Product Silo
 - Conveyors
 - Pollution Control Dam
 - Tailings Services (Pipeline & Powerline)
 - - - 132 kV PowerLines
 - Eskom Switching Station
 - MV Substation
 - Substation
 - Explosives Magazine
 - Road
 - Underground South Complex
 - Underground Central Complex



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community



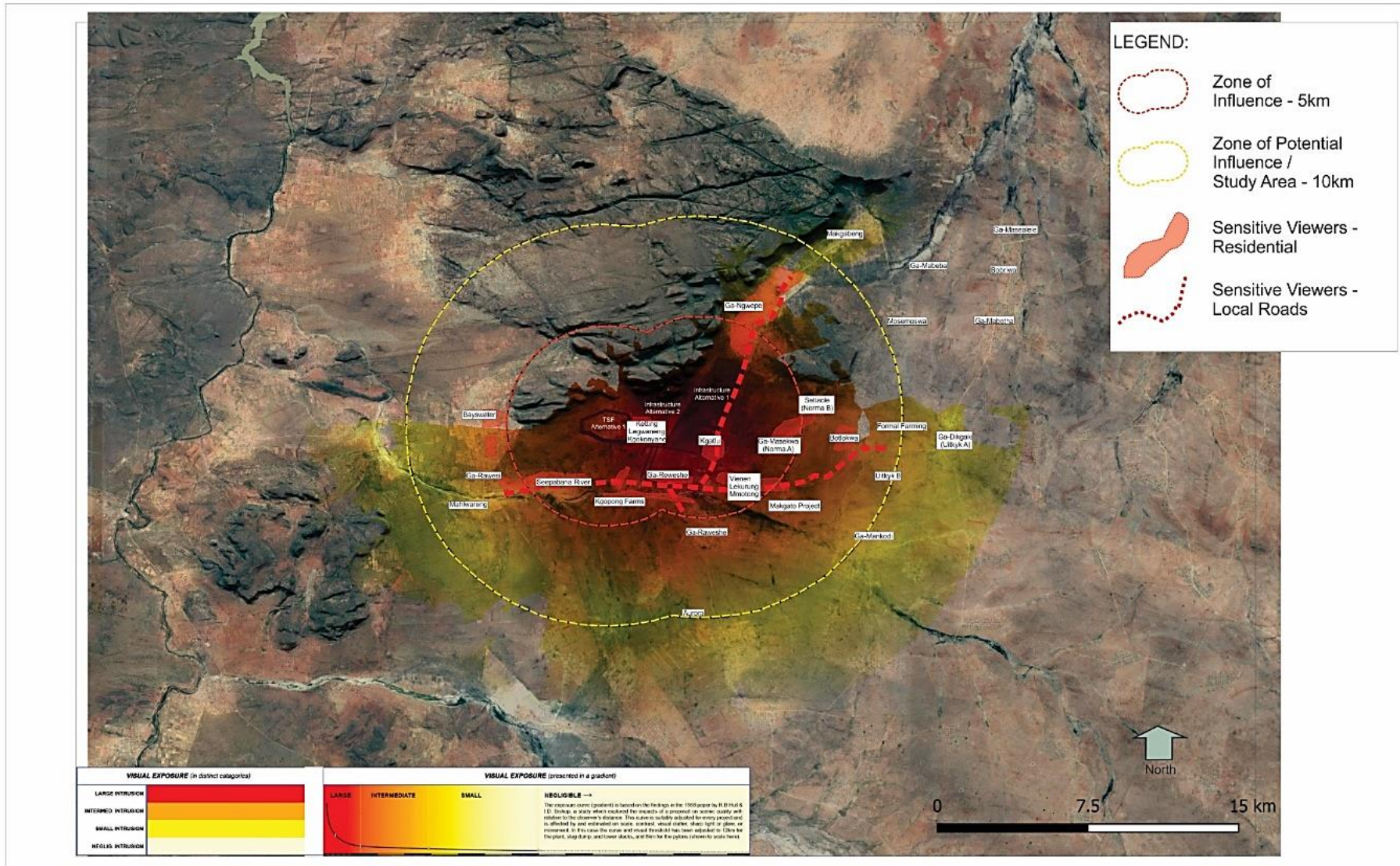
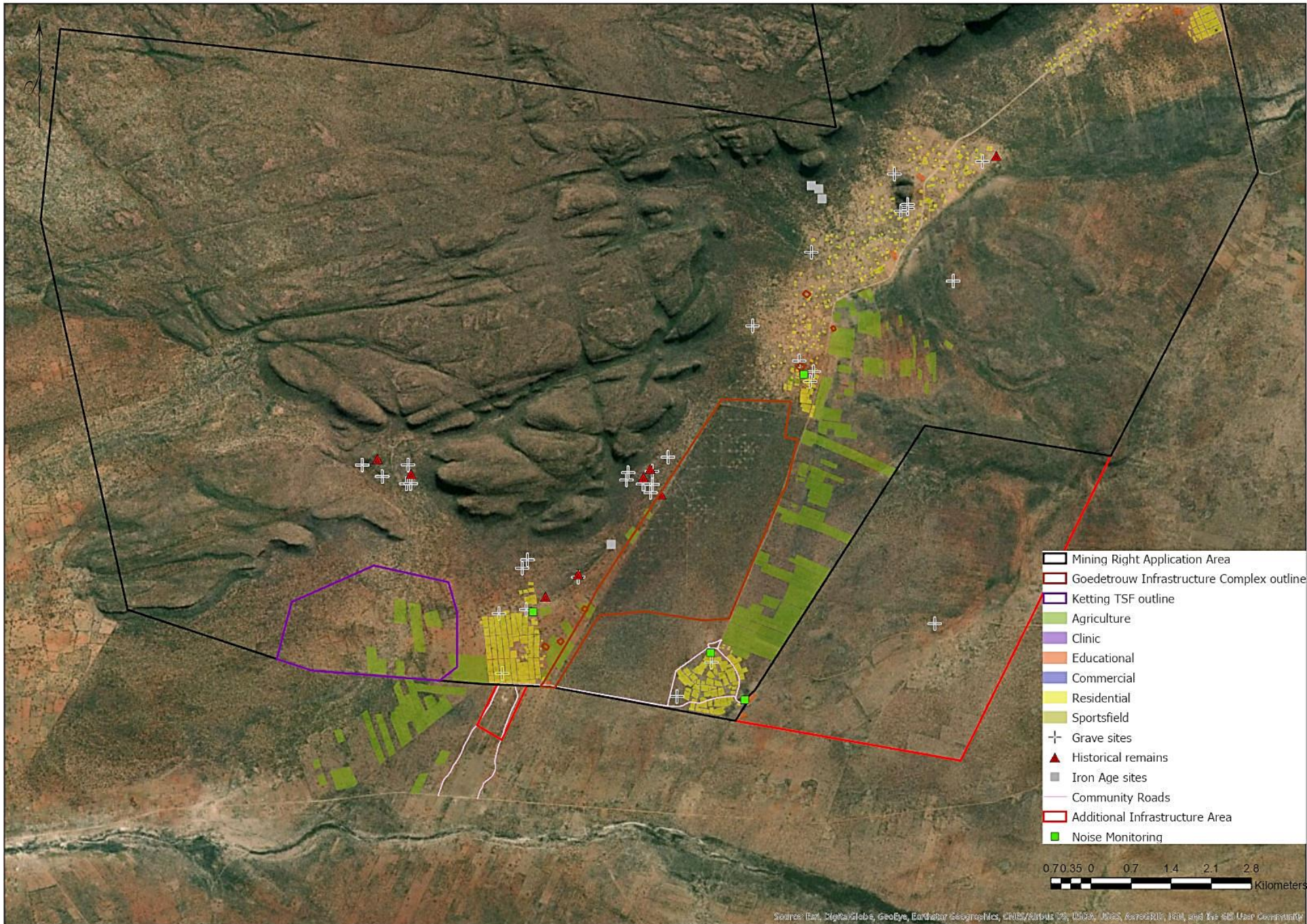


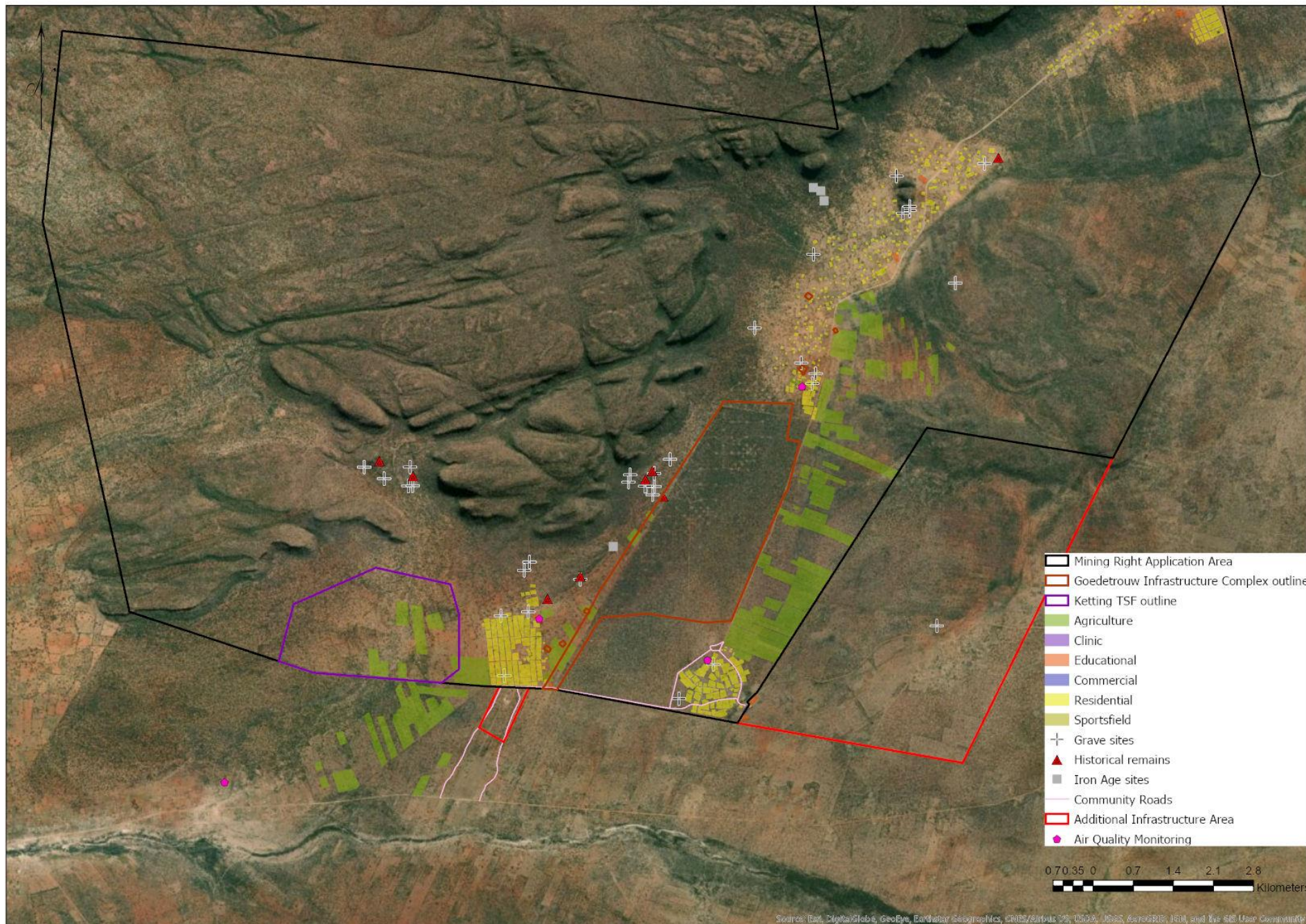
Figure 12: VIEWSHED ANALYSIS - Waterberg Project - Infrastructure Alternative 1, Infrastructure Alternative 2 & TSF Alternative 1



- Mining Right Application Area
- Goedetrouw Infrastructure Complex outline
- Ketting TSF outline
- Agriculture
- Clinic
- Educational
- Commercial
- Residential
- Sportsfield
- + Grave sites
- ▲ Historical remains
- Iron Age sites
- Community Roads
- Additional Infrastructure Area
- Noise Monitoring

0 0.7 1.4 2.1 2.8
 Kilometers

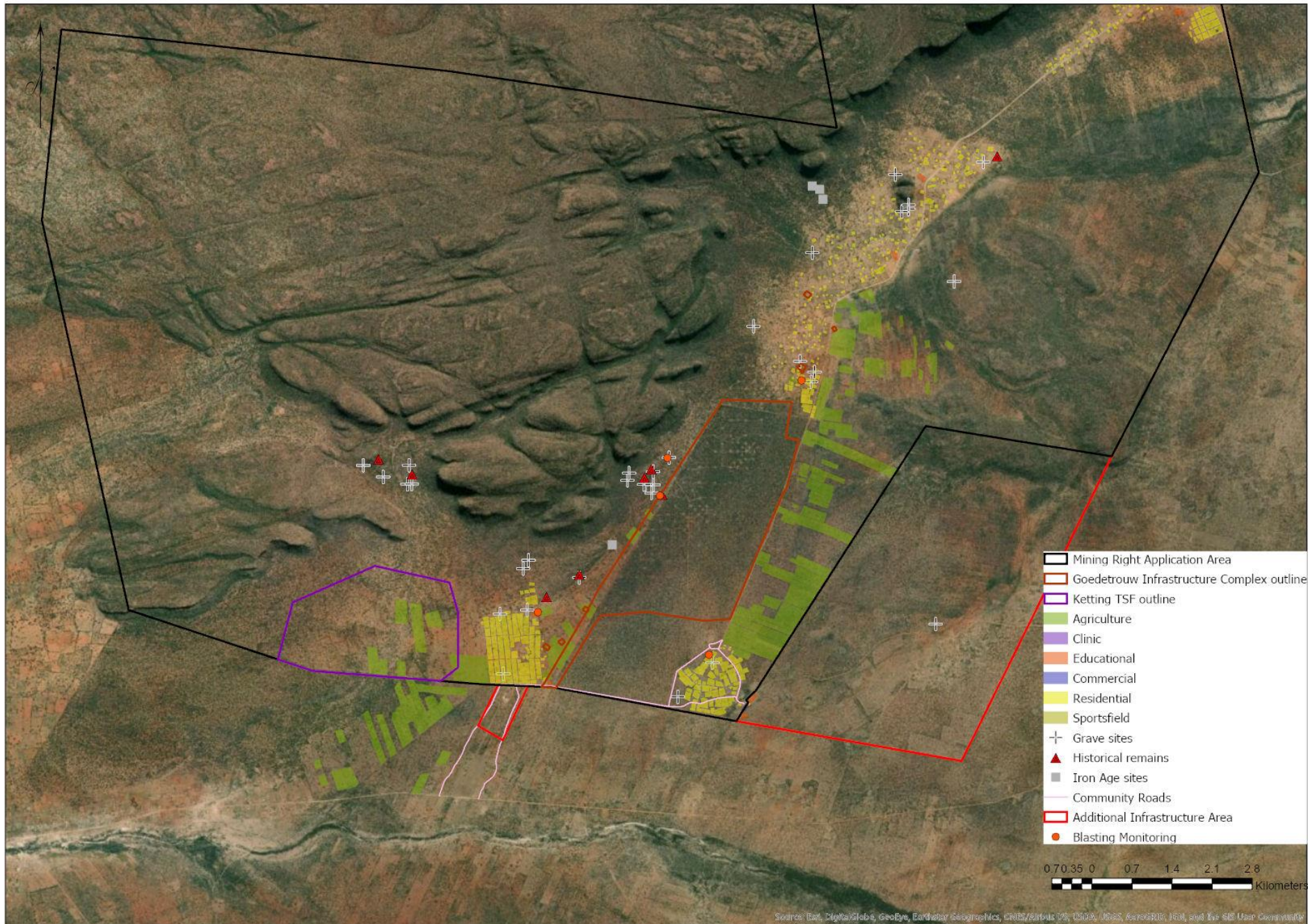
Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- Mining Right Application Area
- Goedetrouw Infrastructure Complex outline
- Ketting TSF outline
- Agriculture
- Clinic
- Educational
- Commercial
- Residential
- Sportsfield
- Grave sites
- Historical remains
- Iron Age sites
- Community Roads
- Additional Infrastructure Area
- Air Quality Monitoring

0 0.7 1.4 2.1 2.8
 Kilometers

Source: Earth DigitalGlobe, GeoEye, Earthstar (Earthstar), CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community



- Mining Right Application Area
- Goedetrouw Infrastructure Complex outline
- Ketting TSF outline
- Agriculture
- Clinic
- Educational
- Commercial
- Residential
- Sportsfield
- + Grave sites
- ▲ Historical remains
- Iron Age sites
- Community Roads
- Additional Infrastructure Area
- Blasting Monitoring



Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community