








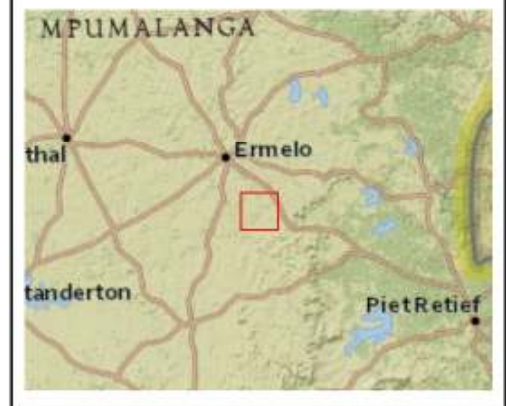
## Mooiplaats Palaeontological Sensitivity

1299 GSW Mooiplaats Colliery S102

### Legend

-  MR Boundary
- Palaeontological Sensitivity**
-  Very High
-  High
-  Moderate
-  Low
-  Insignificant
-  Unknown

Disclaimer: This image was manually georeferenced. Small inconsistencies may exist.

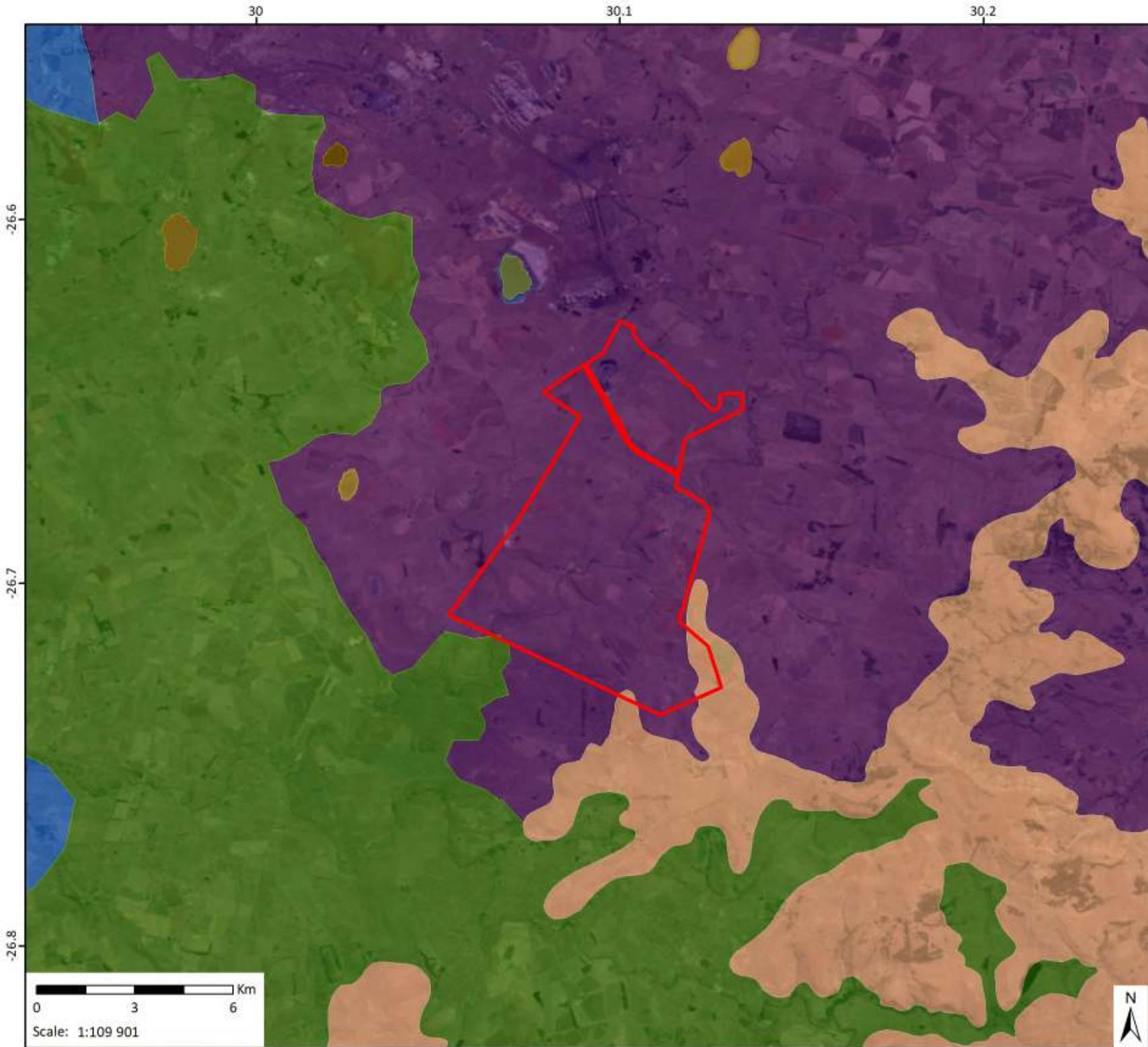


Data Sources:  
 CSG; ESRI; SAHRA  
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 Ref: Paleo\_190514

Date: 2019/08/27

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



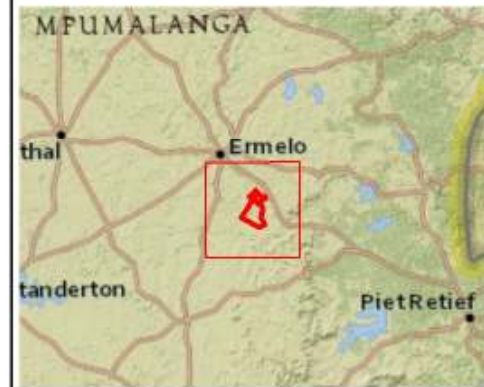


## Mooiplaats Surrounding Vegetation

1299 GSW Mooiplaats Colliery S102

### Legend

-  Mining Right Boundary
- Mucina and Rutherford Vegetation**
-  Amersfoort Highveld Clay Grassland
-  Eastern Highveld Grassland
-  Eastern Temperate Freshwater Wetlands
-  Soweto Highveld Grassland
-  Wakkerstroom Montane Grassland



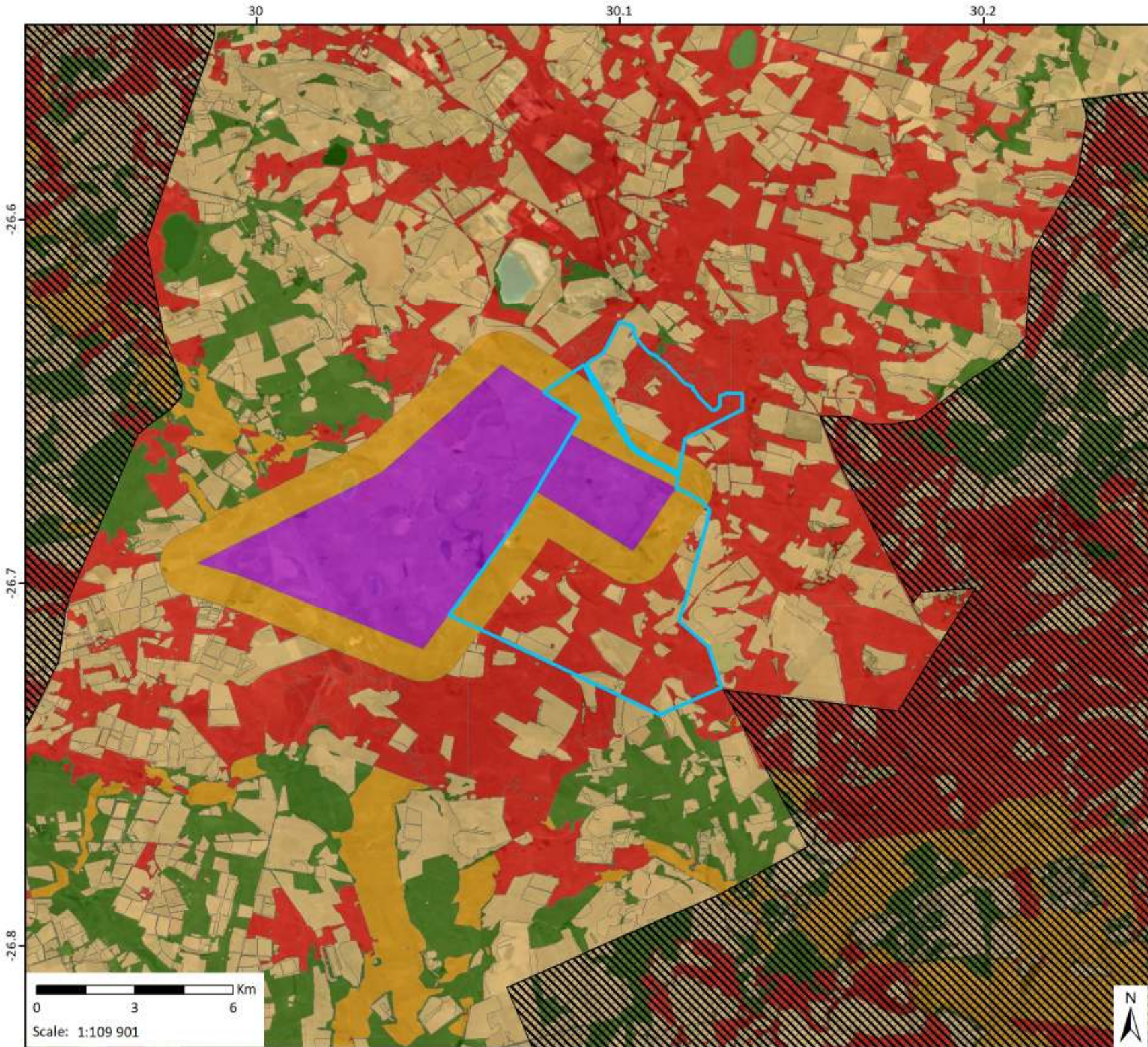
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Date: 2019/08/27

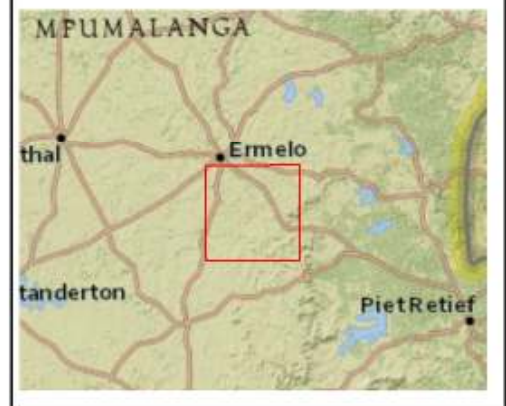
Compiled: PH  
 Reviewed: SvdG  
 Approved: LW





**Mooiplaats MBSP Terrestrial Assessment and Important Bird Areas**  
1299 GSW Mooiplaats Colliery S102

- Legend**
-  MR Boundary
  -  Important Bird Areas
- MBSP terrestrial assessment**
-  Critical Biodiversity Area
  -  Ecological Support Area
  -  Heavily or moderately modified
  -  Other Natural Areas
  -  Protected Areas

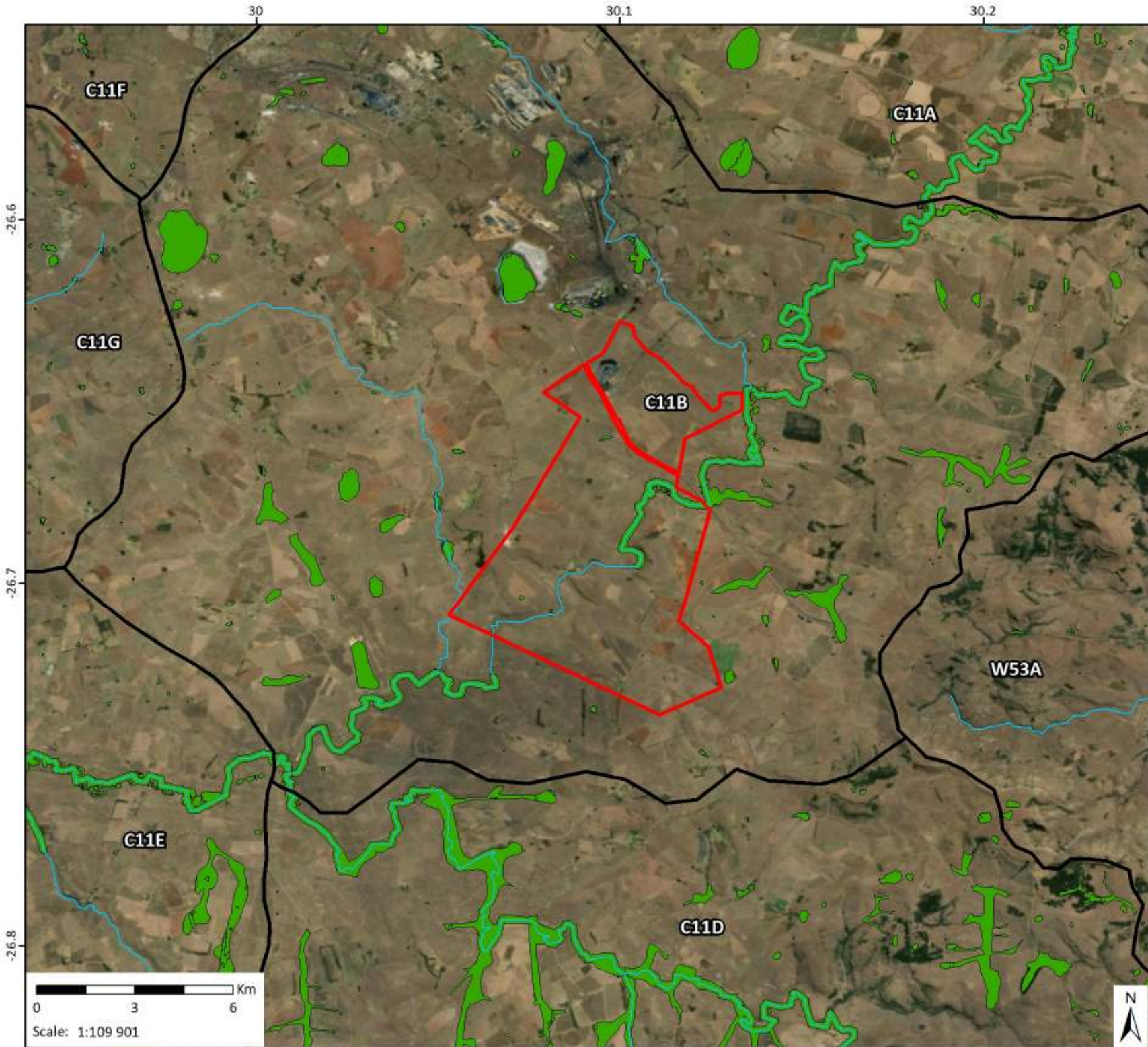


**Data Sources:**  
CSG; ESRI; SANBI  
**Coord System:** GCS WGS 1984  
**Datum:** WGS 1984  
**Ref:** MBSP\_190514

Date: 2019/08/27

Compiled: PH  
Reviewed: SvdG  
Approved: LW

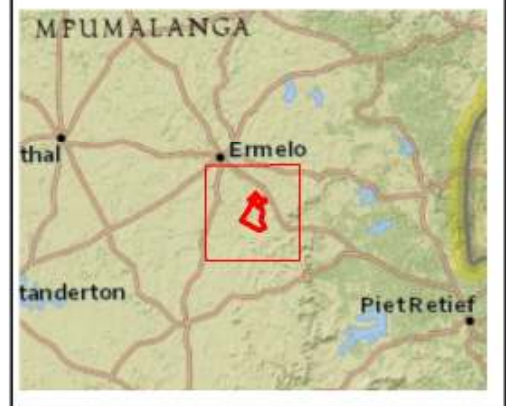




## Mooiplaats Surface Water Features

1299 GSW Mooiplaats Colliery S102

- Legend**
-  MR Boundary
  -  Quaternary Catchments
  -  NFEPA Rivers
  -  Dams
  -  NFEPA Wetlands



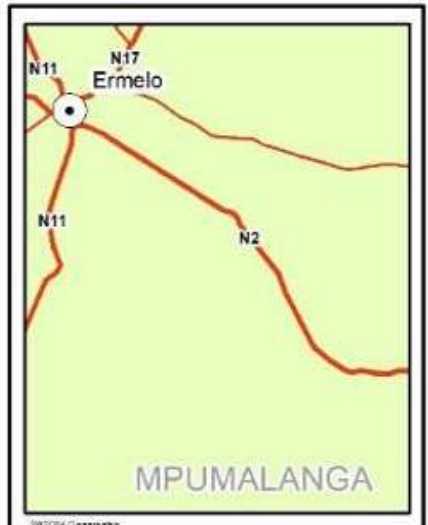
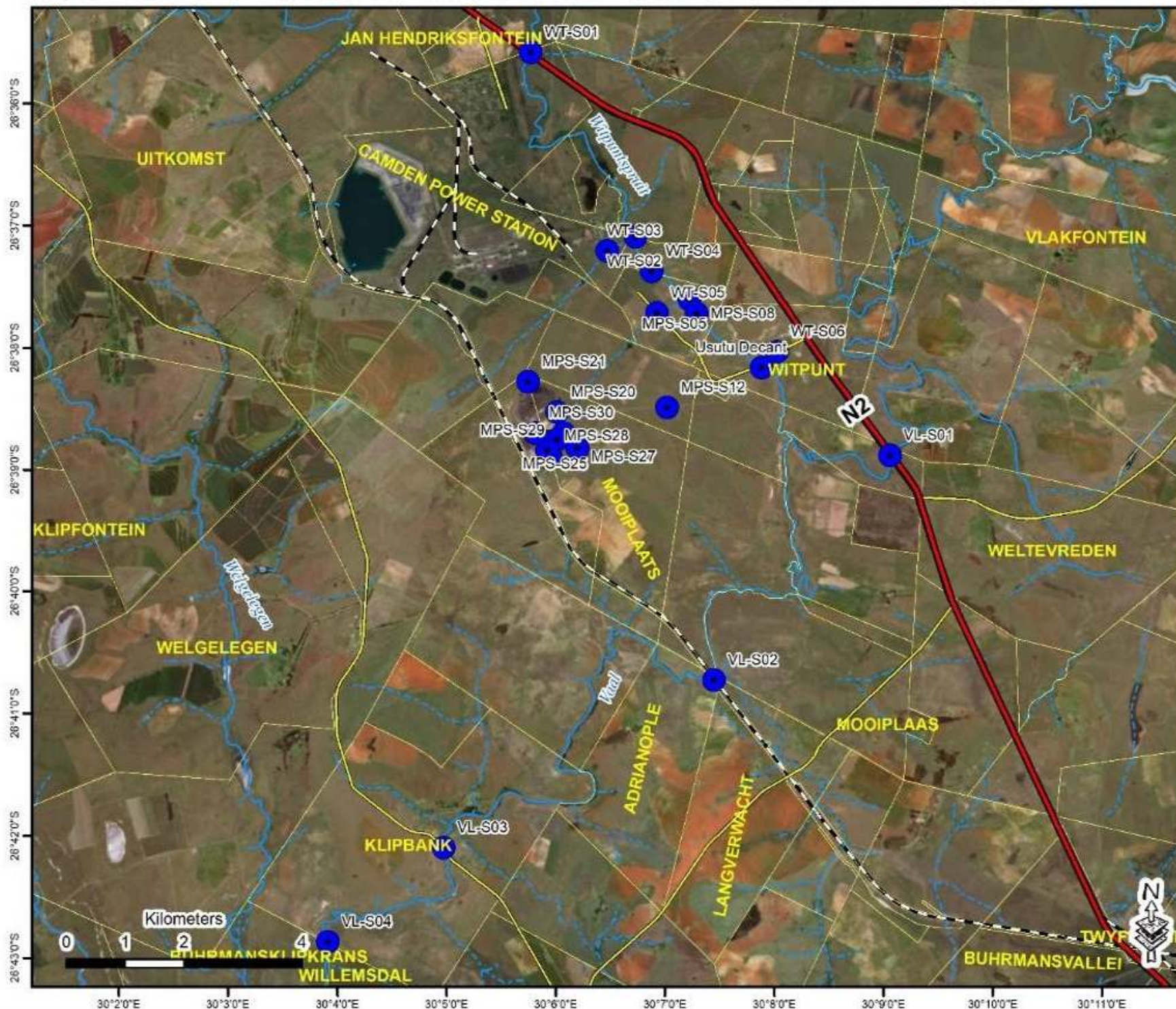
**Data Sources:**  
 CSG; ESRI; NFEPA; SANBI, WR2012  
 Coord System: GCS WGS 1984  
 Datum: WGS 1984  
 Ref: SW Features\_190514

Date: 2019/08/27

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



# MOOIPLAATS COLLIERY IWUL MONITORING: SURFACE WATER



WGS84 Geographic  
1:51,000 @ A4 paper size

### Legend

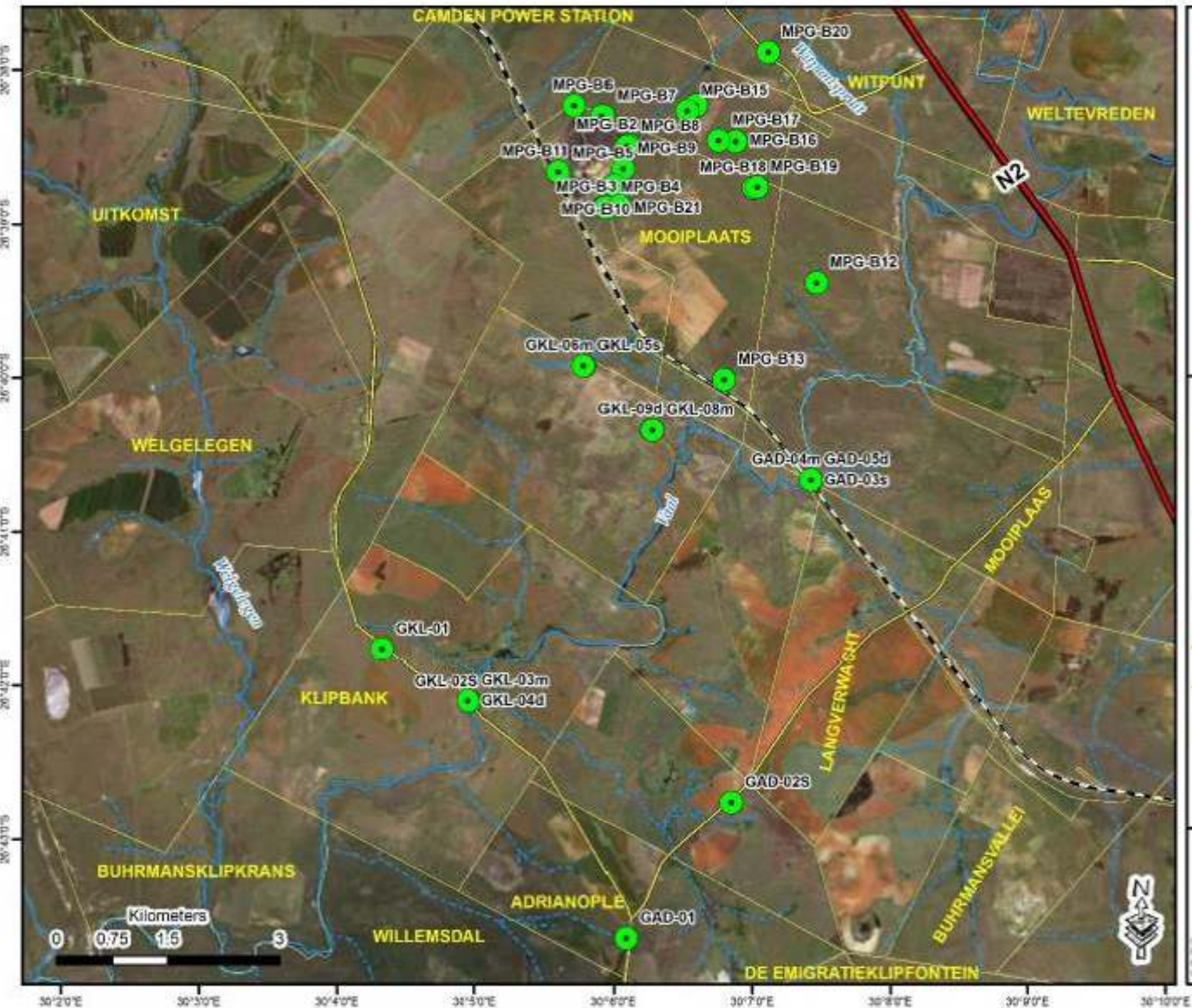
- Surface Water Monitoring
- Perennial Rivers
- Non-Perennial Rivers
- Railway Line
- Main Road
- Secondary Road
- Cadastral

R. F van der Merwe  
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PGPT 023



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Website: [www.geosolwater.co.za](http://www.geosolwater.co.za)

# MOOIPLAATS COLLIERY IWUL MONITORING: GROUNDWATER



## Legend

- Groundwater Monitoring
- Perennial Rivers
- Non-Perennial Rivers
- Railway Line
- Main Road
- Secondary Road
- Cadastral

R. F. van der Merwe  
GIS Specialist  
PGPT 023



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Fax: 096 604 3531  
E-mail: [info@geoenvision.co.za](mailto:info@geoenvision.co.za)  
Website: [www.geoenvision.co.za](http://www.geoenvision.co.za)

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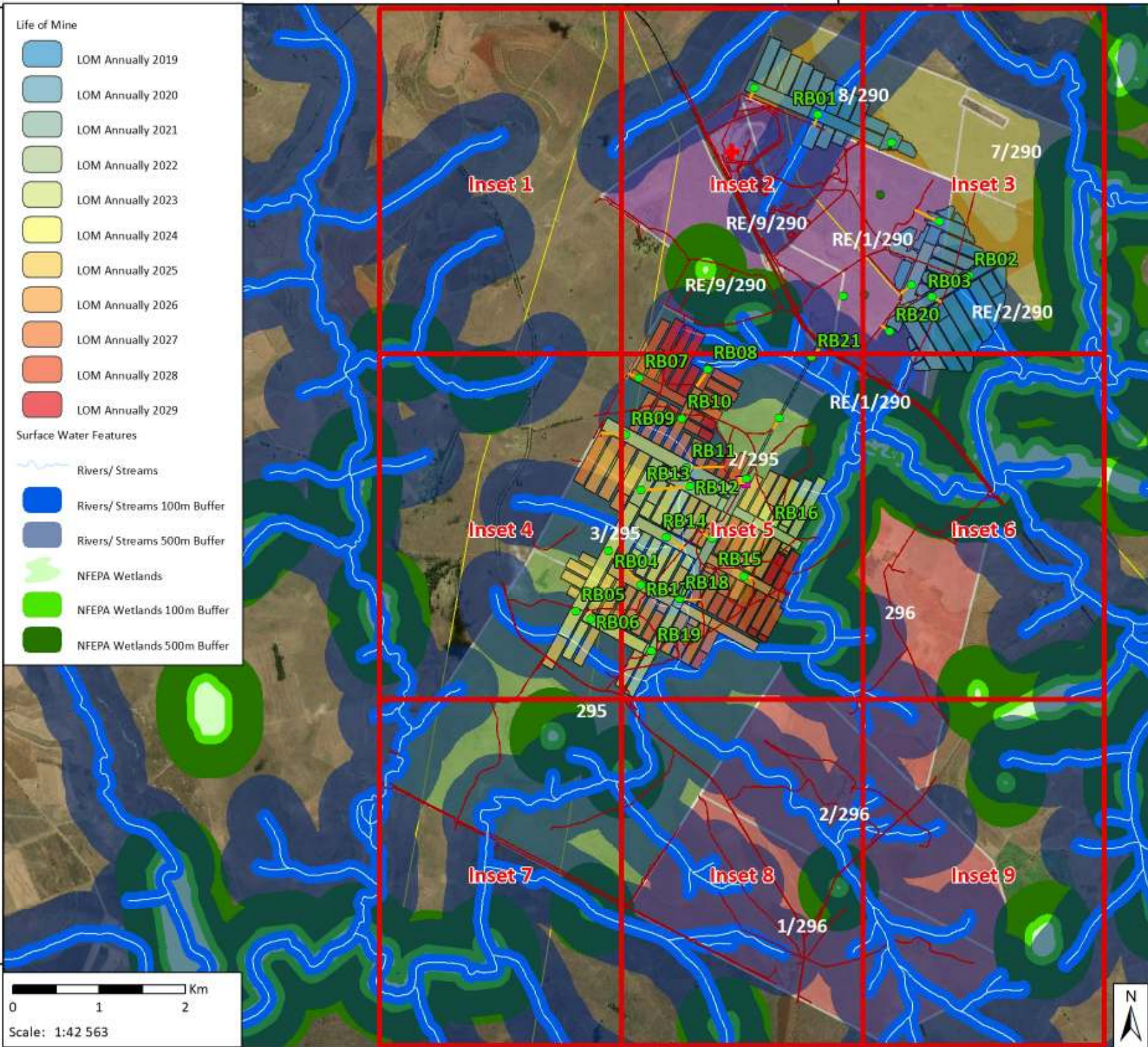
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### Mooiplaats LOM, Proposed Infrastructure and Surface Water Features- Overview

1290 GSW Mooiplaats WUL

- Life of Mine**
- LOM Annually 2019
  - LOM Annually 2020
  - LOM Annually 2021
  - LOM Annually 2022
  - LOM Annually 2023
  - LOM Annually 2024
  - LOM Annually 2025
  - LOM Annually 2026
  - LOM Annually 2027
  - LOM Annually 2028
  - LOM Annually 2029
- Surface Water Features**
- Rivers/ Streams
  - Rivers/ Streams 100m Buffer
  - Rivers/ Streams 500m Buffer
  - NFEPA Wetlands
  - NFEPA Wetlands 100m Buffer
  - NFEPA Wetlands 500m Buffer

- Legend**
- Haul and Farm Roads
  - Area 1 and Area2
  - Vunene Portions
  - S102 PR677 Portions
  - S102 PR676 Portions
  - Proposed Infrastructure
    - Planned Rescue Bay BHs
    - Planned Rescue Bay
    - Planned Substation
    - Planned Ventilation Shafts
    - Planned Access Routes
    - Planned Explosive Destruction Bay
  - Insets
  - Original MR Portions



**Data Sources:**  
 CSG; ESRI; ENPAT; SANBI  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Prop Infrastructure and SW Features- Overview



Date: 2019/08/27

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



-2957823.6011

Residential Rate of 600 mg/m<sup>2</sup>/day



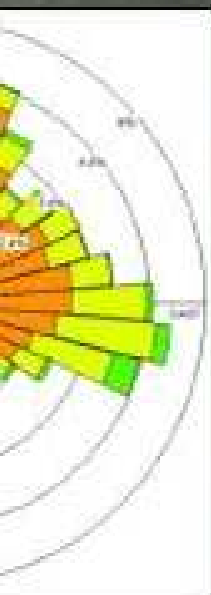
Exceeds Residential Rate of 600 mg/m<sup>2</sup>/day



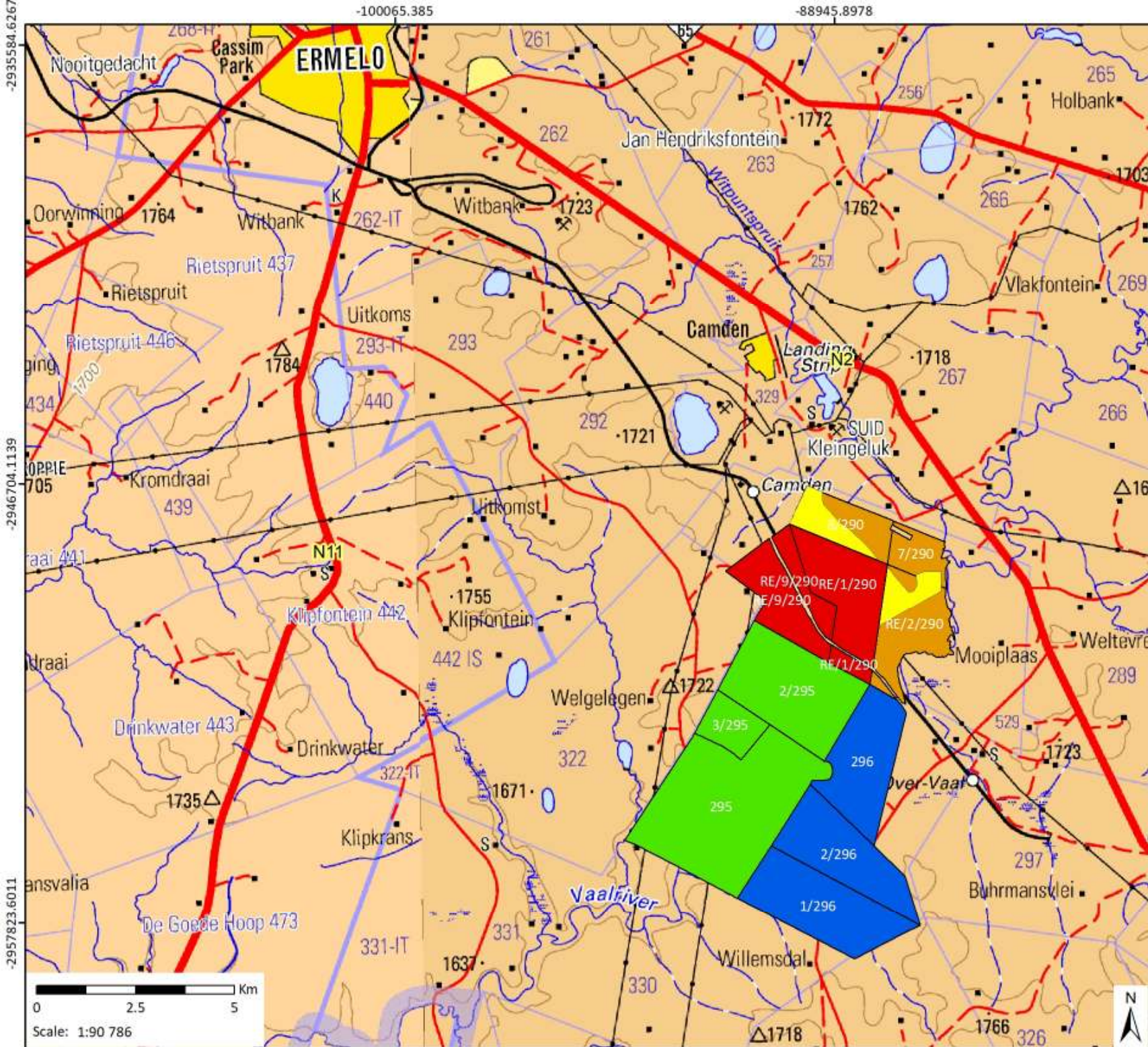
Exceeds Non-residential Rate of 1200



Dominant Wind Directions














### Mooiplaats Locality

1299 GSW Mooiplaats

#### Legend

-  Original MR Portions (MP 30/5/1/2/68MR)
-  S102 PR676 Portions
-  S102 PR677 Portions
-  MR on Vunene Portions
-  Vunene Portions
-  Roads
-  Railway
-  Transmission Lines
-  Rivers



#### Data Sources:

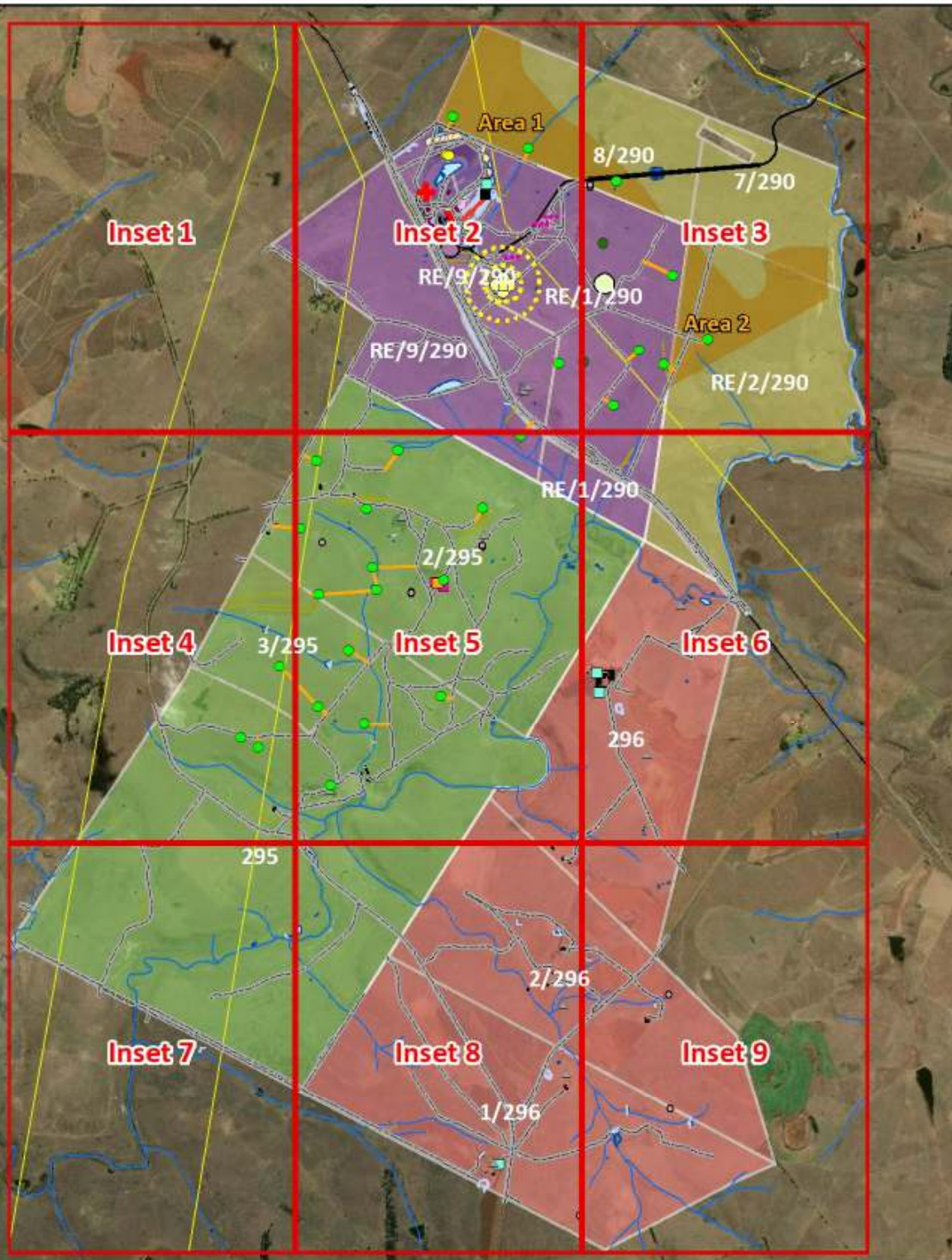
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 Projection: Gauss Kruger  
 Datum: Hartebeesthoek 1994  
 Ref: Locality Topo

Date: 2019/08/21  
 EIMS Ref: 1299  
 Compiled: PH  
 Reviewed: CM  
 Approved: LW



**Existing Infrastructure**

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



**Infrastructure Inset Map Overview**

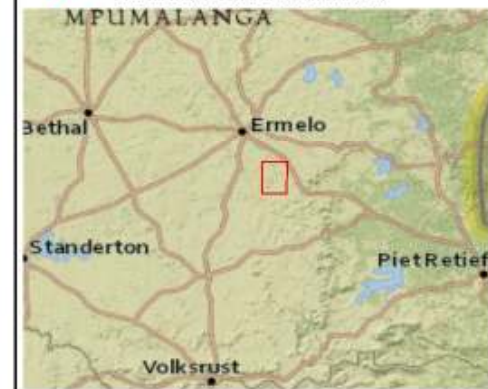
GSW Mooiplaats S102

**Legend**

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- ⊕ Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

**Planned Infrastructure**

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



**Data Sources:**

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Inset Map Overview

Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



**Existing Infrastructure**

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- 🛢 Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams

0 0.325 0.65 Km

Scale: 1:14 204



**Infrastructure Layout Map- Inset 1**

GSW Mooiplaats S102

**Legend**

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- ⊕ Area 1 and Area2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

**Planned Infrastructure**

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



**Data Sources:**

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Layout Map- Inset 1

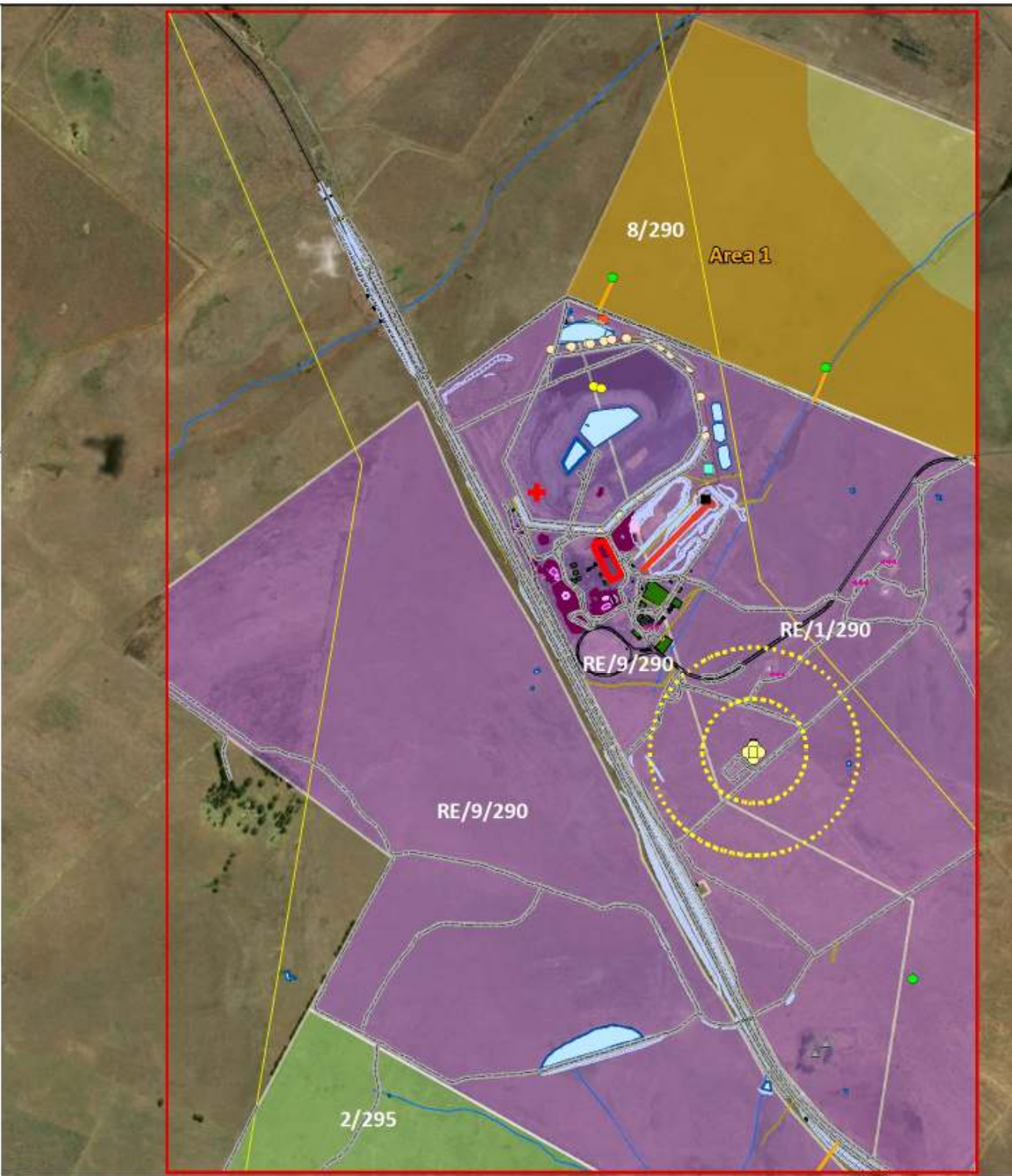
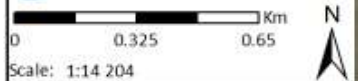
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊗ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛽ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Layout Map- Inset 2

GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- +
- Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Layout Map- Inset 2

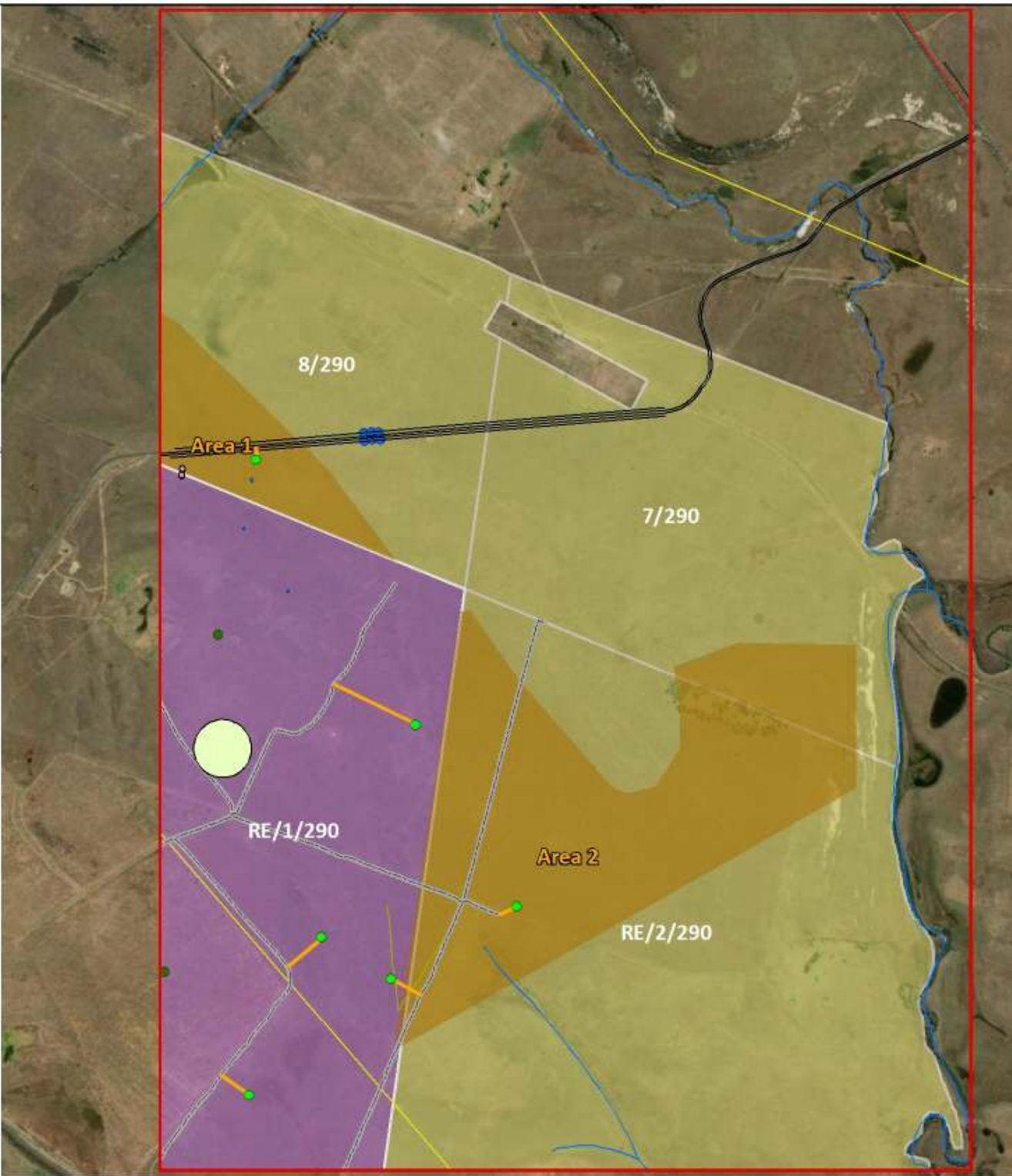
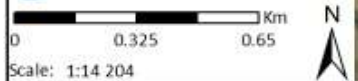
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Layout Map- Inset 3

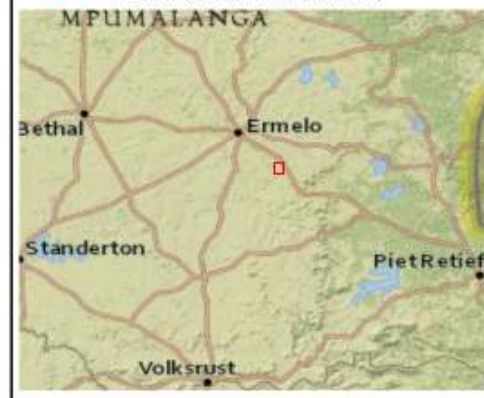
GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- +
- Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Layout Map- Inset 3

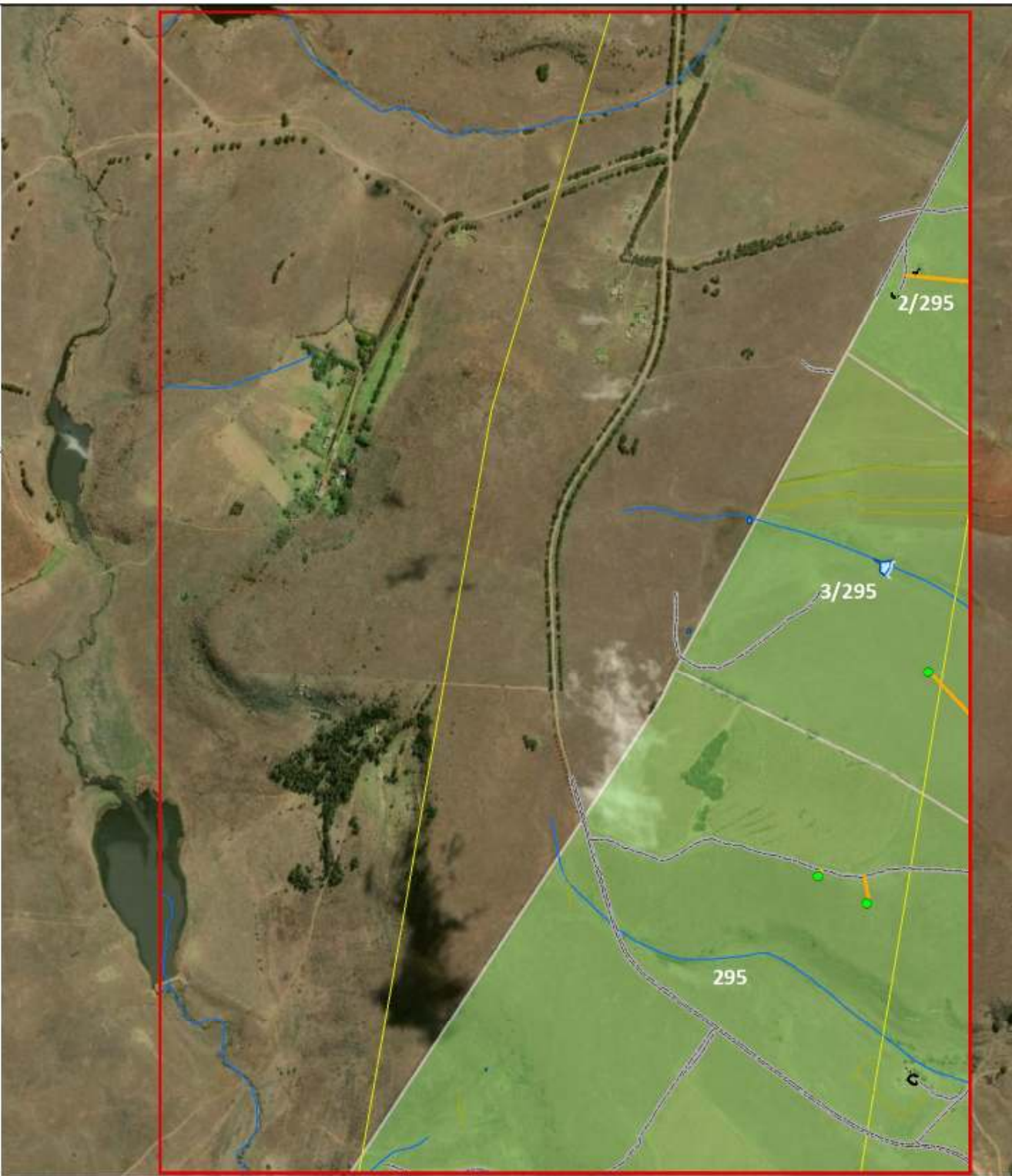
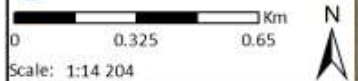
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Layout Map- Inset 4

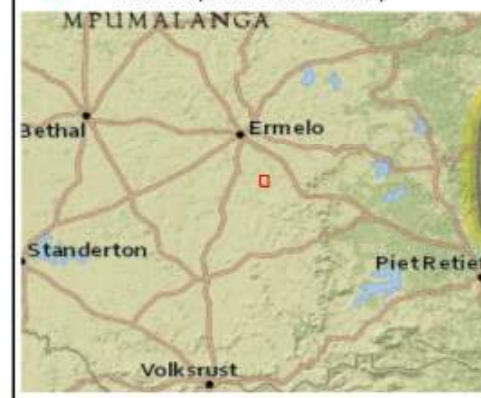
GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
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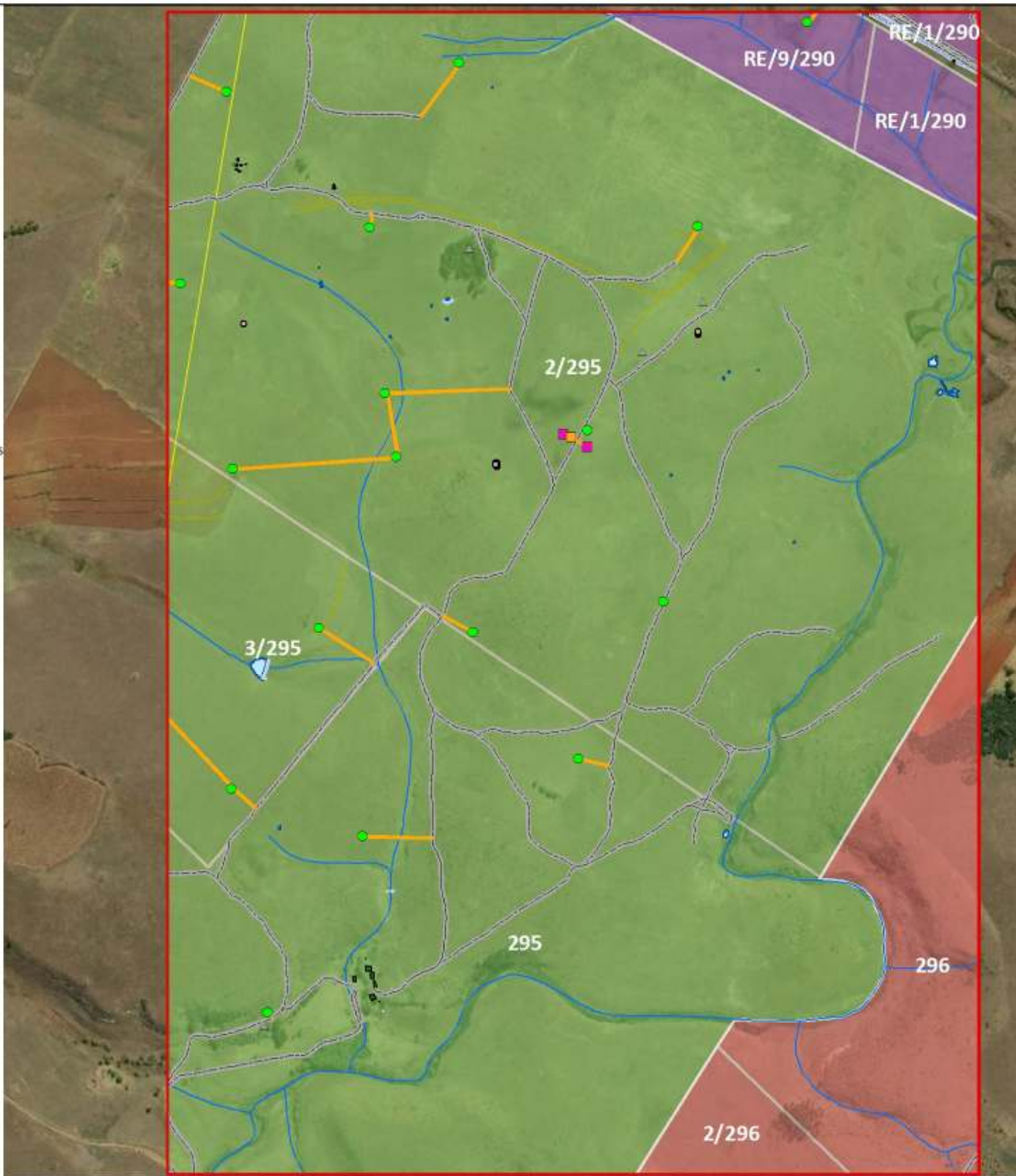
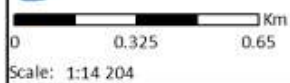
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊗ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛽ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Layout Map- Inset 5

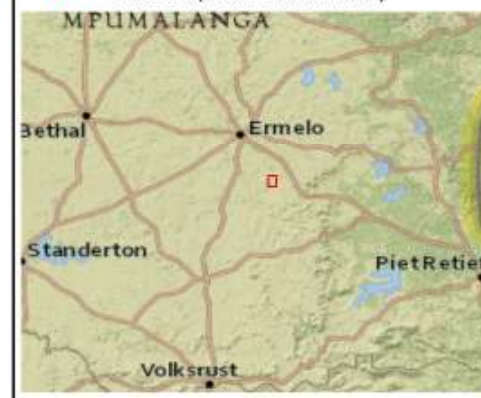
GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- ⊗ Area 1 and Area2
- ⊗ Vunene Portions
- ⊗ S102 PR677 Portions
- ⊗ S102 PR676 Portions
- ⊗ Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
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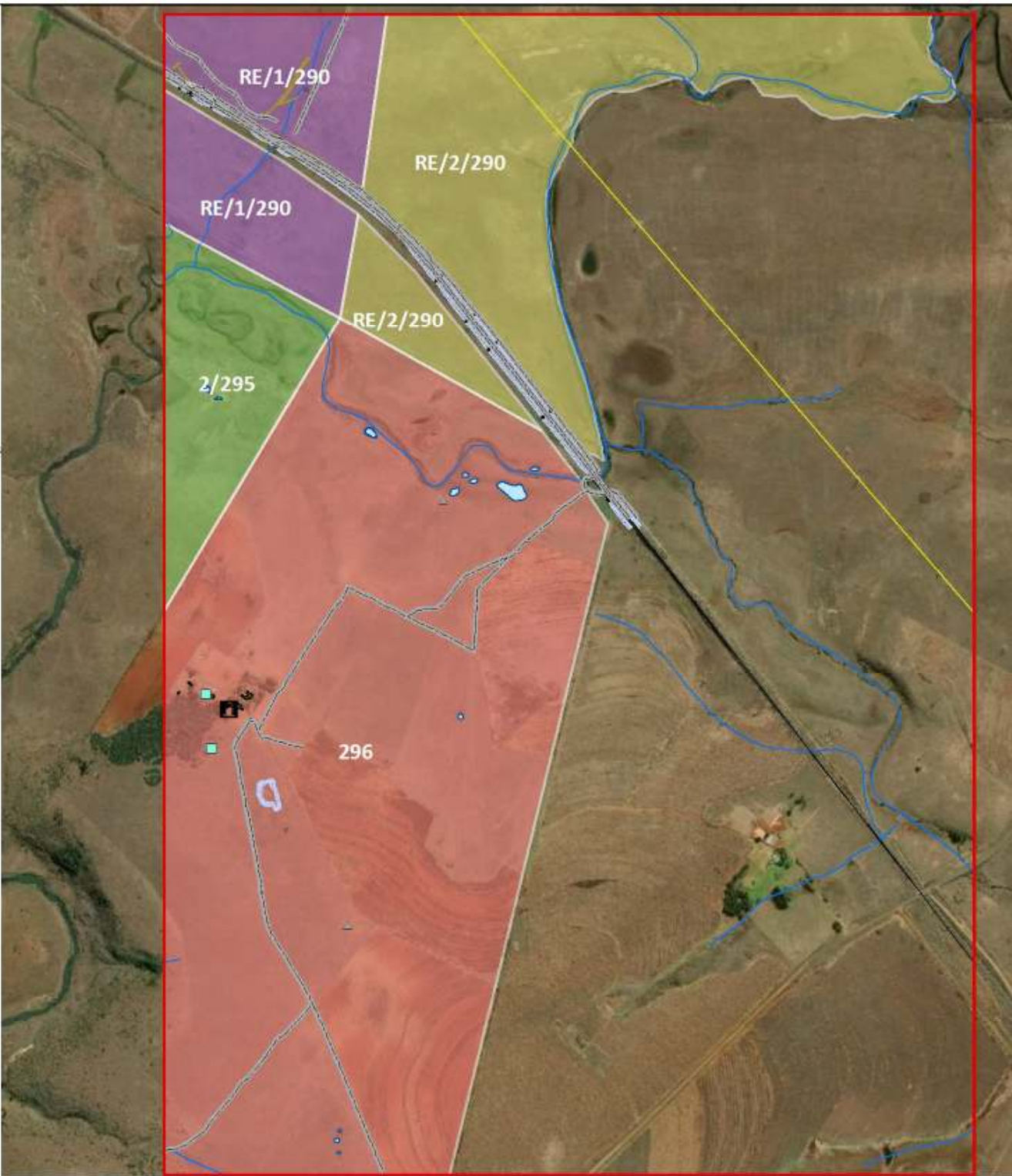
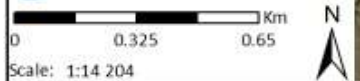
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams

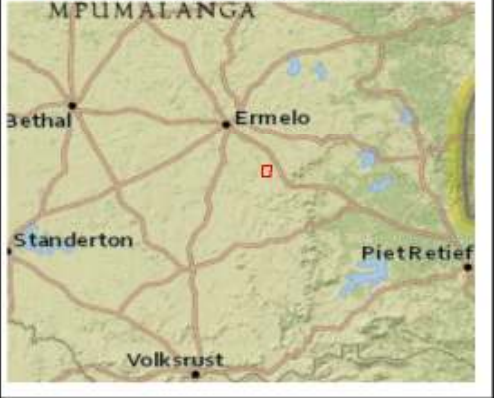


### Infrastructure Layout Map- Inset 6

GSW Mooiplaats S102

- #### Legend
- Inset Grid
  - Transmission Lines
  - Railway
  - Roads
  - Rivers/ Streams
  - ⊕ Area 1 and Area 2
  - ⊕ Vunene Portions
  - ⊕ S102 PR677 Portions
  - ⊕ S102 PR676 Portions
  - ⊕ Original MR Portions

- #### Planned Infrastructure
- Planned Rescue Bay BHs
  - Planned Rescue Bay
  - Planned Substation
  - Planned Ventilation Shafts
  - Planned Access Routes
  - ⊕ Planned Explosive Destruction Bay



Data Sources:  
CSG; ESRI; ENPAT  
Coord System: LO31 TM WGS84  
Projection: Transverse Mercator  
Datum: WGS 1984  
Ref: Infrastructure Layout Map- Inset 6

Date: 2019/08/21

Compiled: PH  
Reviewed: SvdG  
Approved: LW





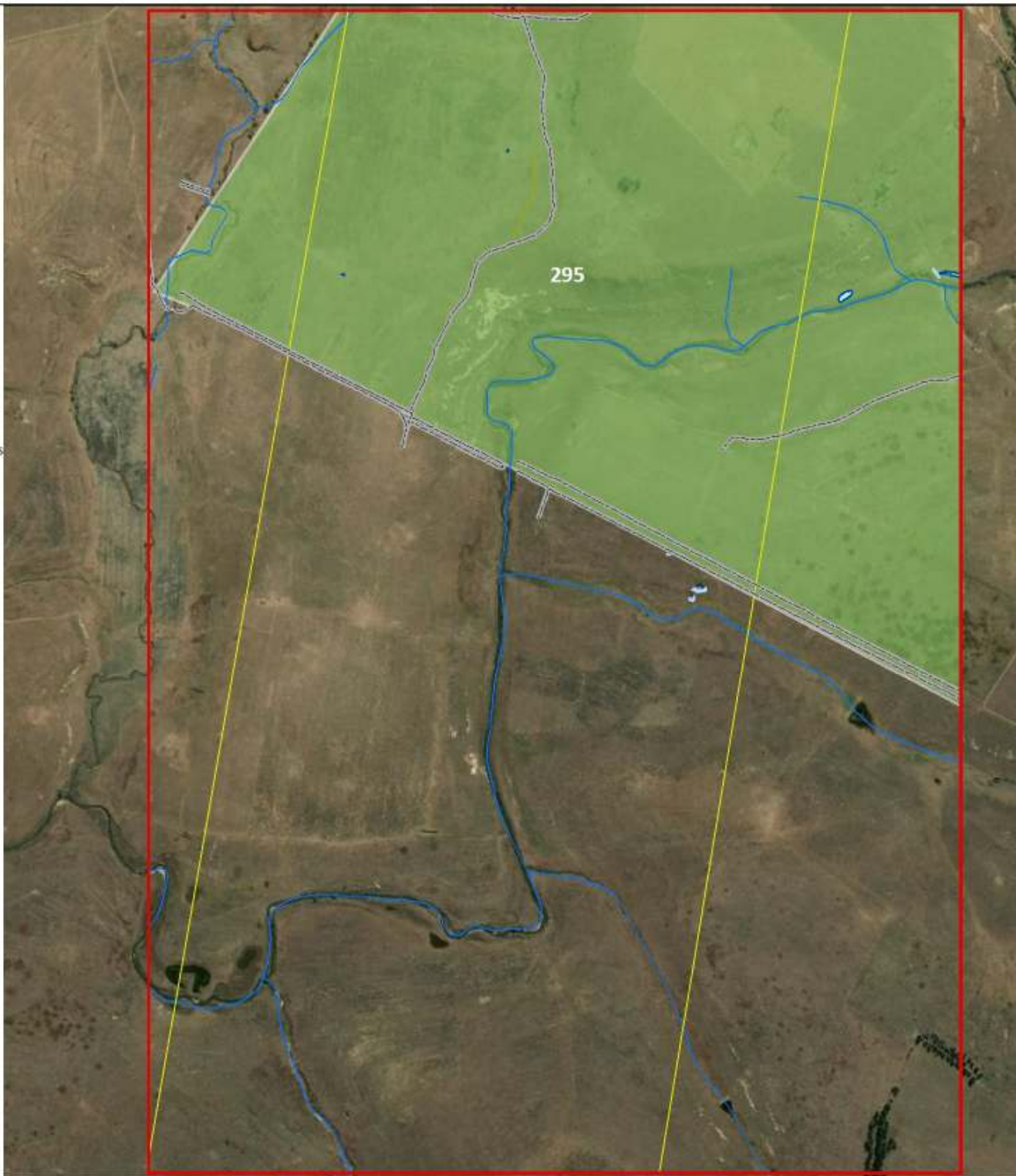
### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams

0 0.325 0.65 Km



Scale: 1:14 204



### Infrastructure Layout Map- Inset 7

GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- +
- Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Layout Map- Inset 7

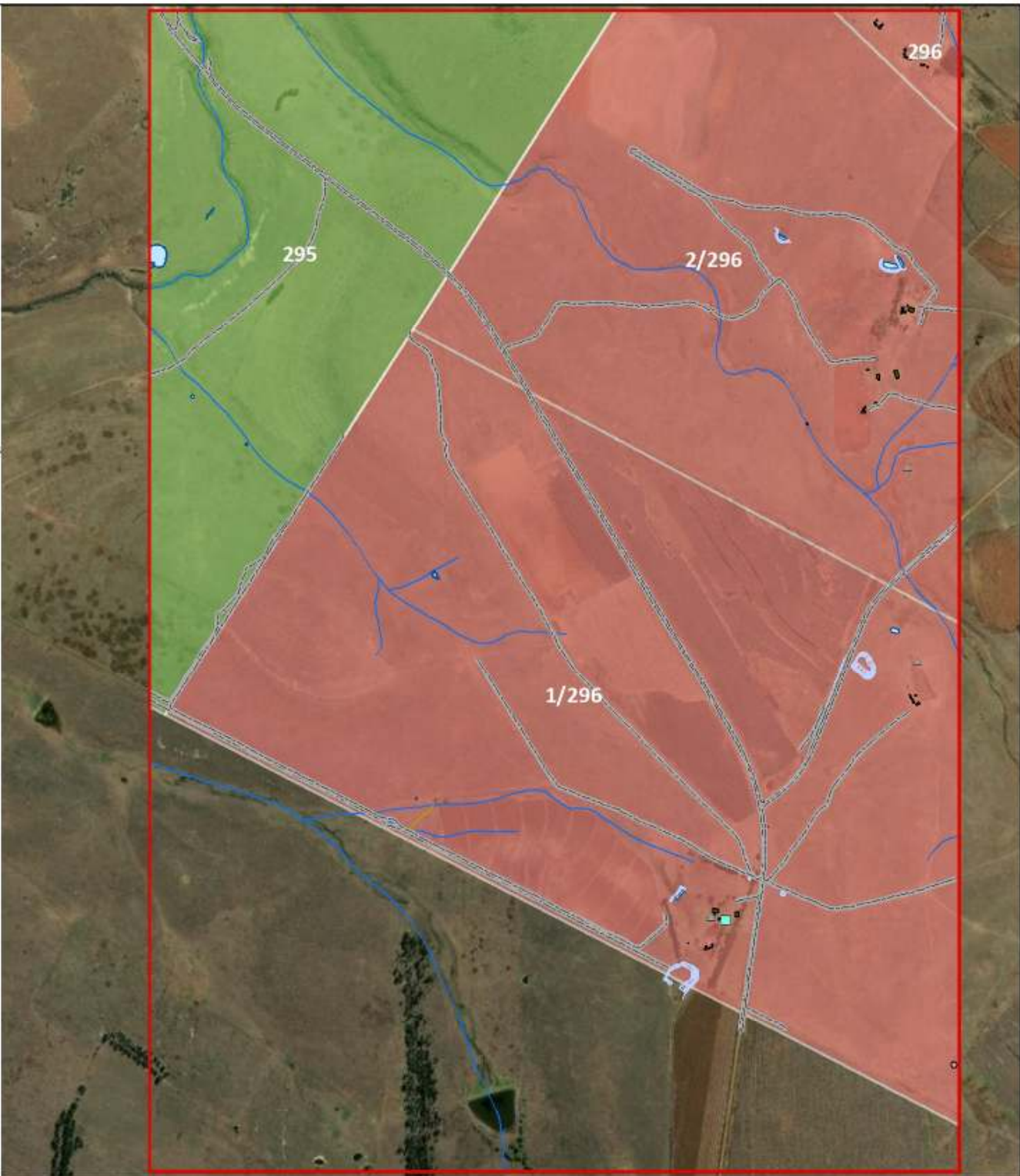
Date: 2019/08/21

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW



**Existing Infrastructure**

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- ⛛ Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



**Infrastructure Layout Map- Inset 8**

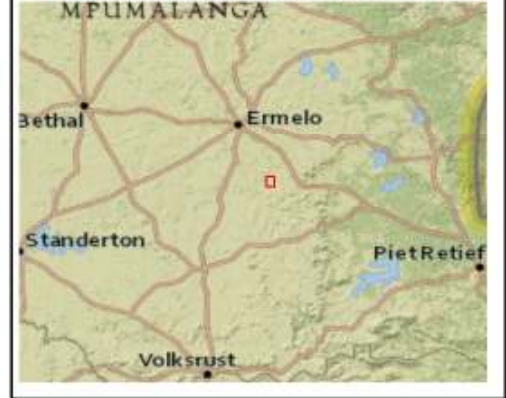
GSW Mooiplaats S102

**Legend**

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- ⊕ Area 1 and Area2
- ⊕ Vunene Portions
- ⊕ S102 PR677 Portions
- ⊕ S102 PR676 Portions
- ⊕ Original MR Portions

**Planned Infrastructure**

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



Data Sources:  
CSG; ESRI; ENPAT  
Coord System: LO31 TM WGS84  
Projection: Transverse Mercator  
Datum: WGS 1984  
Ref: Infrastructure Layout Map- Inset 8

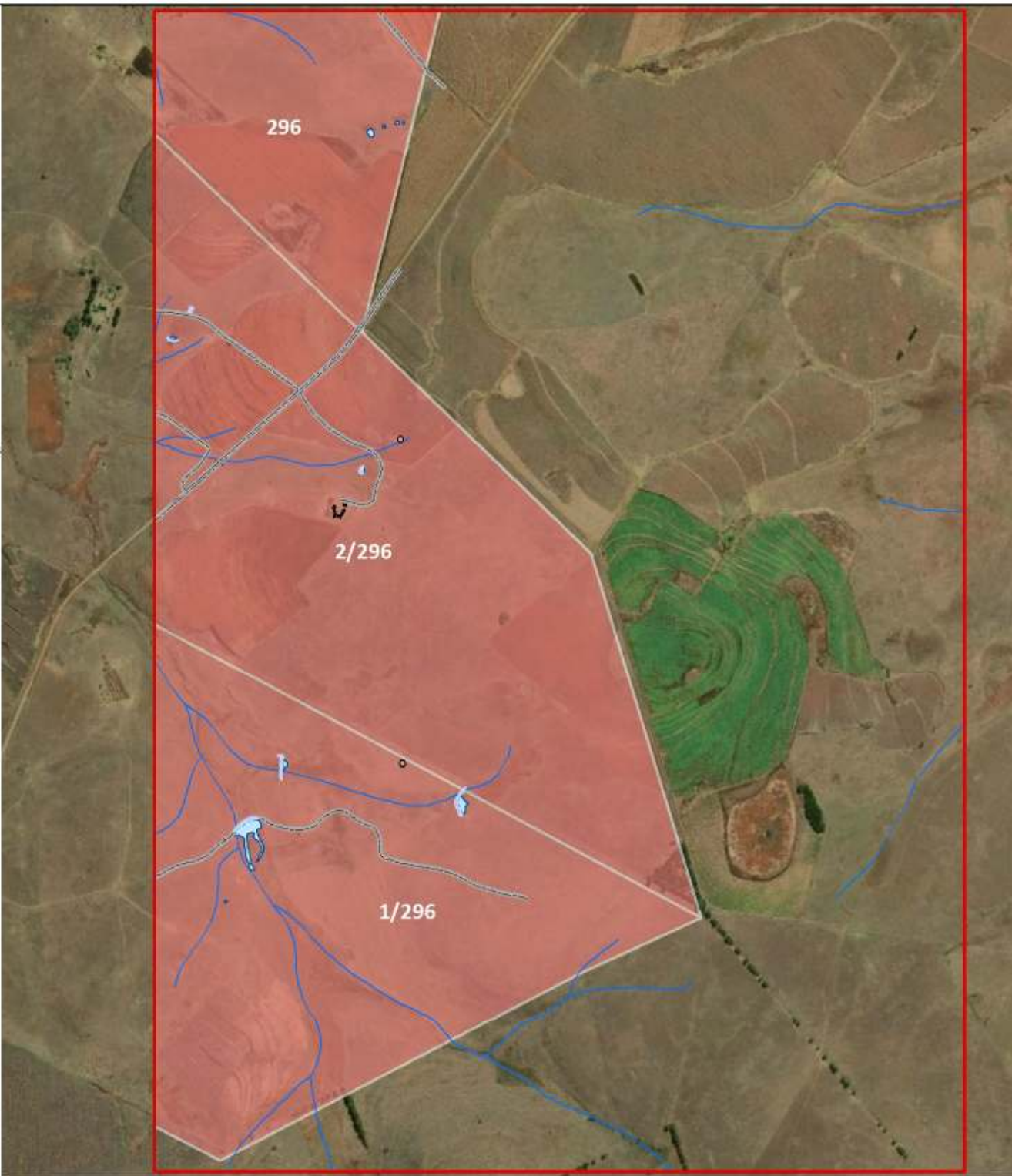
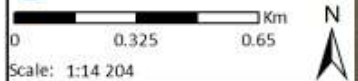
Date: 2019/08/21

Compiled: PH  
Reviewed: SvdG  
Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
- Drain Holes
- Discard Dump
- Bridge
- Concrete
- Culverts
- Embankment
- 🚰 Fuel Tanks
- Furrow
- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Layout Map- Inset 9

GSW Mooiplaats S102

#### Legend

- Inset Grid
- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- ⊕ Area 1 and Area 2
- ⊕ Vunene Portions
- ⊕ S102 PR677 Portions
- ⊕ S102 PR676 Portions
- ⊕ Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- ⊕ Planned Explosive Destruction Bay



#### Data Sources:

CSG; ESRI; ENPAT  
Coord System: LO31 TM WGS84  
Projection: Transverse Mercator  
Datum: WGS 1984  
Ref: Infrastructure Layout Map- Inset 9

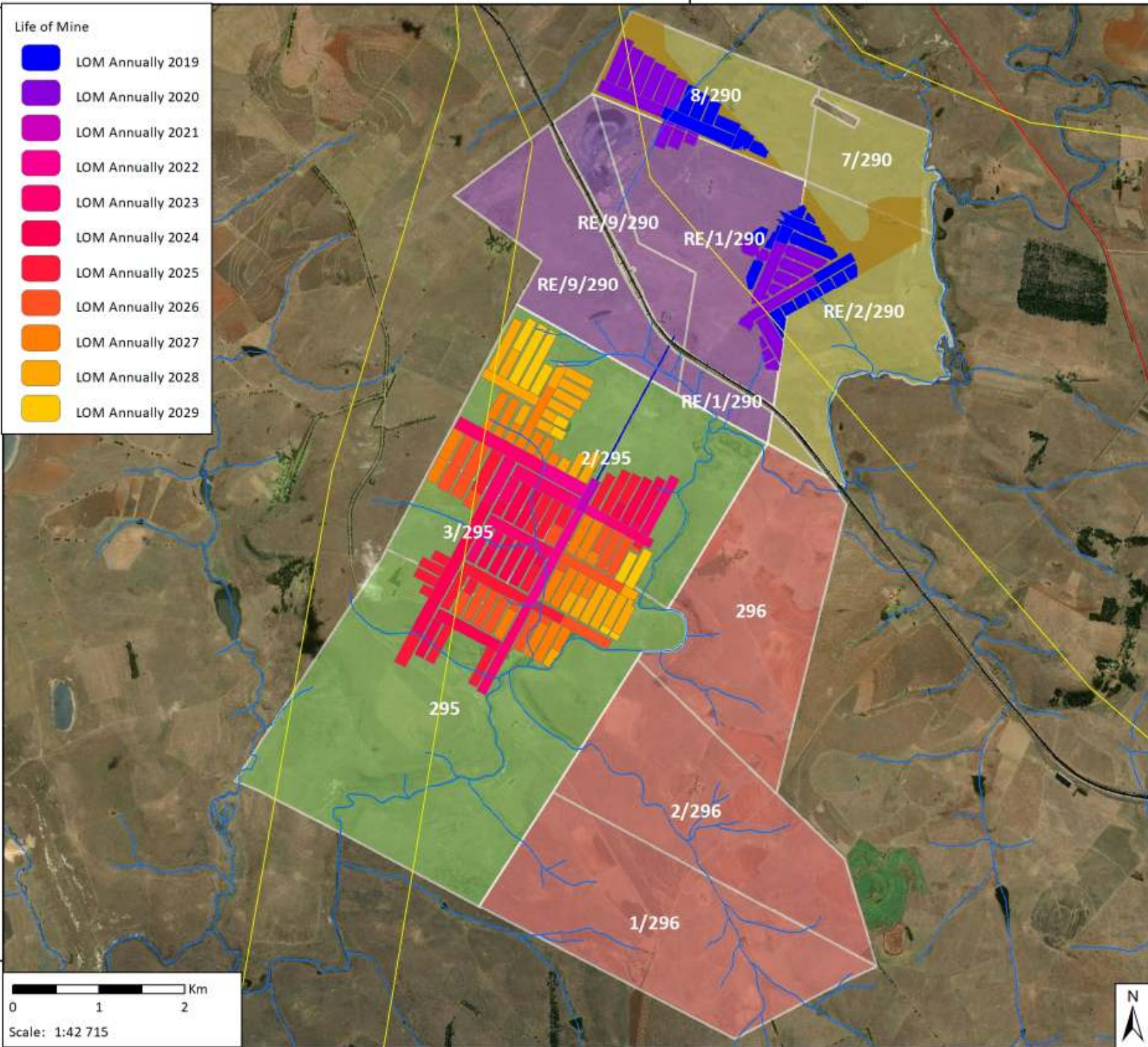
Date: 2019/08/21

Compiled: PH  
Reviewed: SvdG  
Approved: LW



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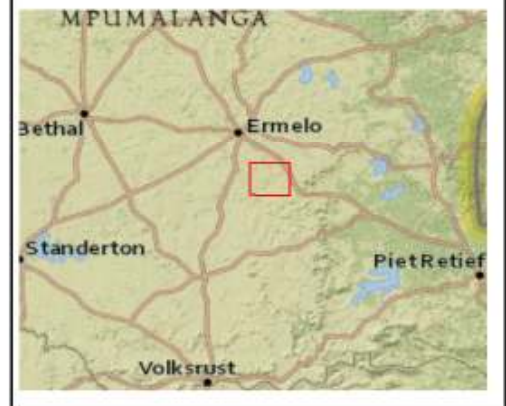
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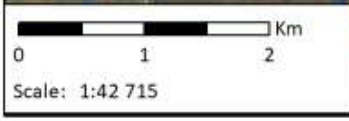
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- LOM Annually 2019
  - LOM Annually 2020
  - LOM Annually 2021
  - LOM Annually 2022
  - LOM Annually 2023
  - LOM Annually 2024
  - LOM Annually 2025
  - LOM Annually 2026
  - LOM Annually 2027
  - LOM Annually 2028
  - LOM Annually 2029

**Mooiplaats LOM and Affected Properties Overview**  
GSW Mooiplaats S102

- Legend**
- Transmission Lines
  - Railway
  - Roads
  - Rivers/ Streams
  - Area 1 and Area2
  - Vunene Portions
  - S102 PR677 Portions
  - S102 PR676 Portions
  - Original MR Portions



Data Sources:  
CSG; ESRI; ENPAT  
Coord System: LO31 TM WGS84  
Projection: Transverse Mercator  
Datum: WGS 1984  
Ref: LOM and Infrastructure Overview



Date: 2019/08/21

Compiled: PH  
Reviewed: SvdG  
Approved: LW



-2957823.6011

# Mooiplaats Infrastructure



## Legend

### Infrastructure

- |  |                              |  |                              |  |                                  |
|--|------------------------------|--|------------------------------|--|----------------------------------|
|  | 1, Weighbridge               |  | 26, Containers- Reliant Elec |  | 52, Workshop Container 6         |
|  | 2, Weighbridge- office       |  | 27, Plant- Control room      |  | 53, Access Gate Hut              |
|  | 3, Carport                   |  | 28, Laboratory               |  | 54, Yard area                    |
|  | 4, Bridge                    |  | 29, Plant workshop           |  | 55, Decline Shaft                |
|  | 5, Offices/ Training Center  |  | 30, Shaft access guard house |  | 56, MP6- Waste Dump              |
|  | 6, Offices/ Lamp room        |  | 31, Shaft Security Building  |  | 57, Co-disposal facility         |
|  | 7, Unknown Structure         |  | 32, Parking Carport          |  | 59, Conveyor                     |
|  | 8, Store                     |  | 33, Security hut             |  | 61, Rewash                       |
|  | 9, Workshop                  |  | 34, Return water dam (lined) |  | 62, Middlings conveyor           |
|  | 10, Bunded Storage area      |  | 35, Silt trap                |  | 63, Load out conveyor            |
|  | 11, Container and Golf Cart  |  | 36, Dam 1                    |  | 64, Load out conveyor            |
|  | 12, Unknown Structure        |  | 37, Dam 2                    |  | 65, Conveyor                     |
|  | 13, Unknown Structure        |  | 38, Dam 3                    |  | 66, Load out conveyor            |
|  | 14, Temp Offices             |  | 39, Water tanks 1            |  | 67, Primary product conveyor     |
|  | 15, Generator- buidling      |  | 40, Water tanks 2            |  | 68, ROM Conveyor                 |
|  | 16, Generator                |  | 41, Pollution control dam    |  | 69, Auxillary stockpile conveyor |
|  | 17, Diesel storage           |  | 42, Water tanks 3            |  | 70, Discard conveyor             |
|  | 18, Sewage plant             |  | 43, Water tanks 4            |  | 72, Old Stockpile area           |
|  | 19, Container                |  | 44, Genset dam               |  | 73, Auxillary stockpile 1        |
|  | 20, Unknown Structure        |  | 45, Stockyard/ Salvage Yard  |  | 74, Auxillary stockpile 2        |
|  | 21, Sub-station              |  | 46, Laydown area             |  | 75, Visitors parking             |
|  | 22, Sub-station              |  | 47, Workshop Container 1     |  | 76, Parking area                 |
|  | 23, Workshop                 |  | 48, Workshop Container 2     |  | 77, MP1-Topsoil Stockpile        |
|  | 24, Workshop                 |  | 49, Workshop Container 3     |  | 78, MP7- Topsoil and Softs       |
|  | 25, Containers- Reliant Elec |  | 50, Workshop Container 4     |  | 79, MP7- Topsoil and Softs       |
|  |                              |  | 51, Workshop Container 5     |  |                                  |

Data Sources:  
 GCS, ESRI  
 Coordinate System: Wgs84 Lo31  
 Projection: Transverse Mercator  
 Datum: Hartebeesthoek 1994  
 False Easting: 0.0000  
 False Northing: 0.0000  
 Central Meridian: 31.0000  
 Scale Factor: 1.0000  
 Latitude Of Origin: 0.0000  
 Units: Meter  
 Ref: Mooiplaats infra

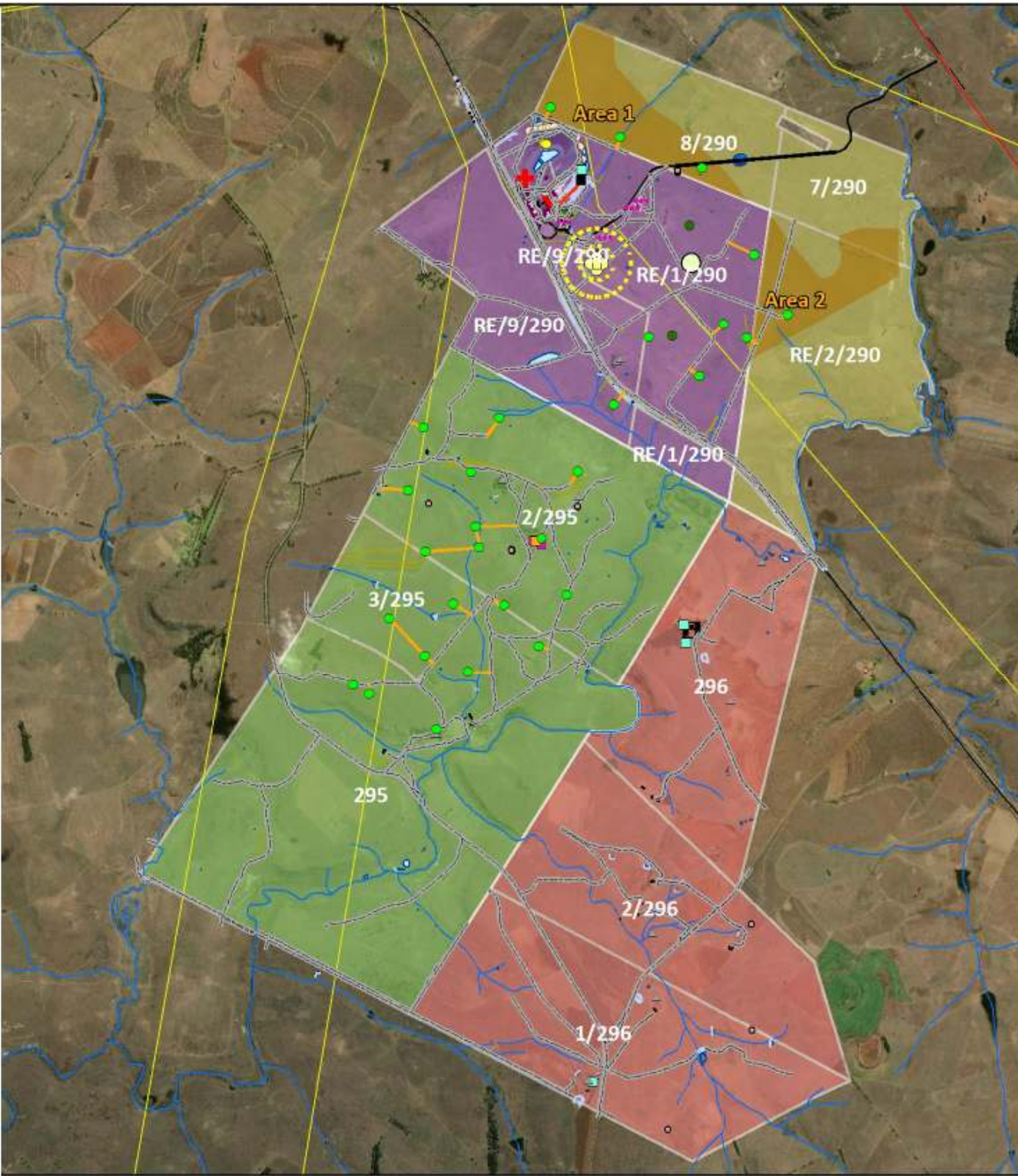
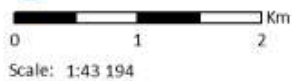


Date: 2019/08/27  
 EIMS Ref: 1242  
 Compiled: PH  
 Reviewed: LW  
 Approved: LW



### Existing Infrastructure

- ▲ Ruins
- Graves
- Sump
- Boxcut
- ⊕ Magazine
- ⋯ Magazine Radius
- Mining Restrictions
- ⚡ Transformers
- Water Tank
- Main Drain
- Steel Pipes
- Haul Roads/ Existing Farm Routes
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- Buildings/ Infrastructure
- ★ Pipe in Concrete
- Pollution Control Dam
- Stockpiles
- Substation
- Tar Road
- Trench
- Water BHs
- Surface Pump Lines
- Coal Stockpiles
- Dams



### Infrastructure Inset Map Overview

GSW Mooiplaats S102

#### Legend

- Transmission Lines
- Railway
- Roads
- Rivers/ Streams
- Area 1 and Area 2
- Vunene Portions
- S102 PR677 Portions
- S102 PR676 Portions
- Original MR Portions

#### Planned Infrastructure

- Planned Rescue Bay BHs
- Planned Rescue Bay
- Planned Substation
- Planned Ventilation Shafts
- Planned Access Routes
- Planned Explosive Destruction Bay

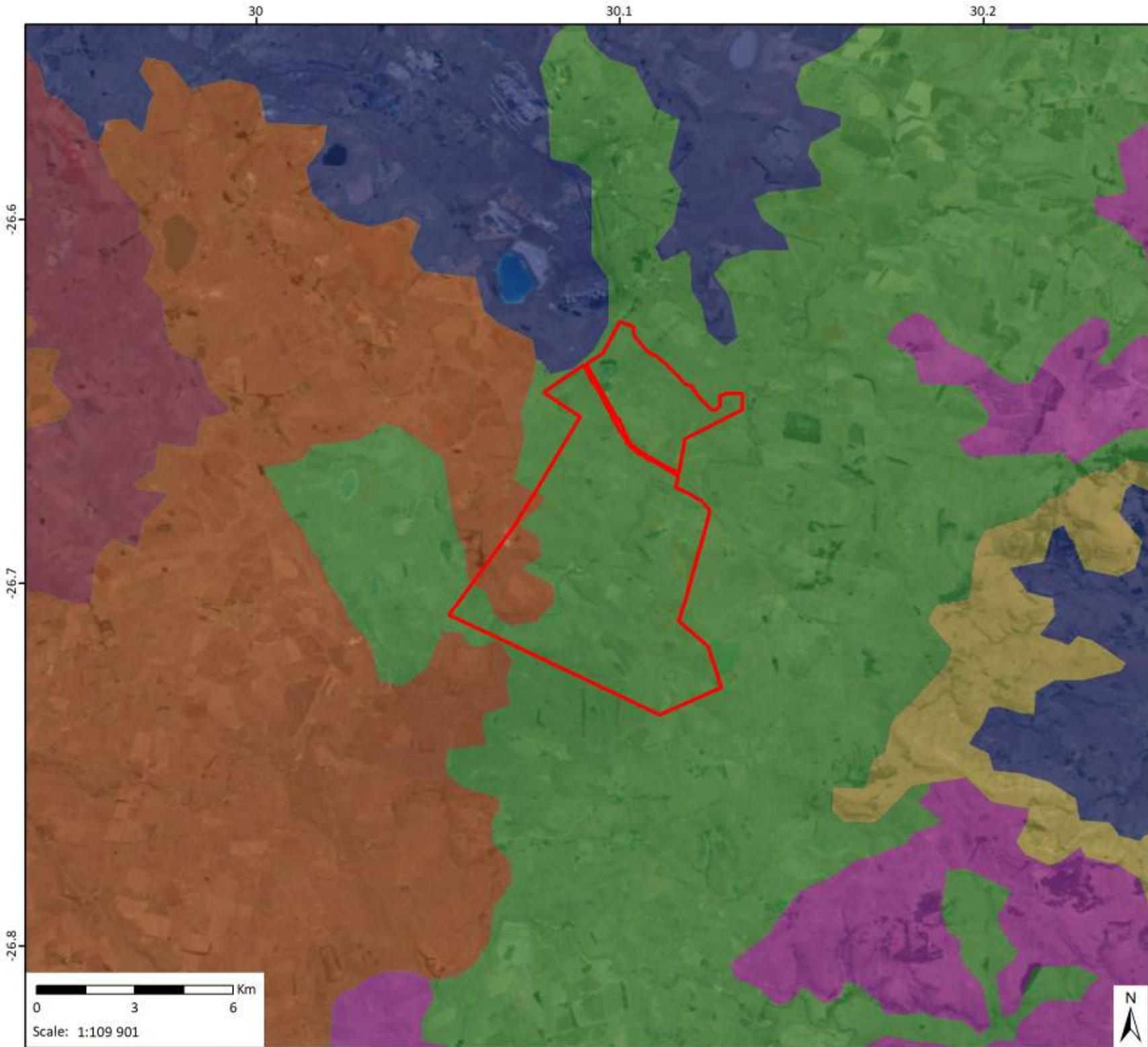


Data Sources:  
 CSG; ESRI; ENPAT  
 Coord System: LO31 TM WGS84  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Ref: Infrastructure Inset Map Overview

Date: 2019/08/26

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW





## Mooiplaats Soil Types

1299 GSW Mooiplaats Colliery S102

### Legend



Mining Right Boundary

### Soil Types



ACh



ACp



FRr



LPq



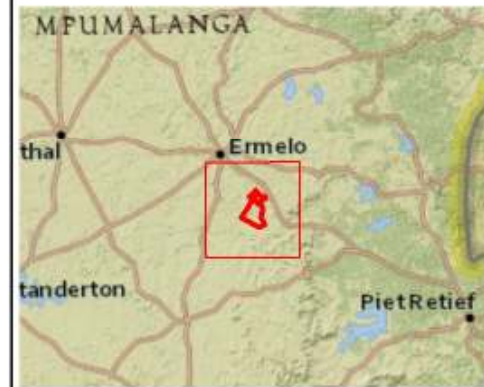
PHh



PLe



RGe



### Data Sources:

CSG; ESRI; ISRIC

Coord System: GCS WGS 1984

Datum: WGS 1984

Ref: Soil\_190514

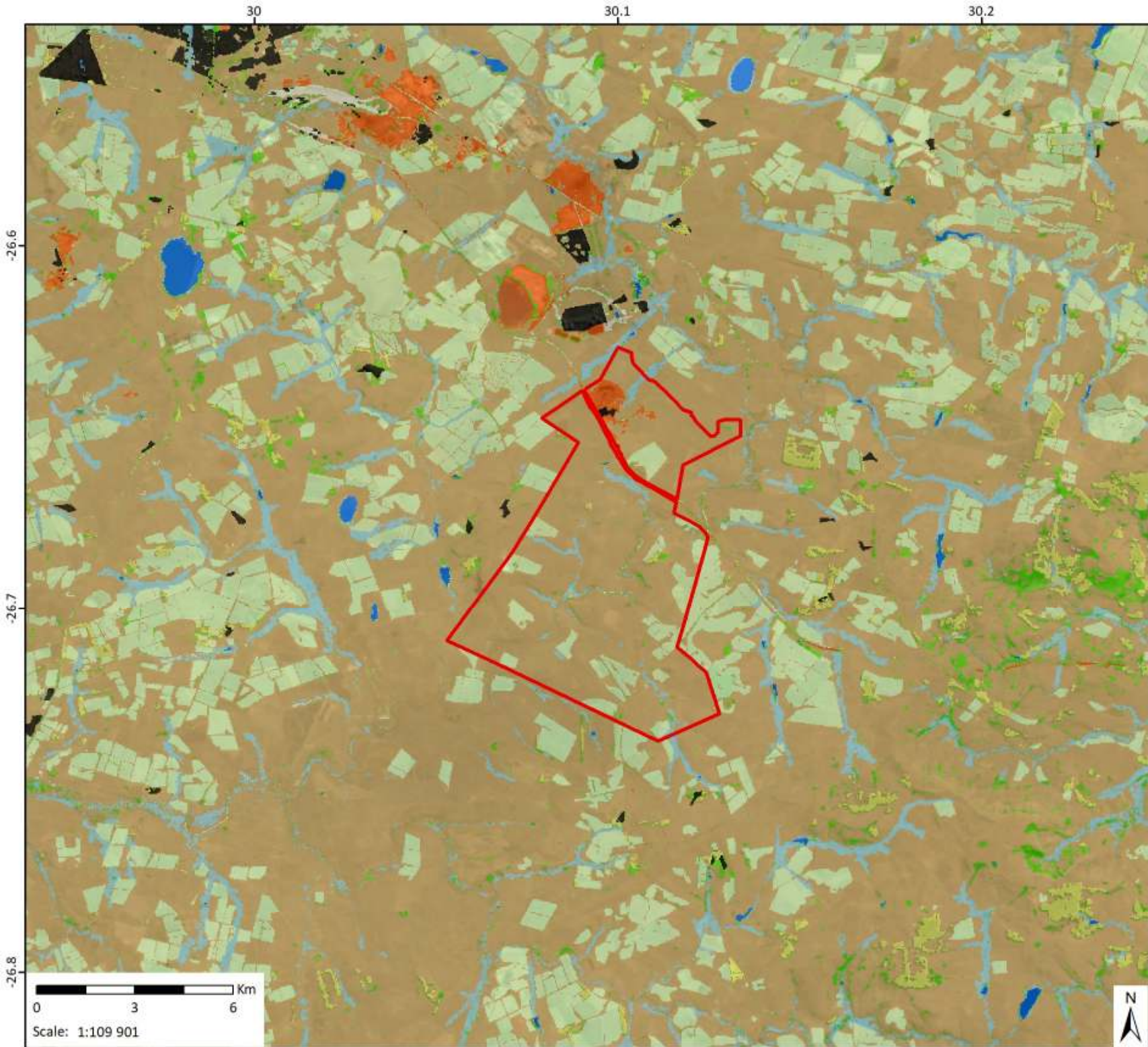
Date: 2019/08/27

Compiled: PH

Reviewed: SvdG

Approved: LW





## Mooiplaats Surrounding Land Cover

1299 GSW Mooiplaats Colliery S102

### Legend

-  MR Boundary
- Surrounding Land Cover**
-  None Vegetated Areas and Dongas
-  Cultivated Areas
-  Grassland
-  Indigenous Forest
-  Shrubland/ Bush/ Woodlands
-  Mining Areas
-  Plantations
-  Urbanised Areas
-  Surface Water Areas



Data Sources:  
 CSG; ESRI; DEA  
 Coord System: GCS WGS 1984  
 Datum: WGS 1984  
 Ref: Land Cover\_190514

Date: 2019/08/27

Compiled: PH  
 Reviewed: SvdG  
 Approved: LW

