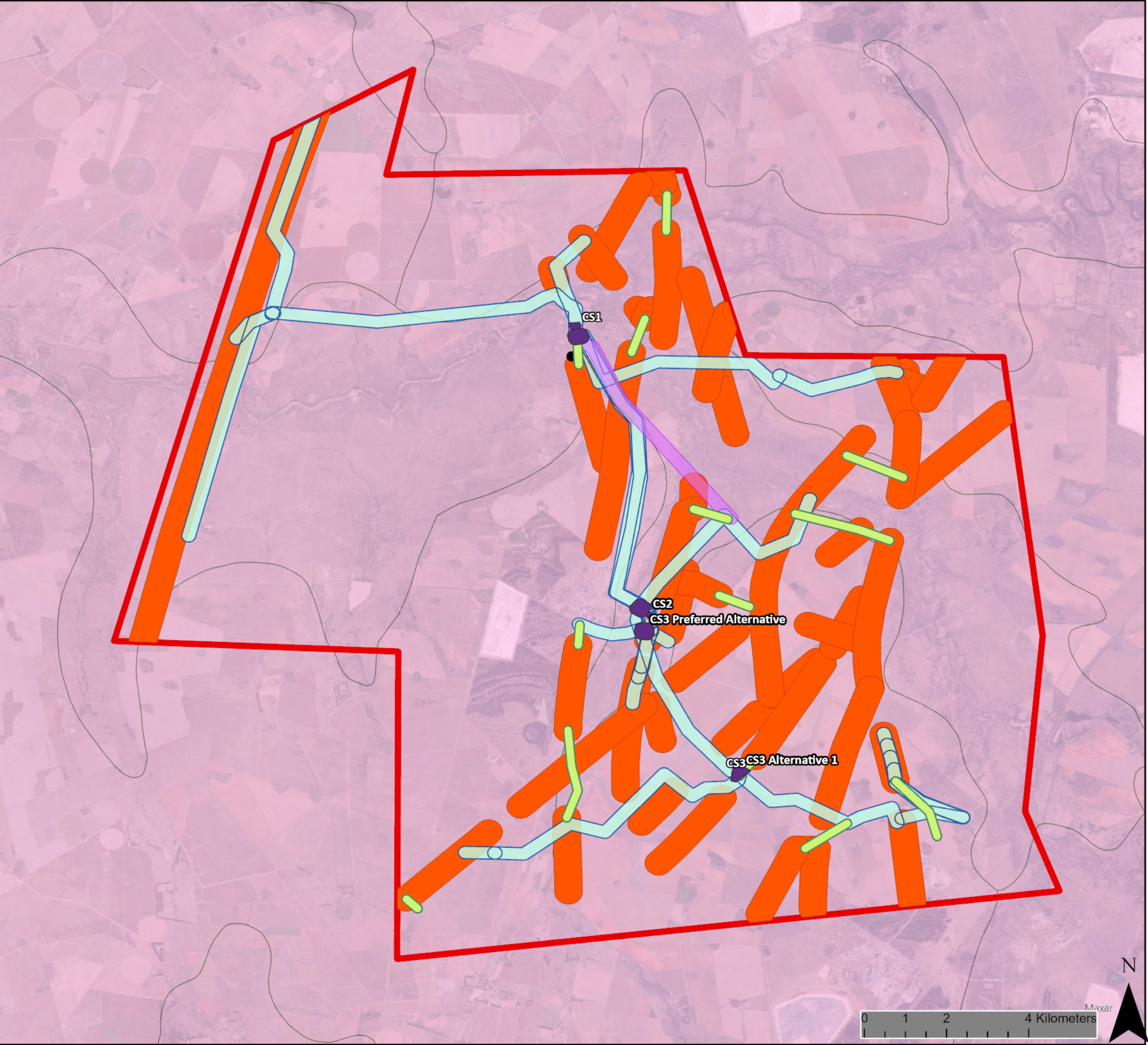




Land Capability

1473 Tetra4 Cluster 2 Project

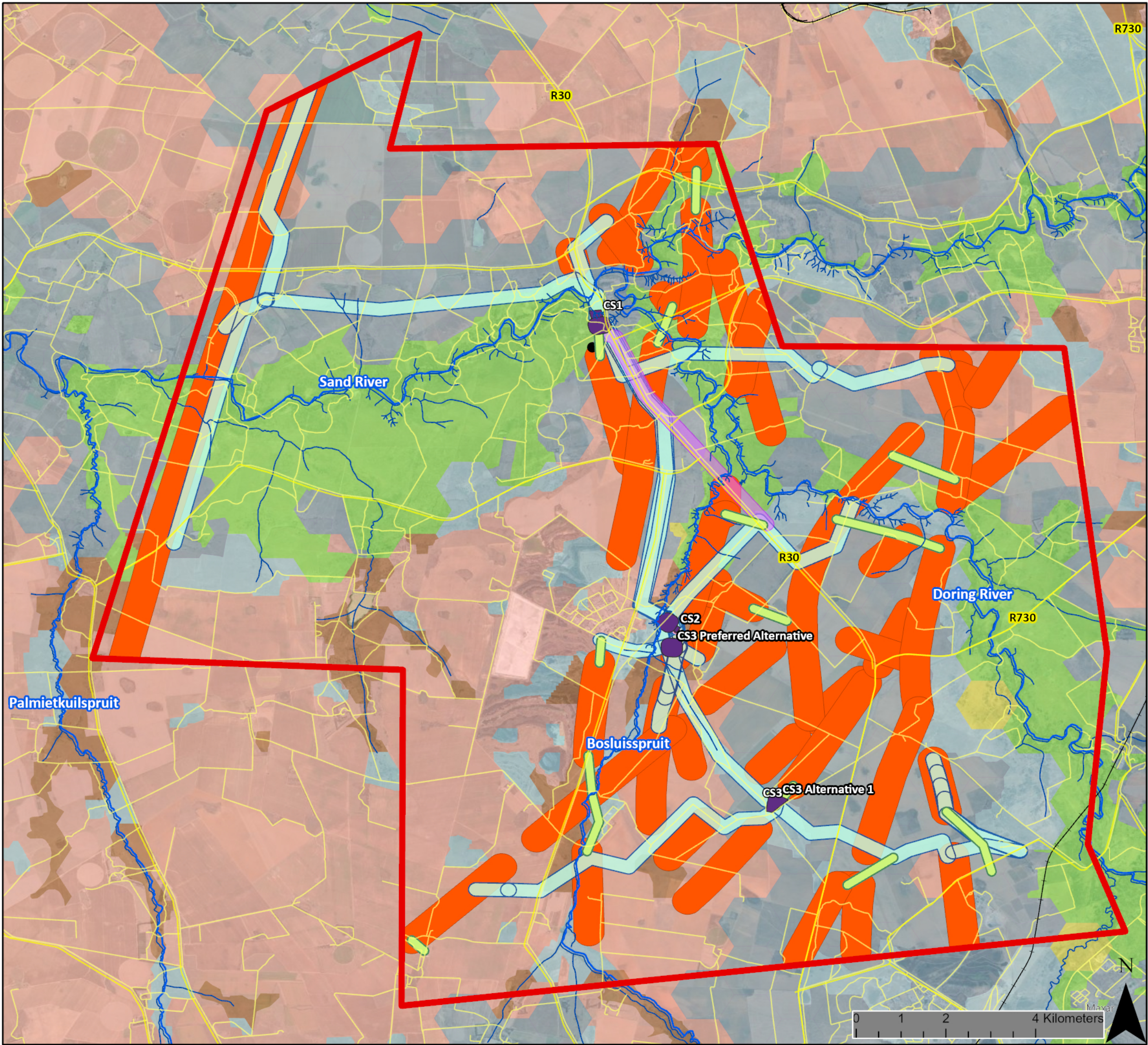
Legend

-  Study Area
- Infrastructure**
 -  Compressor Stations
 -  Extensions
 -  LNG/LHe Plant
- Project Footprint Buffer Zones**
 -  Pipeline (300m)
 -  Wells Tansects (600m)
 -  Transmission Loop Buffer (300m)
- Land Capability**
 -  Class IV

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Land Capability
Date: 2022/07/19

EIMS Ref: Land Capability
Compiled: CM
Reviewed: BW
Approved: LW





Biodiversity Map

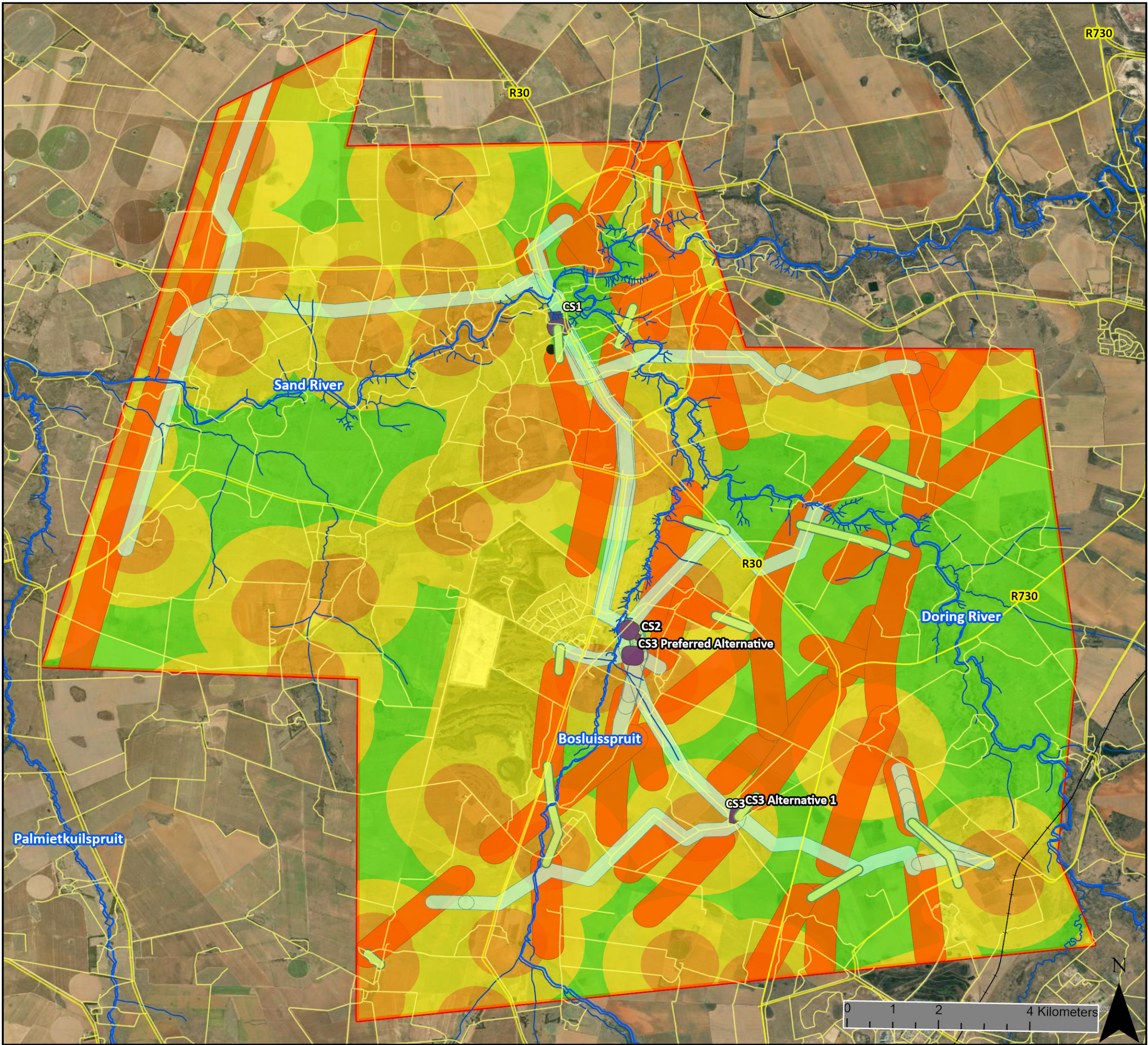
1473 Tetra4 Cluster 2 Project

- Legend
- Study Area**
- Study Area
- Base Layers**
- Places
 - Railway
 - Roads
 - Rivers
- Infrastructure**
- LNG/LHe Plant
 - Compressor Stations
 - Extensions
- Project Footprint Buffer Zones**
- Pipeline (300m)
 - Wells Tansects (600m)
 - Transmission Loop Buffer (300m)
- Biodiversity Areas**
- Critical Biodiversity Area 1
 - Critical Biodiversity Area 2
 - Degraded
 - Ecological Support Area 1
 - Ecological Support Area 2
 - Other

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Biodiversity

Date: 2022/06/23
EIMS Ref: Biodiversity
Compiled: CM
Reviewed: BW
Approved: LW



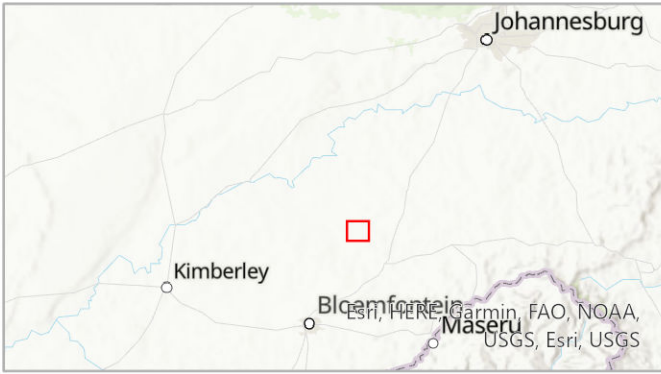


EIA Phase Air Quality Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Points
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Extensions
- Air Quality Sensitivity**
- Sensitivity Ranking**
 - Least Concern
 - Low
 - Medium



Data Sources:

CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473_Air Quality Sens

Date: 2022/10/14

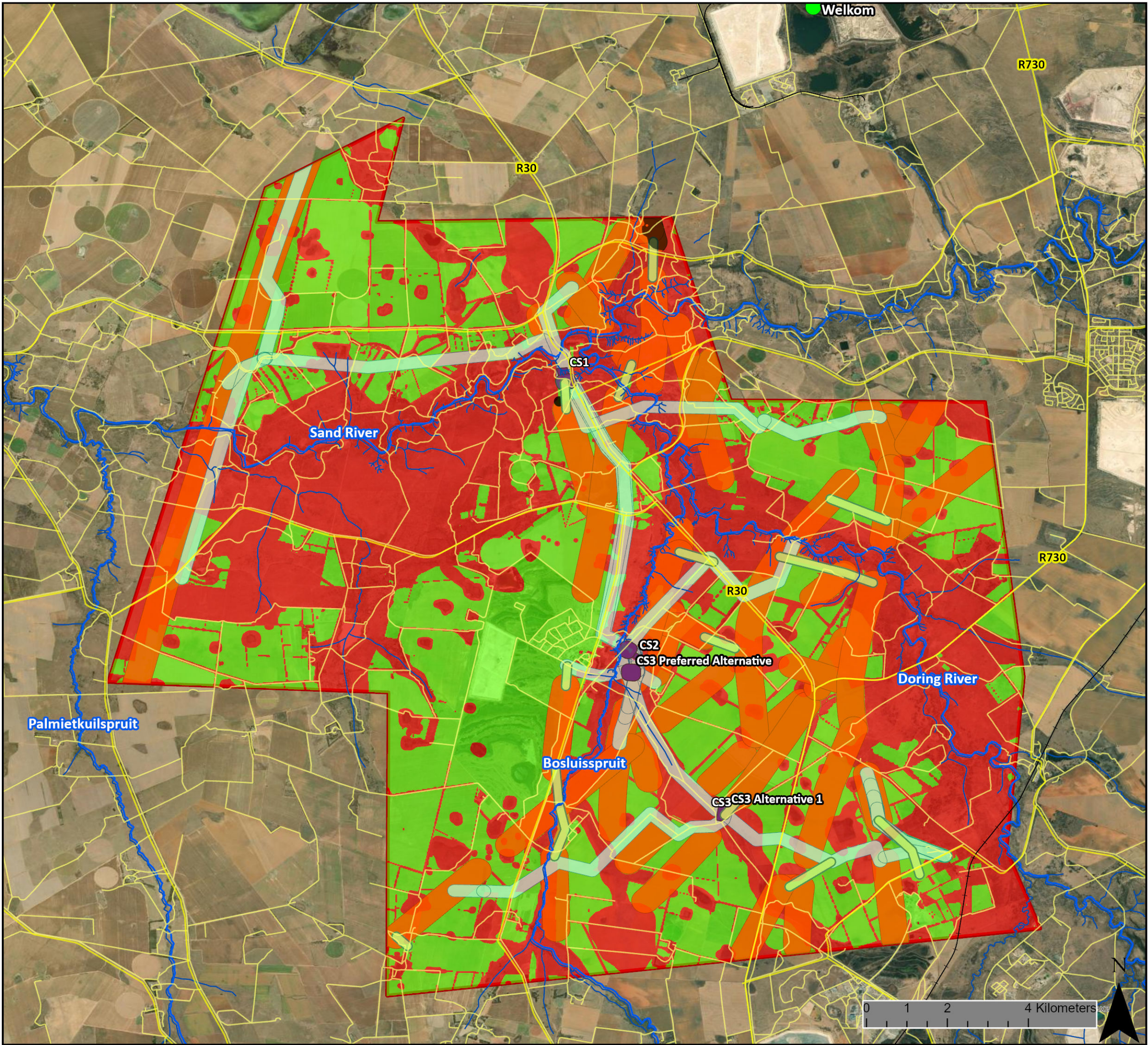
EIMS Ref: 1473

Compiled: CM

Reviewed: BW

Approved: LW



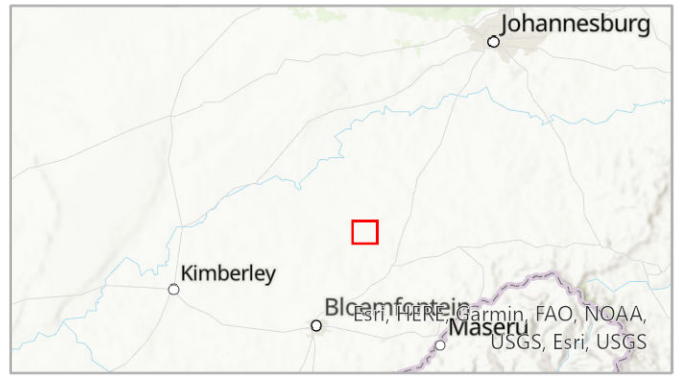


EIA Phase Biodiversity Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Biodiversity Sensitivity**
 - Sensitivity Ranking
 - Least Concern
 - Medium
 - High
 - No-Go

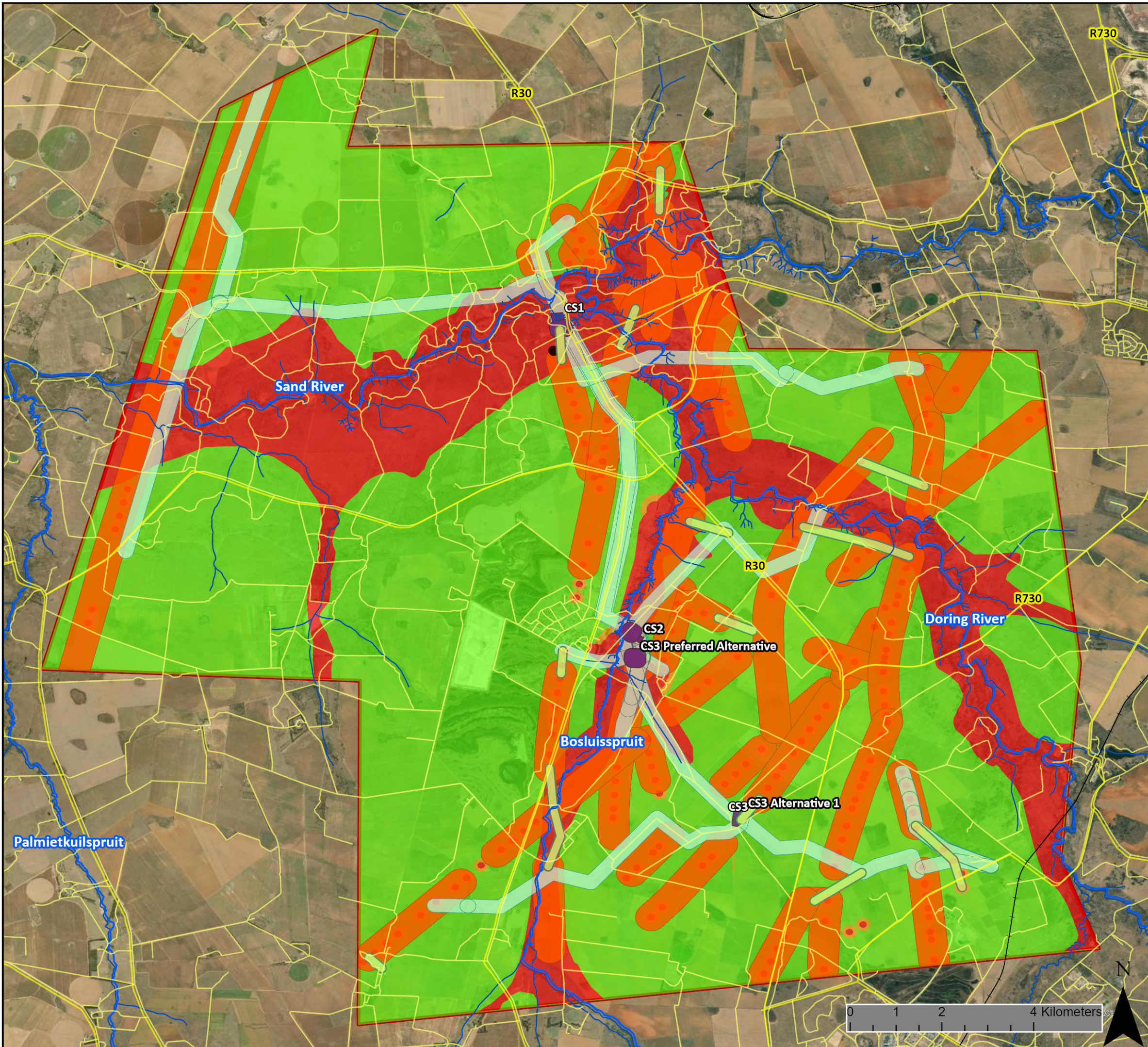


Data Sources:

CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 Biodiversity

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW



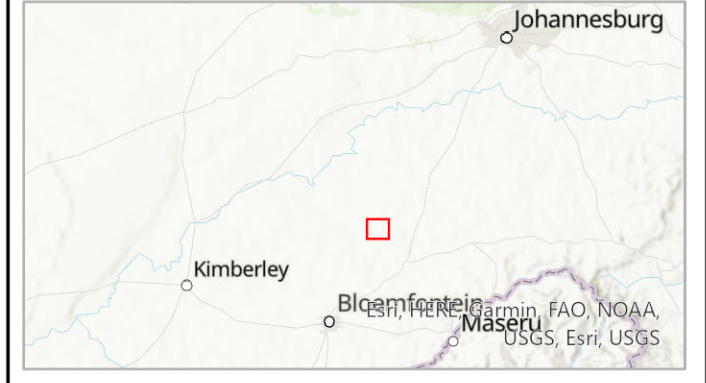


EIA Phase Geohydrology Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Sensitivity Ranking**
 - Least Concern
 - Medium
 - High

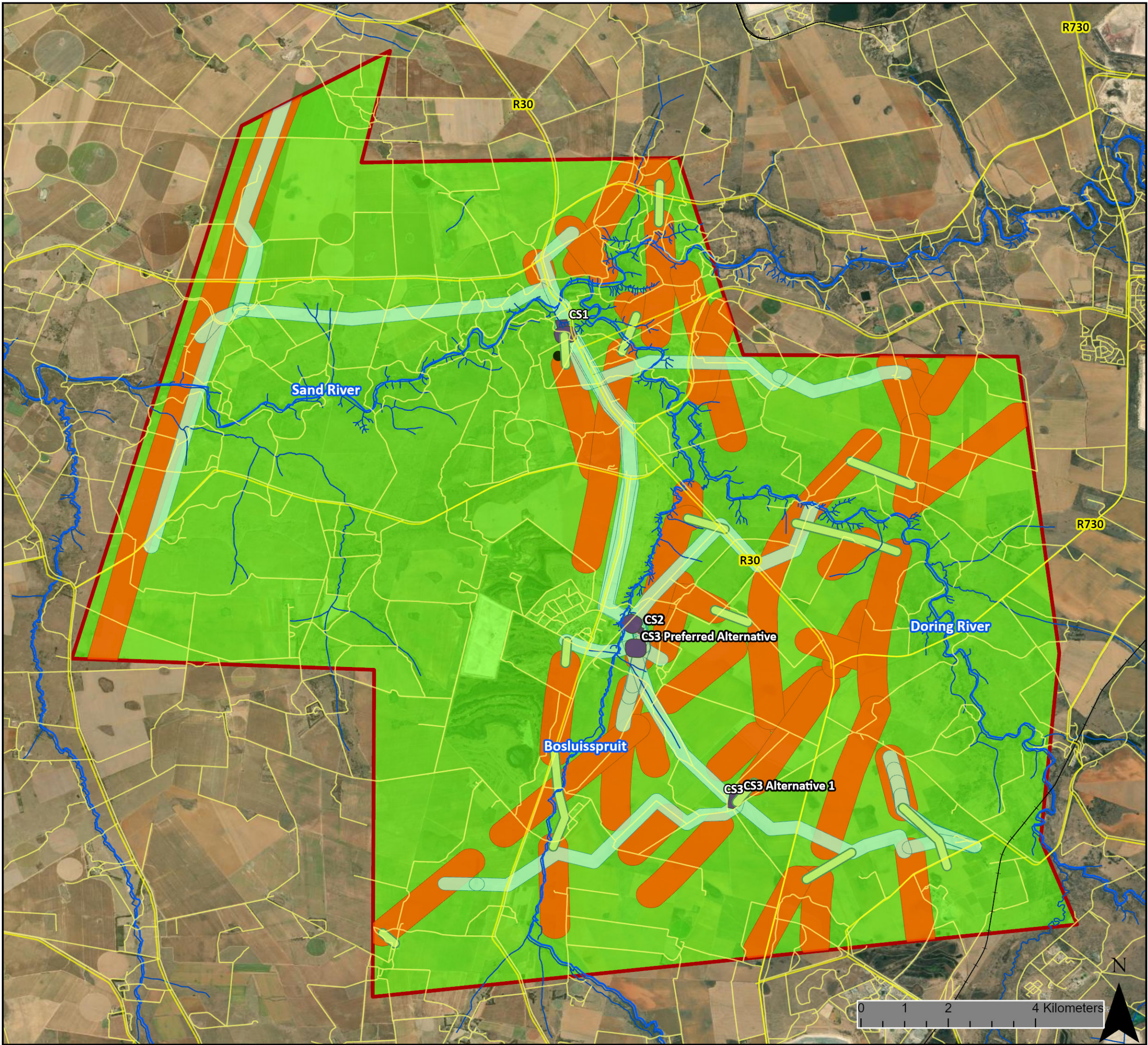


Data Sources:

CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 Geohydo

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW



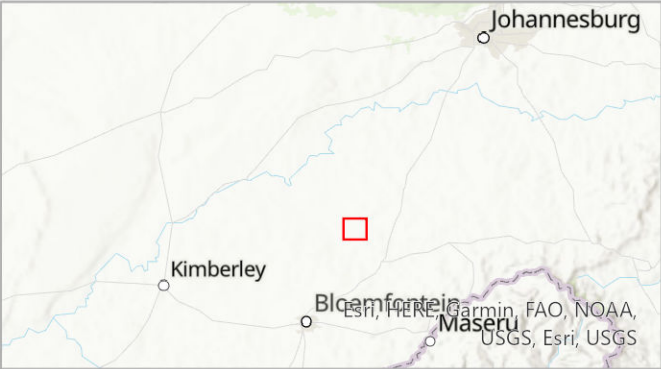


EIA Phase Heritage Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

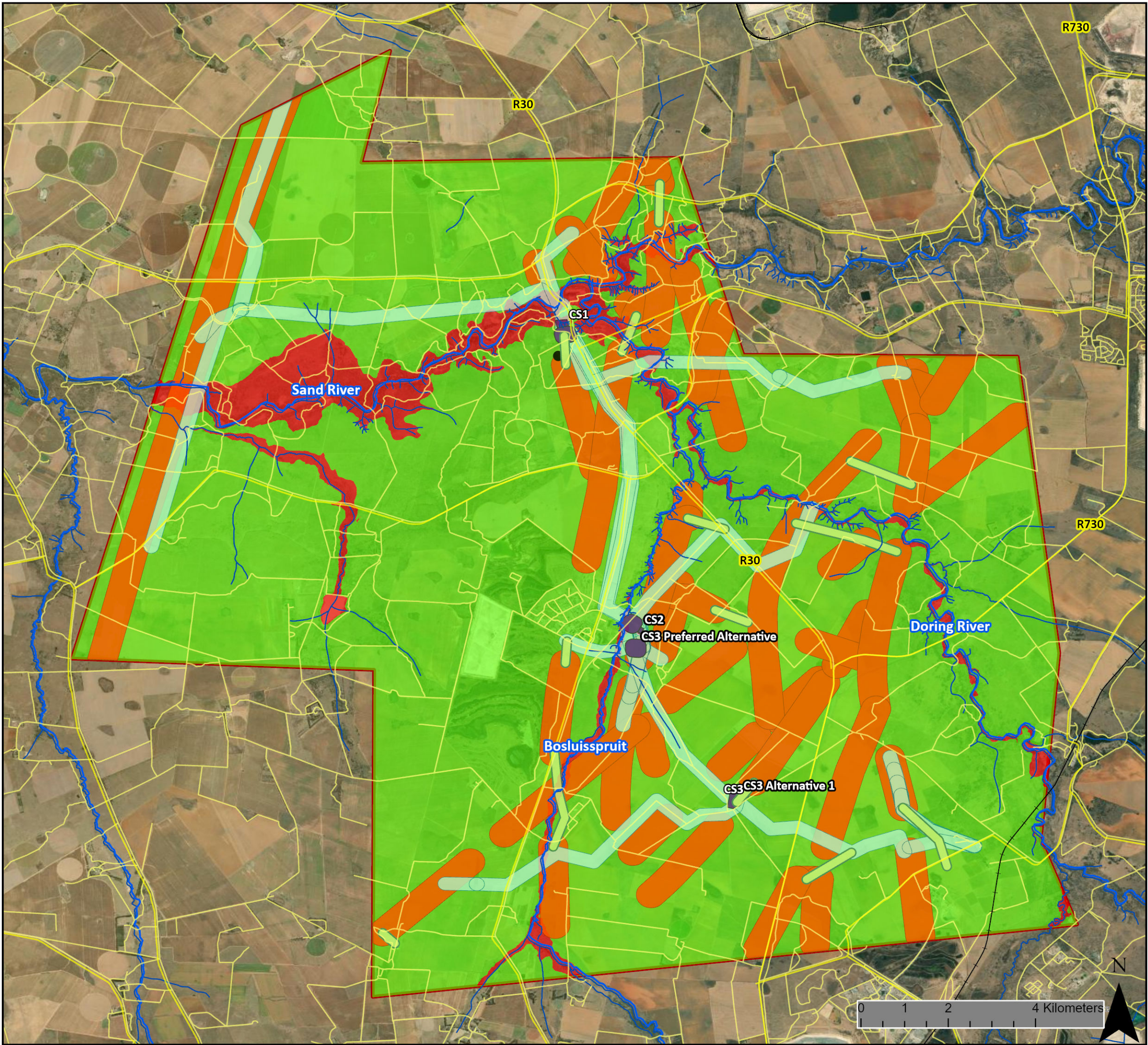
- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Sensitivity Ranking**
 - Least Concern
 - Medium
 - High



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 EIA Heritage

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW



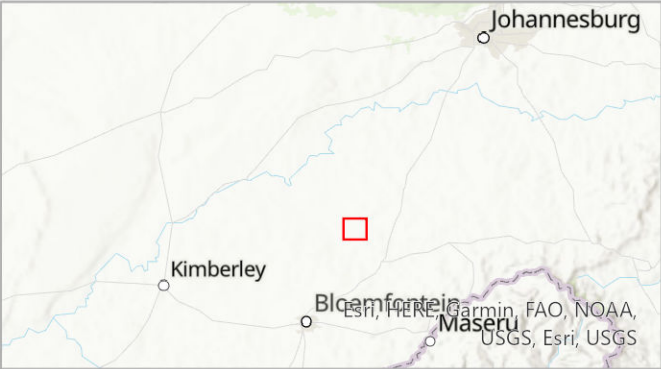


EIA Phase Hydrology Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

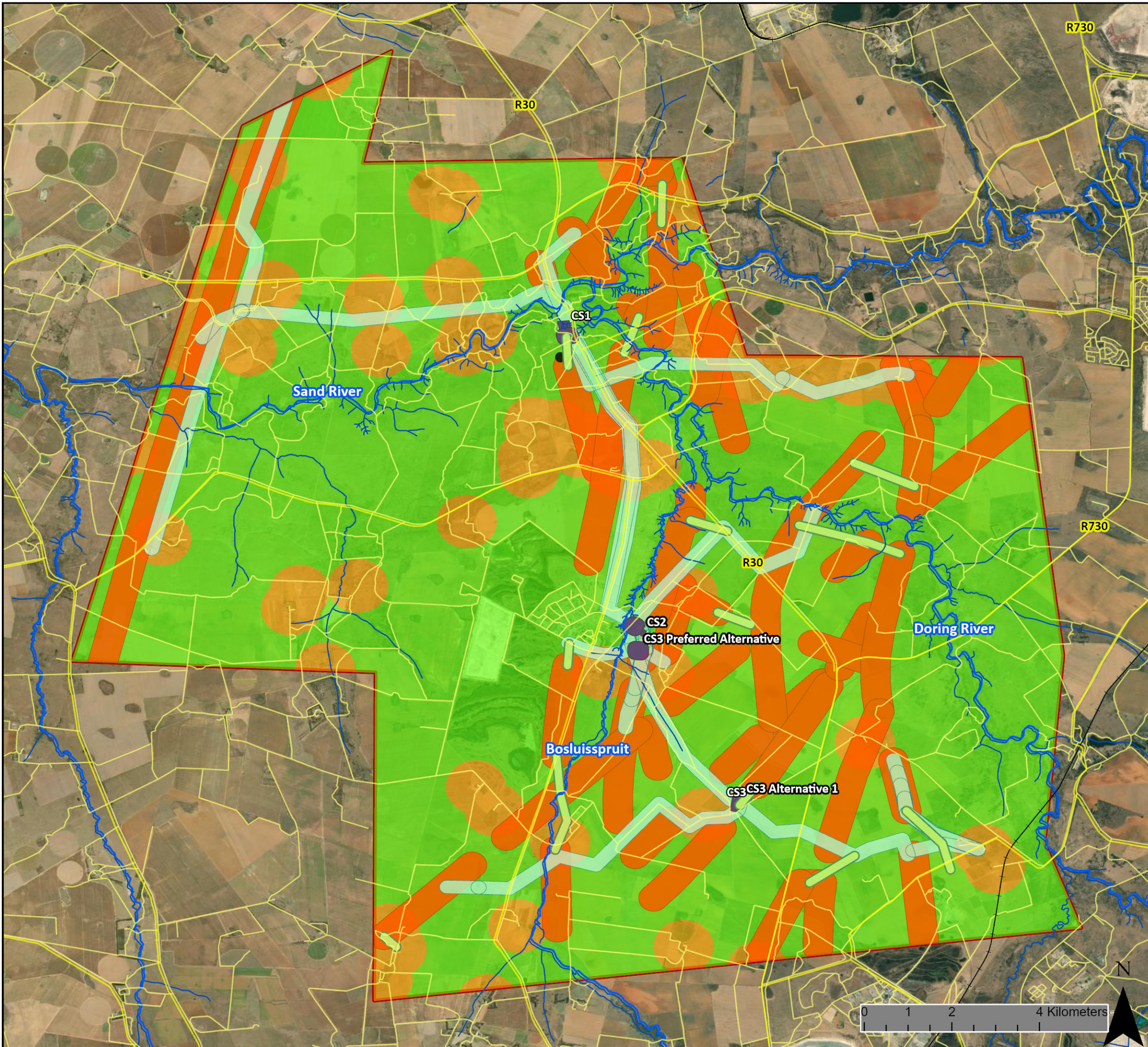
- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Hydrology Sensitivity
 - Sensitivity Ranking
 - Least Concern
 - High



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 EIA Hydro Sens

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW

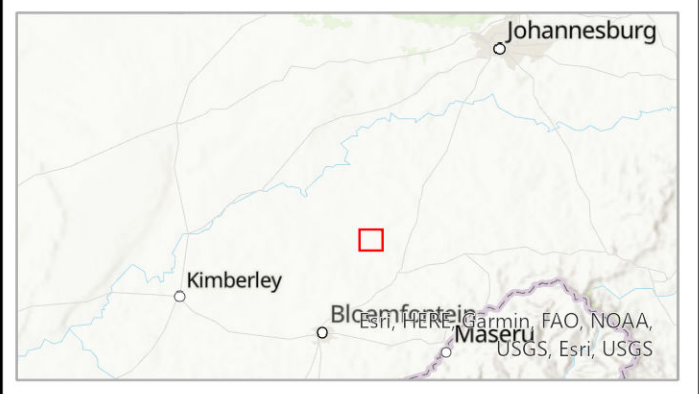




EIA Phase Noise Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

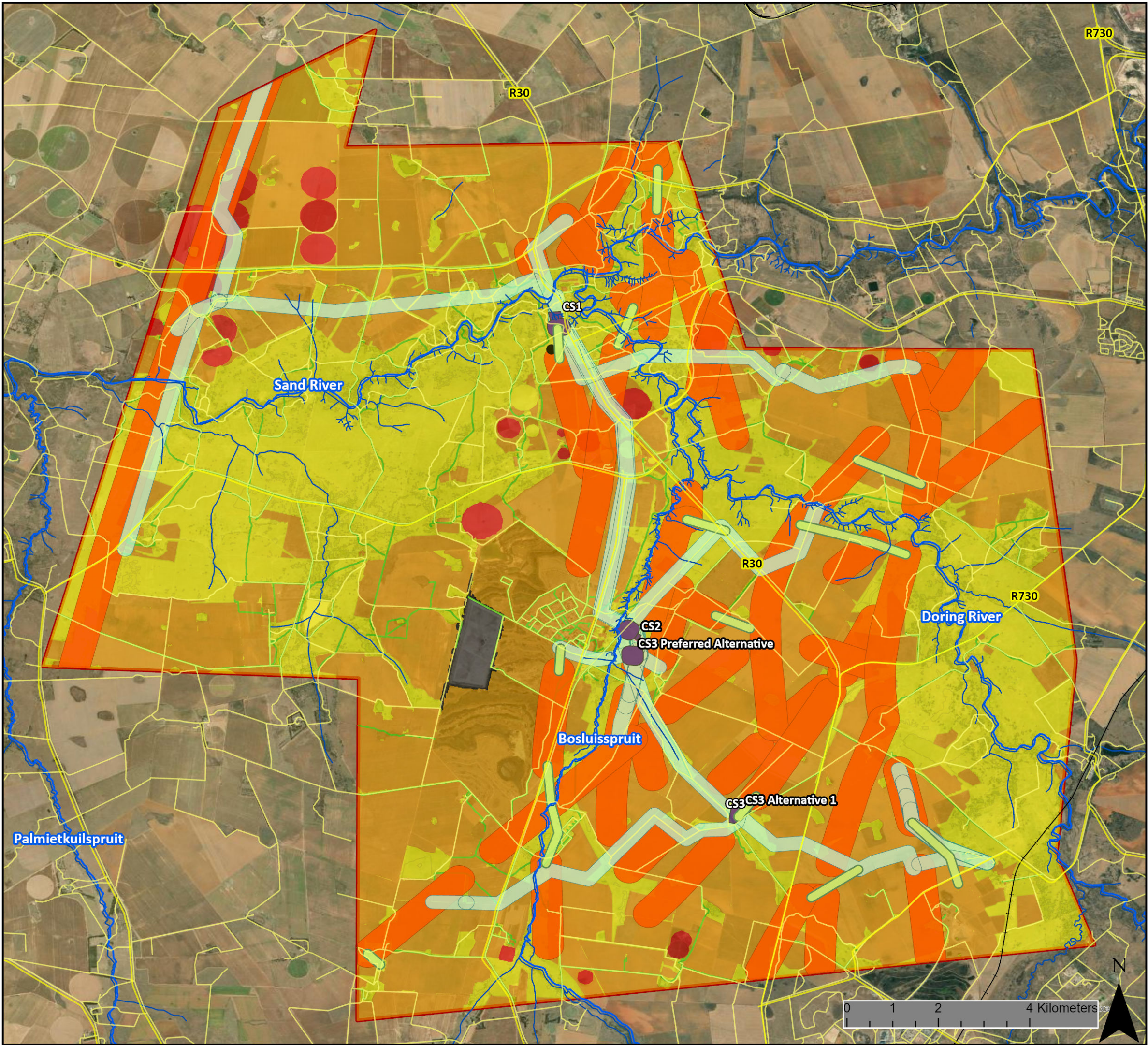
- Legend**
- Study Area
 - Places
 - Railway
 - Roads
 - Rivers
 - Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Noise Sensitivity**
 - Sensitivity Ranking: Least Concern
 - Sensitivity Ranking: Medium



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473_EIA Noise

Date: 2022/10/14
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW



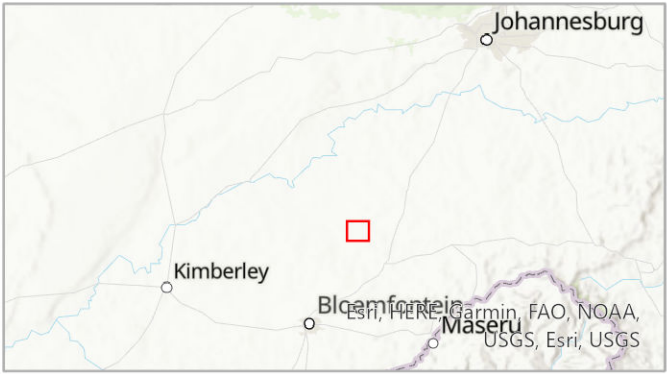


EIA Phase Social Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Social Sensitivity
 - Sensitivity Rating
 - Least Concern
 - Low
 - Medium
 - High
 - No-Go

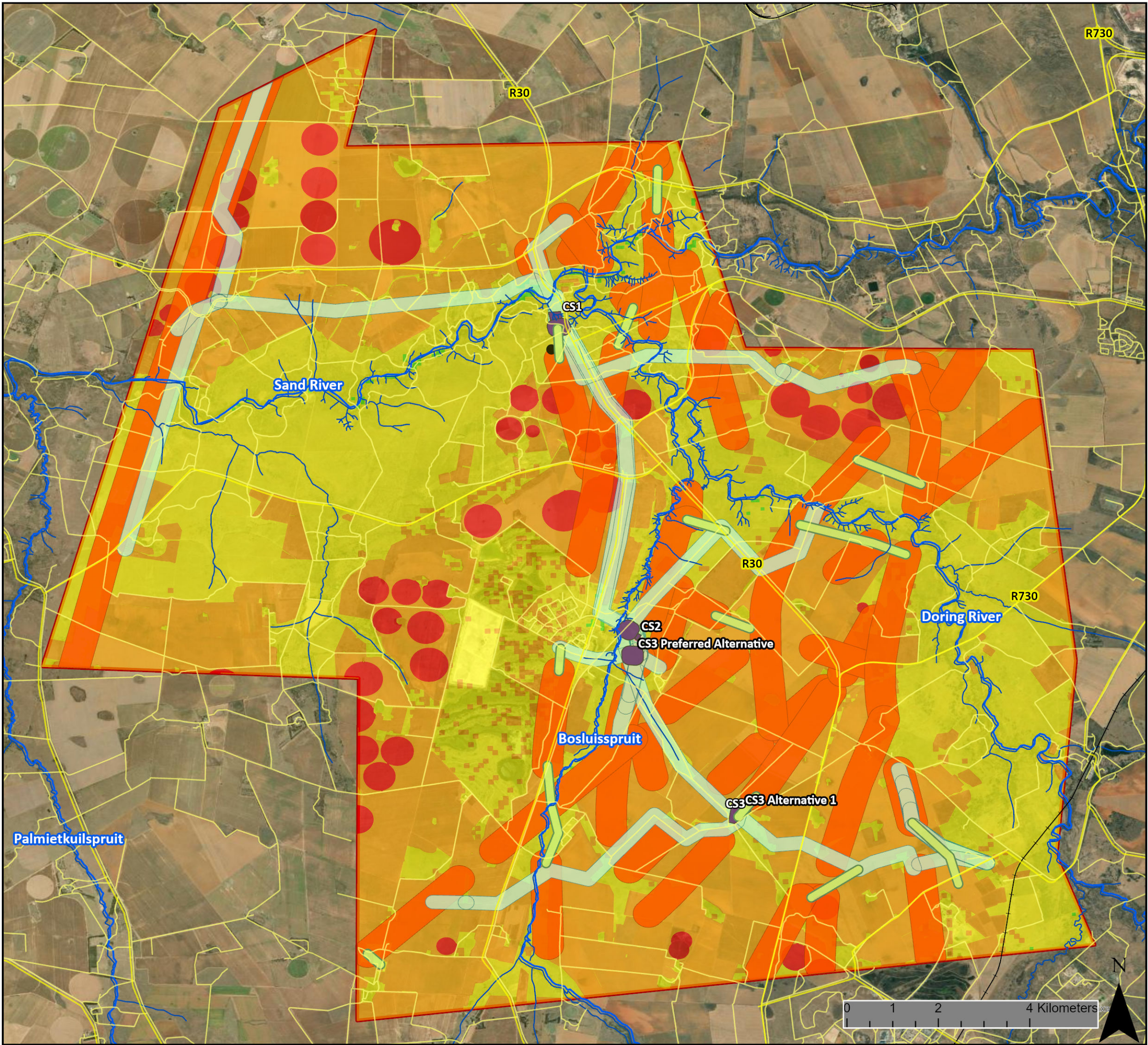


Data Sources:

CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473_EIA Social Sens

Date: 2022/10/13
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW



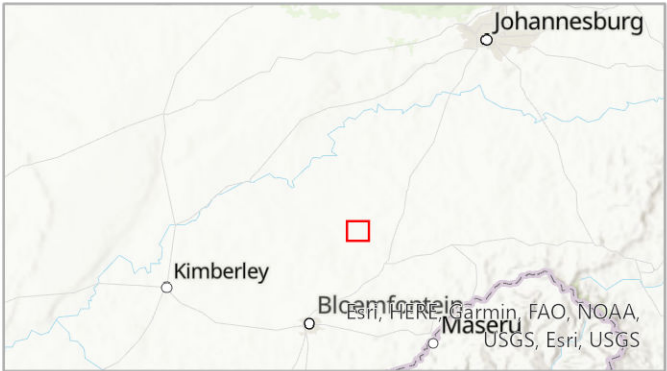


EIA Phase Soil Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

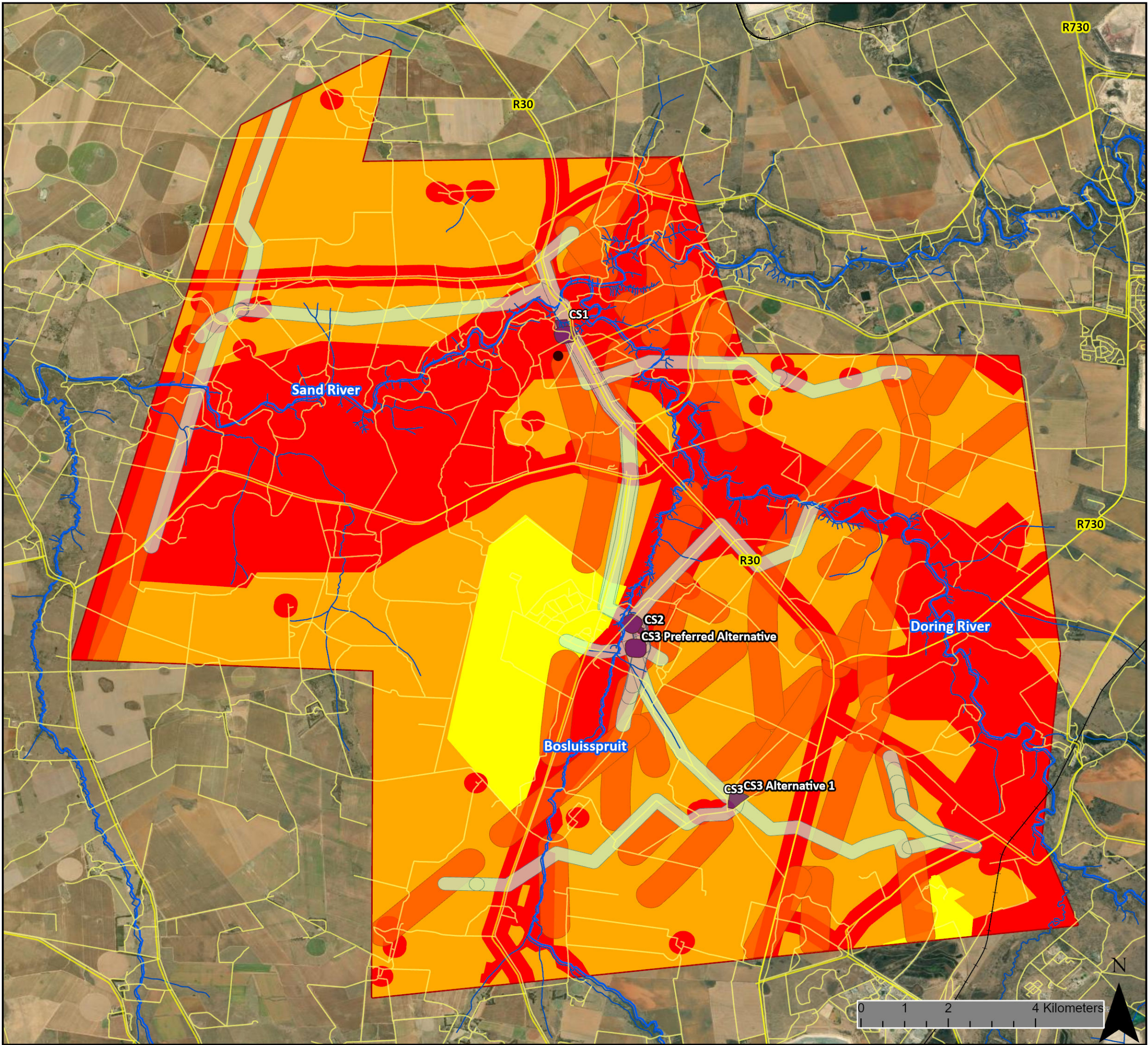
- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Soil Sensitivity
 - Sensitivity Ranking
 - Least Concern
 - Low
 - Medium
 - High



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 Soils

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW

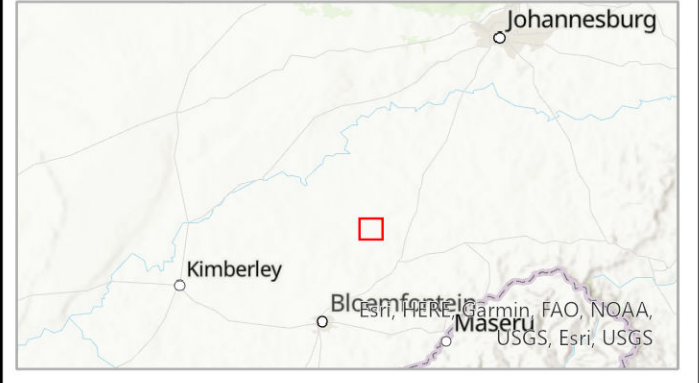




EIA Phase Visual Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

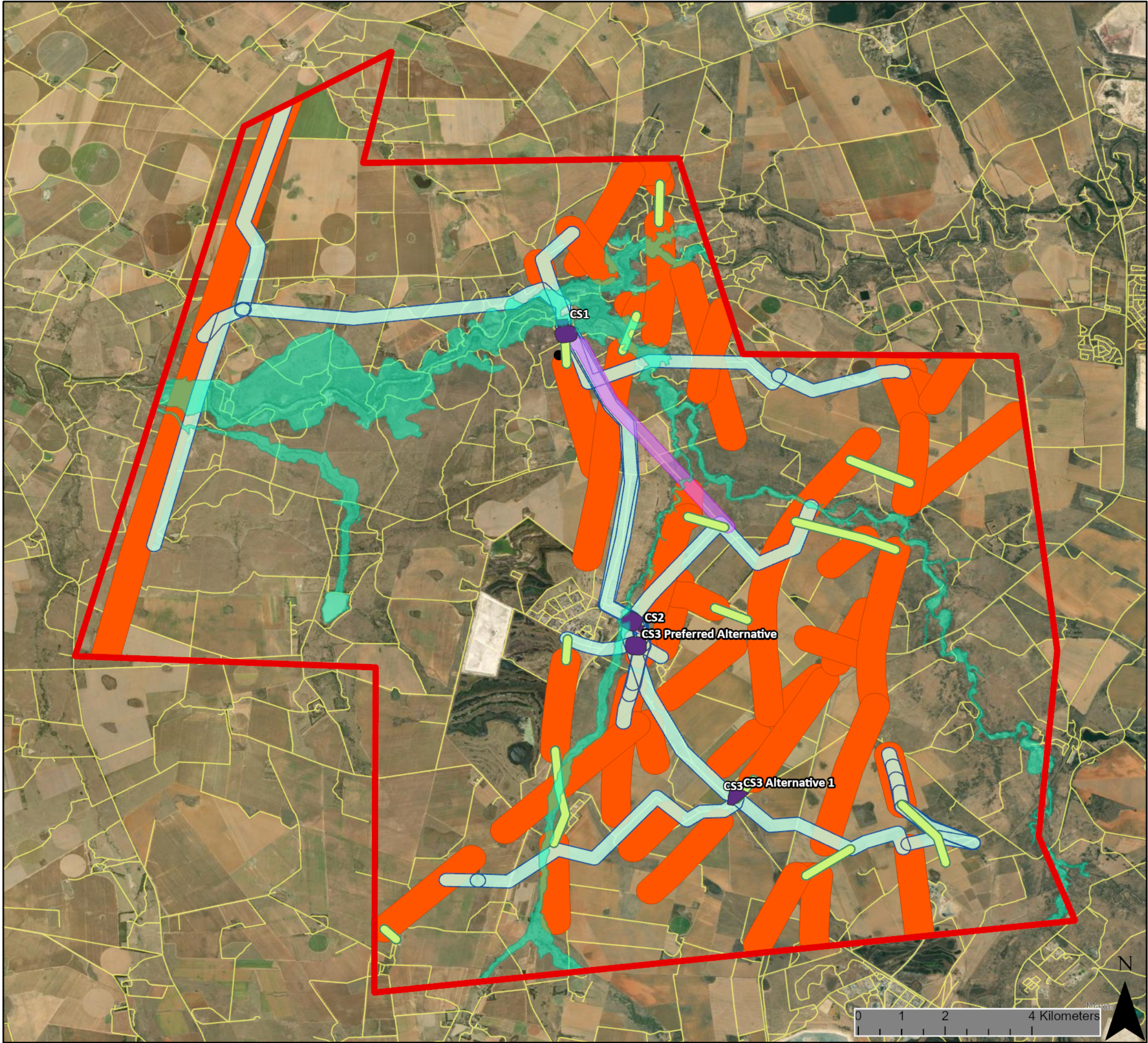
- Legend**
- Study Area
 - Places
 - Railway
 - Roads
 - Rivers
 - Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Points
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Visual Sensitivity**
 - Sensitivity Ranking**
 - Low
 - Medium
 - High



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473_EIA Visual

Date: 2022/10/19
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW





100-year Floodline

1473 Tetra4 Cluster 2 Project

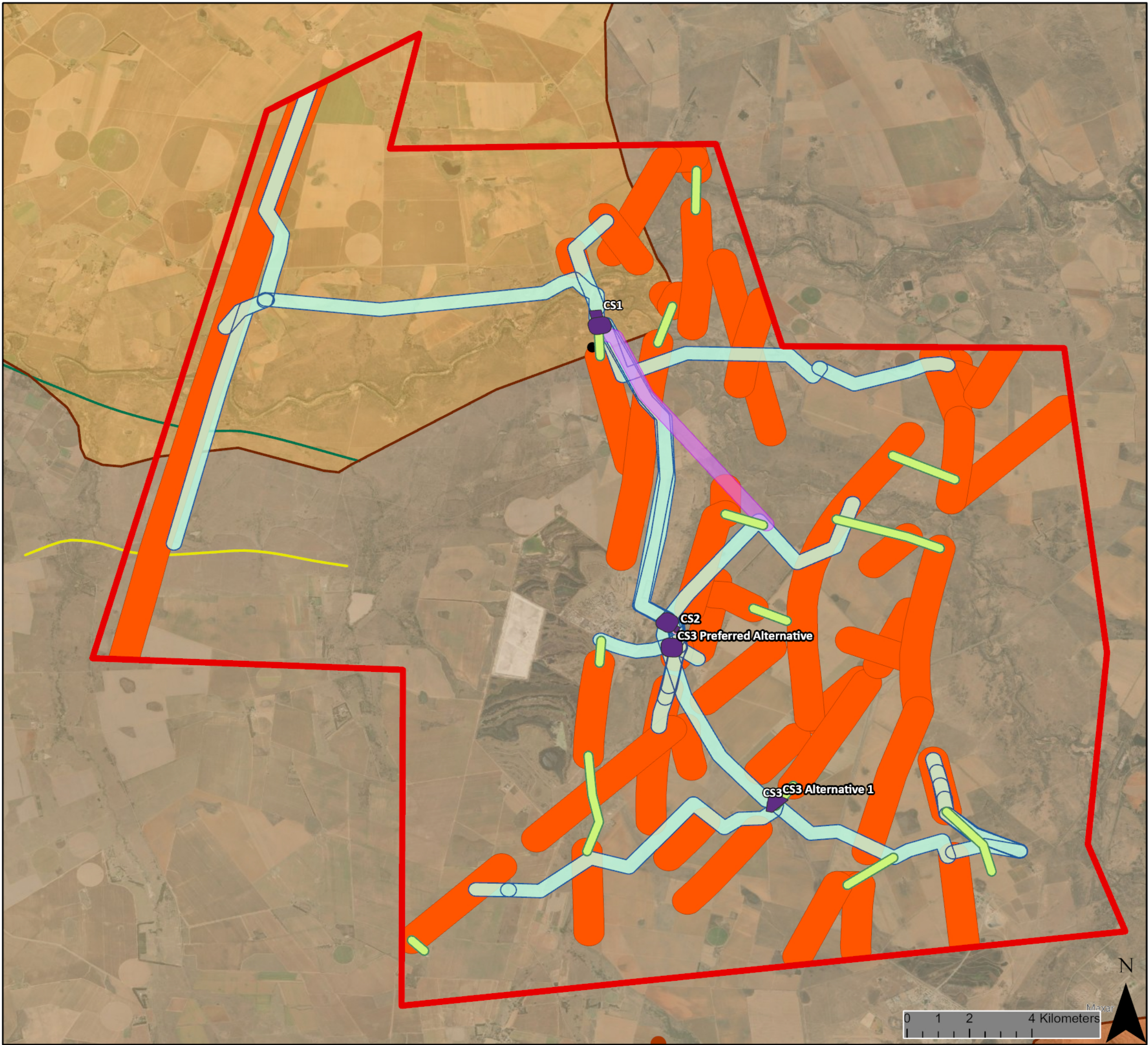
Legend

- Study Area
- Places
- Roads
- 100-year Floodline
- Infrastructure
 - Compressor Stations
 - Extensions
 - LNG/LHe Plant
 - Transmission Loop Buffer (300m)
 - Pipeline (300m)
 - Wells Tansects (600m)

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Floodline
Date: 2022/07/20

EIMS Ref: Surface Water Features
Compiled: CM
Reviewed: BW
Approved: LW





Simplified Geology

1473 Tetra4 Cluster 2 Project

Legend

- Study Area
- Places
- Infrastructure**
 - LNG/LHe Plant
 - Compressor Stations
 - Extensions
- Project Footprint Buffer Zones**
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Transmission Loop Buffer (300m)
- Geology**
 - Geological Contacts
 - Lithological Lines
 - Structural Lines
- Geological Points**
 - Description: Pipe, kimberlite

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Geology

Date: 2022/07/19
EIMS Ref: Geology
Compiled: CM
Reviewed: BW
Approved: LW





Simplified Land Cover

1473 Tetra4 Cluster 2 Project

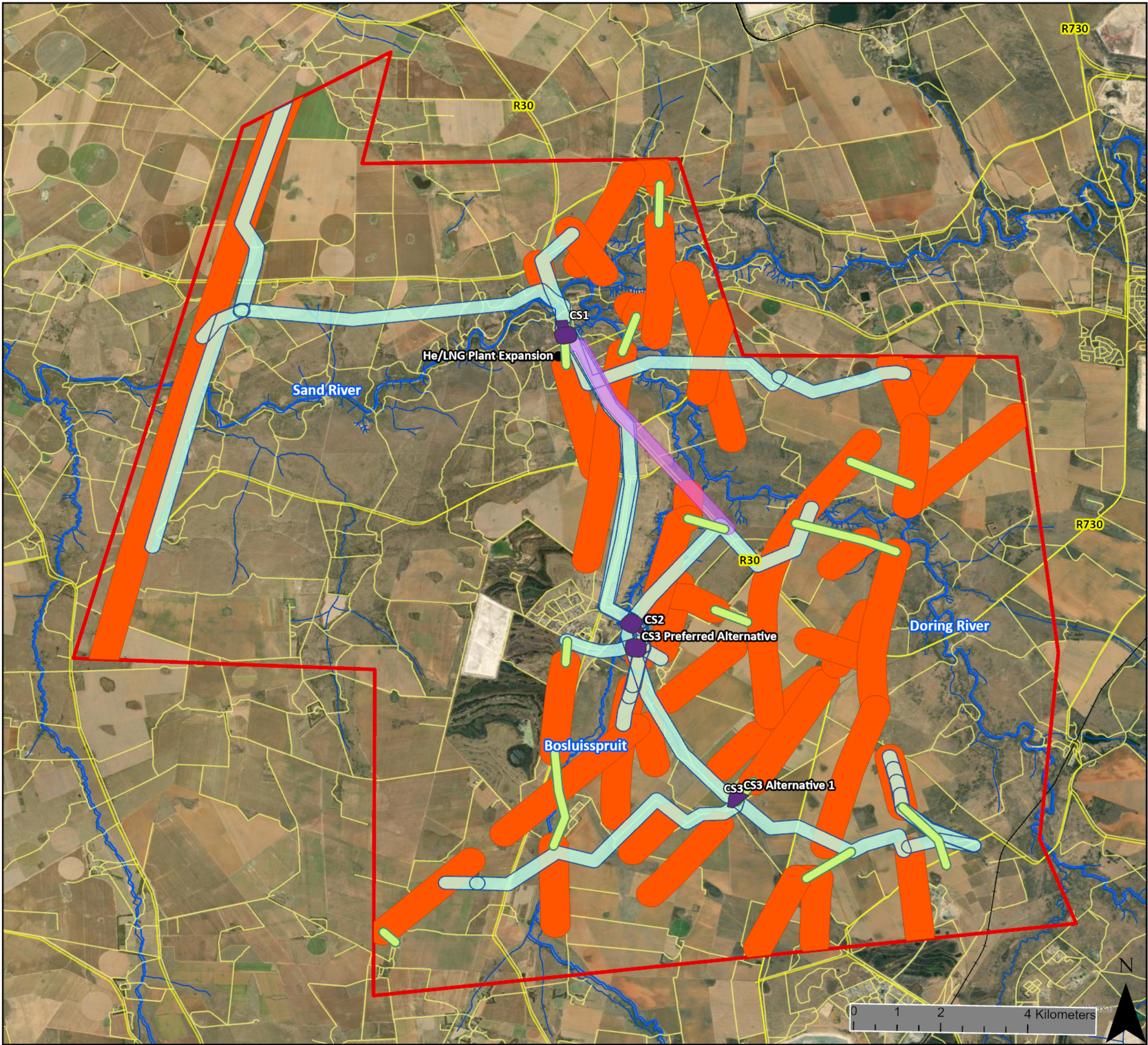
Legend

- Study Area
- Infrastructure
 - Compressor Stations
 - Extensions
 - LNG/LHe Plant
- Project Footprint Buffer Zones
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Transmission Loop Buffer (300m)
- Land Cover
 - Azonal & Wetlands
 - Cultivated Commercial Rainfed
 - Cultivated Irrigated
 - Grassland
 - Mines
 - Open water
 - Urban

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Land Use
Date: 2022/07/19

EIMS Ref: Land Cover
Compiled: CM
Reviewed: BW
Approved: LW





Locality Map

1473 Tetra4 Cluster 2 Project

Legend

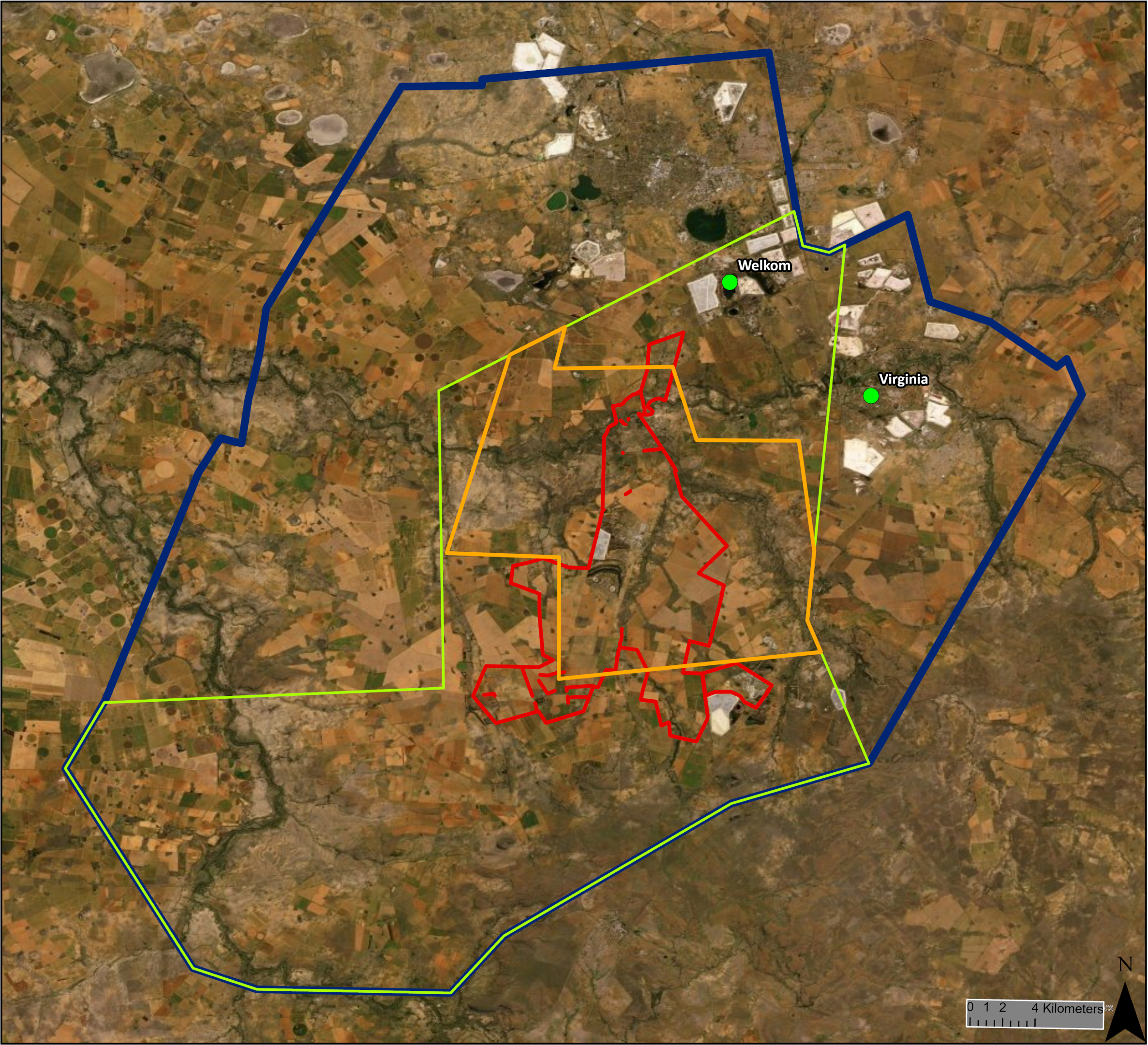
- Study Area
- Places
- Railway
- Roads
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
- Project Footprint Buffer Zones**
 - Pipeline (300m)
 - Wells Tansects (600m)
 - Transmission Loop Buffer (300m)
 - Extensions



Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Locality Map

Date: 2022/07/19
EIMS Ref: Locality
Compiled: CM
Reviewed: BW
Approved: LW

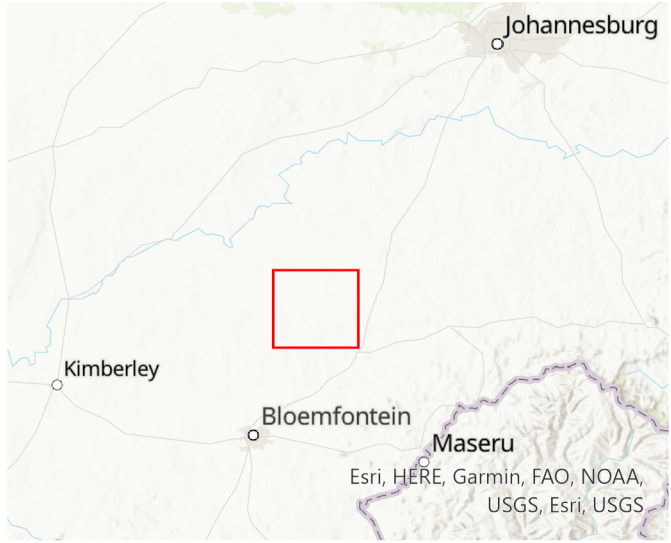




Project History and Mineral Tenure

1473 Tetra4 Cluster 2

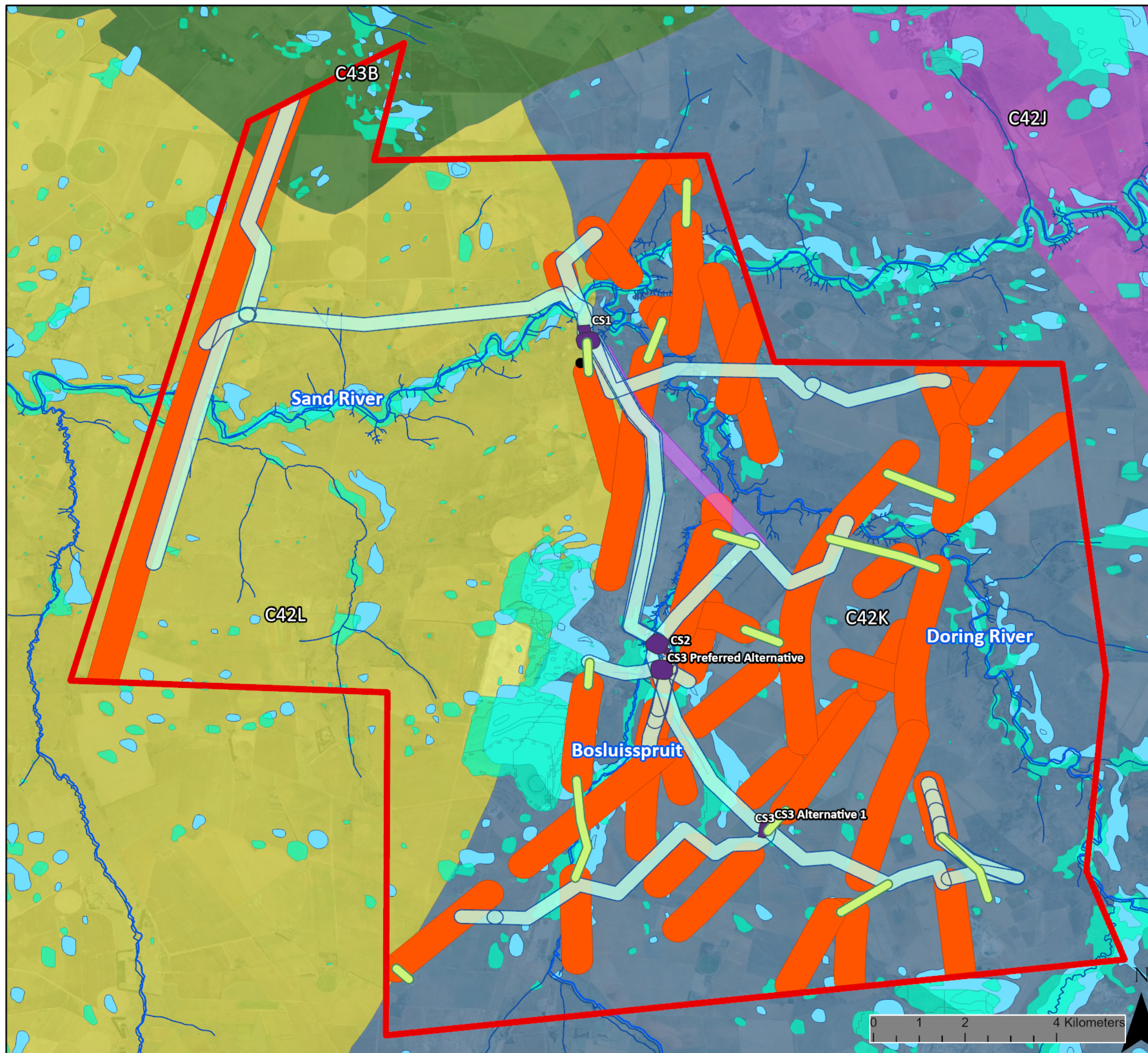
- Legend**
-  Production Right Boundary (2010 EMPr) ... 1
 -  Approved 2011 Study Area
 -  Cluster 1 Approved Area (2017)
 -  Cluster 2 Application Area (2022)
 -  Places



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Project History and Mineral Tenure

Date: 2022/06/29
EIMS Ref: Project History
Compiled: CM
Reviewed: BW
Approved: LW





Quaternary Catchment and Surface Water Features

1473 Tetra4 Cluster 2 Project

Legend

- Study Area
- Quaternary Catchment**
 - C42J
 - C42K
 - C42L
 - C43B
- Rivers
- NFEPA Wetlands
- Wetlands (National Wetland Map)
- Infrastructure**
 - Compressor Stations
 - Extensions
 - LNG/LHe Plant
 - Transmission Loop Buffer (300m)
 - Pipeline (300m)
 - Wells Tansects (600m)

Data Sources:

CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: QC and SW
Date: 2022/06/22

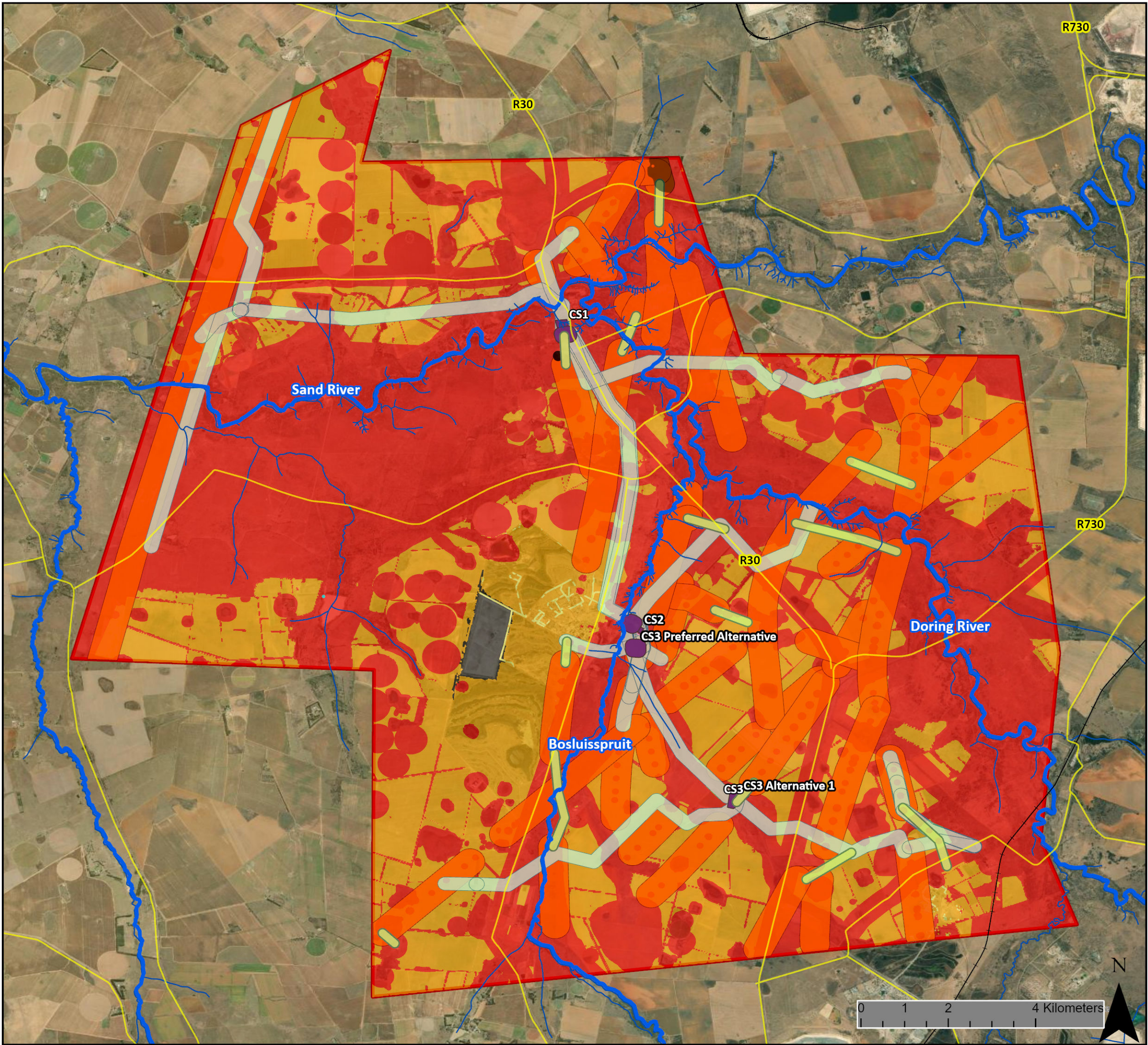
EIMS Ref: Quaternary Catchment

Compiled: CM

Reviewed: BW

Approved: LW



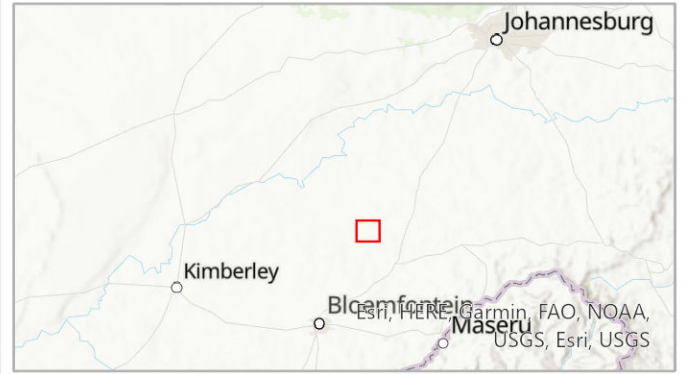


EIA Risk Based Combined Sensitivity Map

1473 Tetra4 Phase 2 BA WULA

Legend

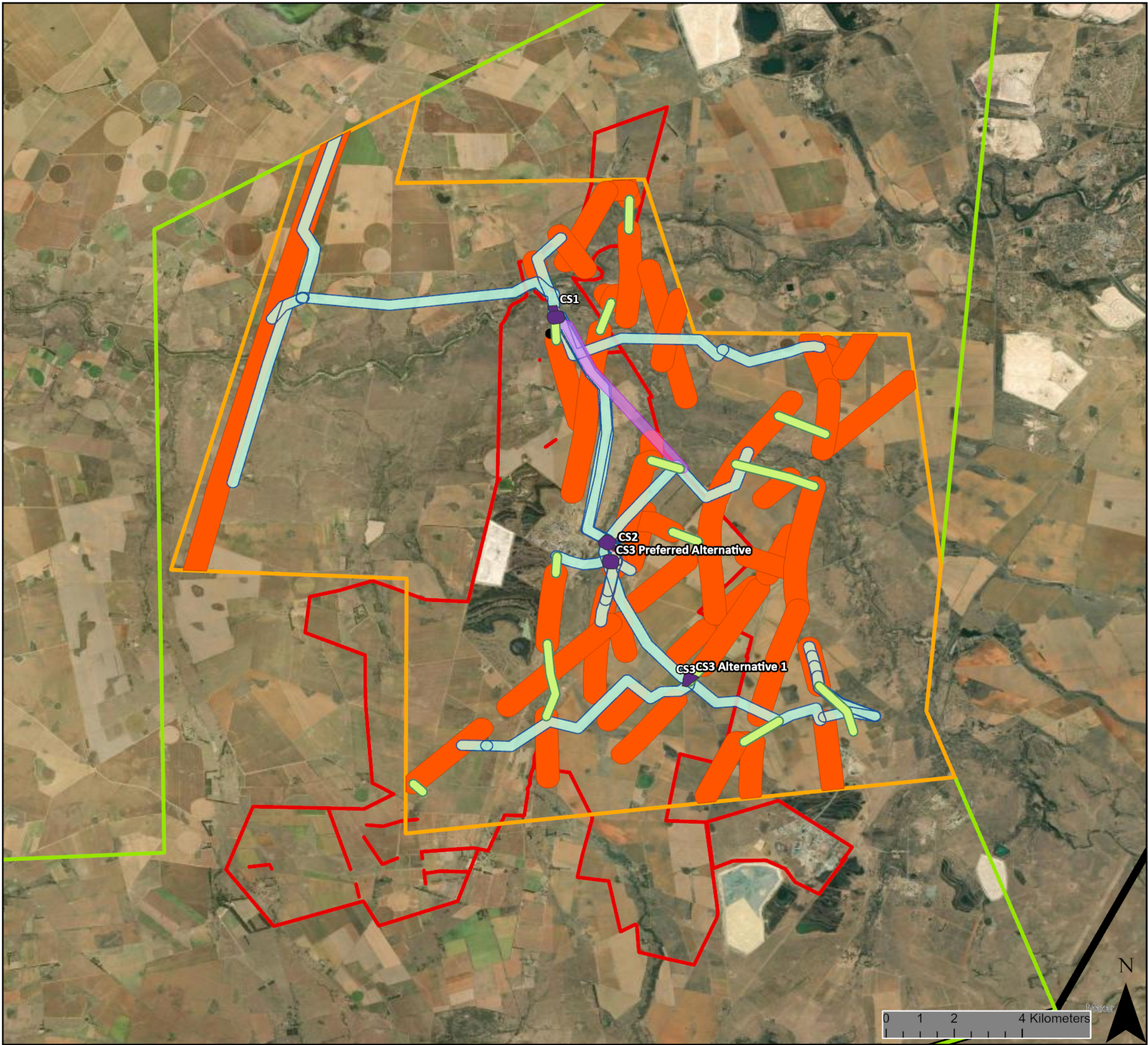
- Study Area
- Places
- Railway
- Rivers
- Infrastructure**
 - Compressor Stations
 - LNG/LHe Plant
 - Extensions
 - Pipeline (300m)
 - Wells Tansects (600m)
- Risk Adverse Sensitivity Ranking**
 - Low
 - Medium
 - High
 - No-Go



Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1473 Combined Sensitivity Map

Date: 2022/10/18
EIMS Ref: 1473
Compiled: CM
Reviewed: BW
Approved: LW





Site Plan

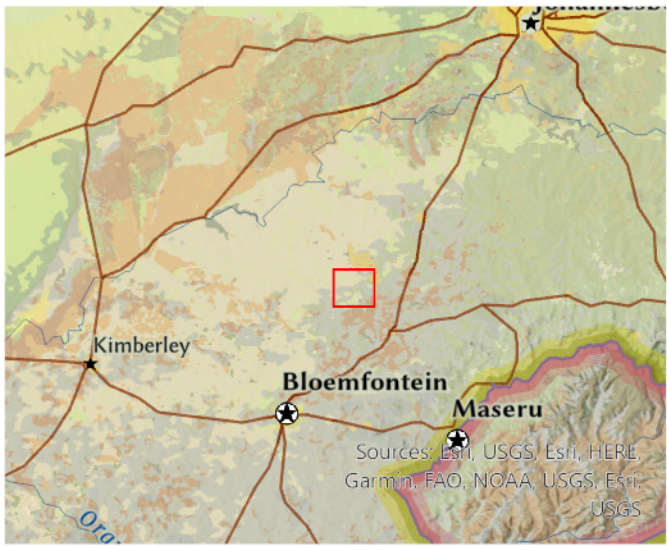
1473 Tetra4 Cluster 2 Project

Legend

- Approved 2011 Study Area
- Cluster 1 Approved Area (2017)
- Cluste 2 Application Area (2022)

Infrastructure

- Compressor Stations
- Extensions
- LNG/LHe Plant
- Transmission Loop Buffer (300m)
- Pipeline (300m)
- Wells Tansects (600m)

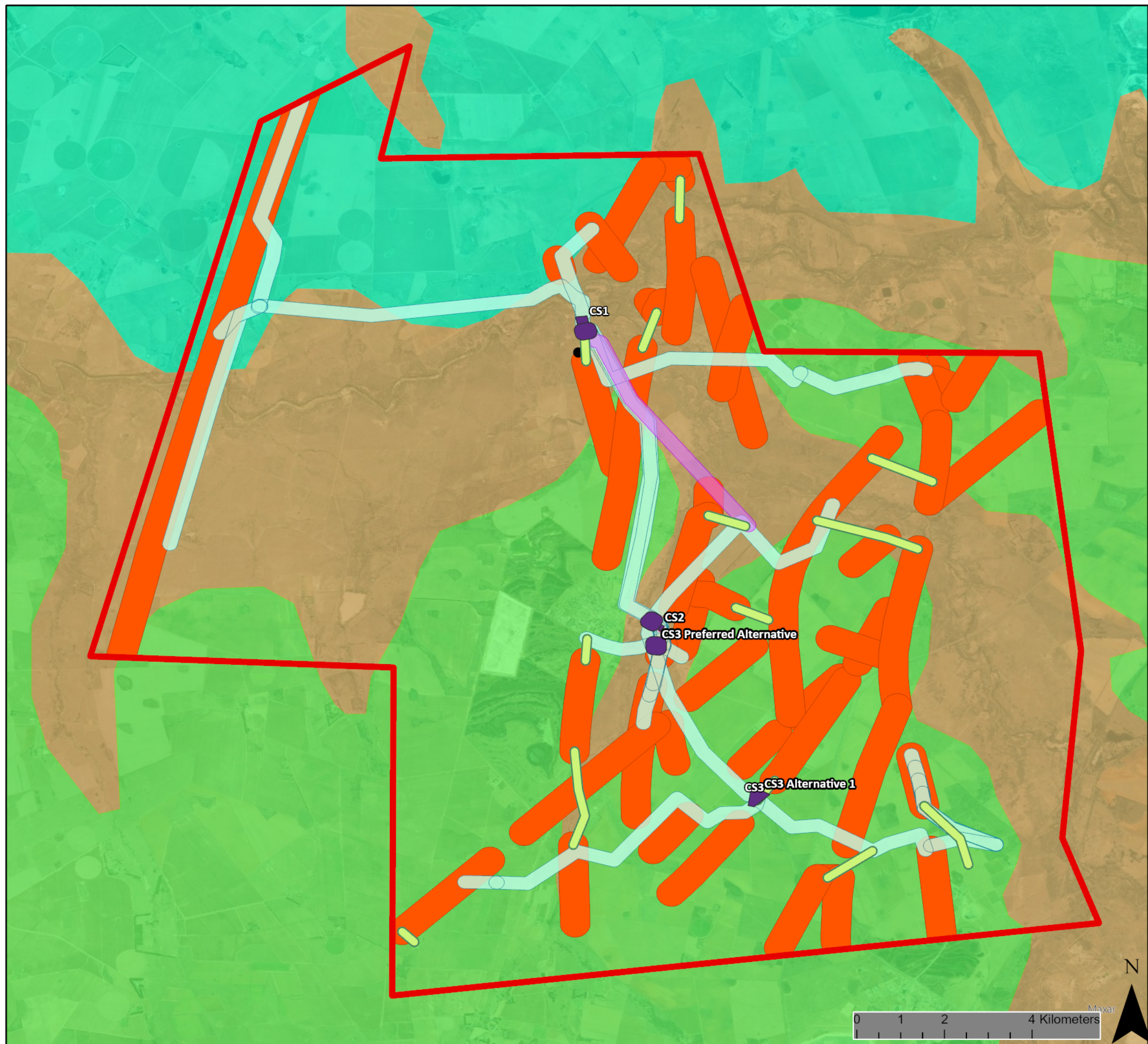


Data Sources:

CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Site Plan

Date: 2022/07/19
EIMS Ref: Project History
Compiled: CM
Reviewed: BW
Approved: LW





Soils

1473 Tetra4 Cluster 2 Project

Legend



Study Area

Soil Types

LVk (Haplic Lixisols)

Gradient:10- 30 %

Relief Intensity: 100- 250 m.km-2



LVk (Chromi-Calcaric Luvisols)

Gradient:10- 30 %

Relief Intensity: 100- 250 m.km-2



LXk (Haplic Lixisols)

Gradient:10- 30 %

Relief Intensity: 100- 250 m.km-2



Infrastructure



Compressor Stations



Extensions



LNG/LHe Plant

Project Footprint Buffer Zones



Pipeline (300m)



Wells Tansects (600m)



Transmission Loop Buffer (300m)

Data Sources:

CSG; ESRI, SANBI, DHSWS

Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: Soils

Date: 2022/07/19

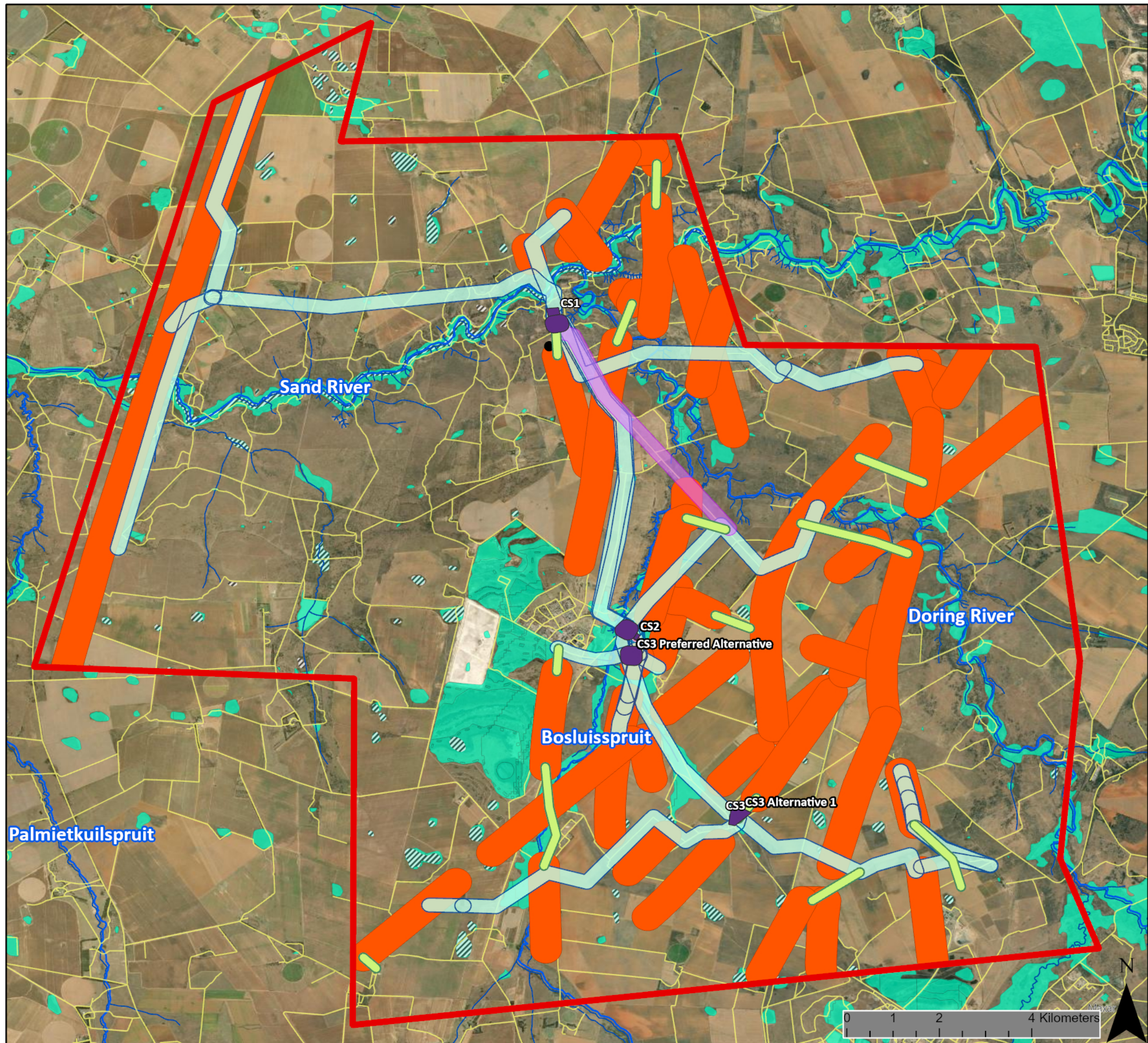
EIMS Ref: Soils

Compiled: CM

Reviewed: BW

Approved: LW





Surface Water Features

1473 Tetra4 Cluster 2 Project

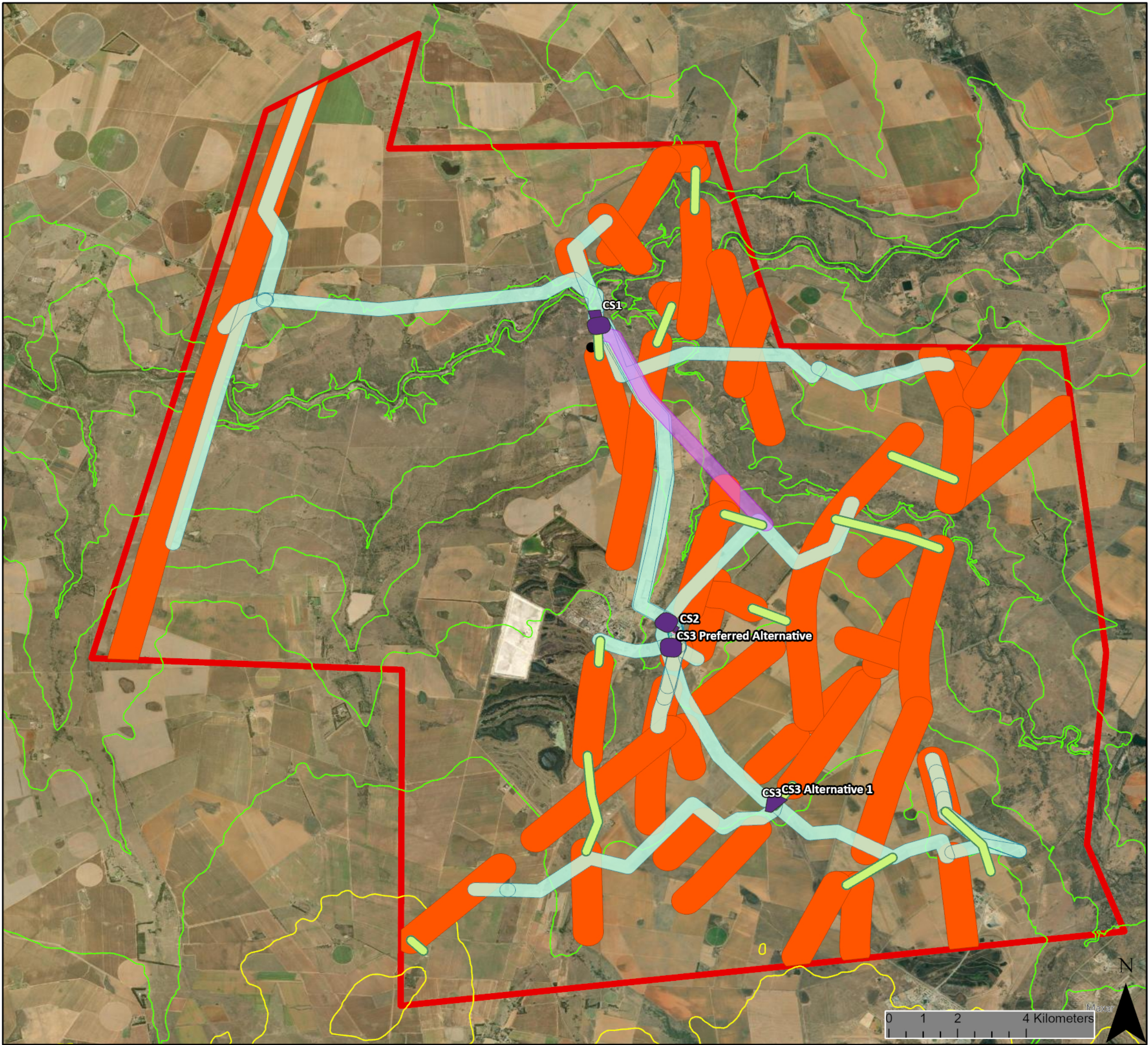
Legend

- Study Area
- Places
- Roads
- Rivers
- NFEPA Wetlands
- Wetlands (National Wetlands Map)
- Infrastructure**
 - Compressor Stations
 - Extensions
 - LNG/LHe Plant
 - Transmission Loop Buffer (300m)
 - Pipeline (300m)
 - Wells Tansects (600m)

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Surface Water Features
Date: 2022/07/19

EIMS Ref: Surface Water Features
Compiled: CM
Reviewed: BW
Approved: LW





Topography

1473 Tetra4 Cluster 2 Project

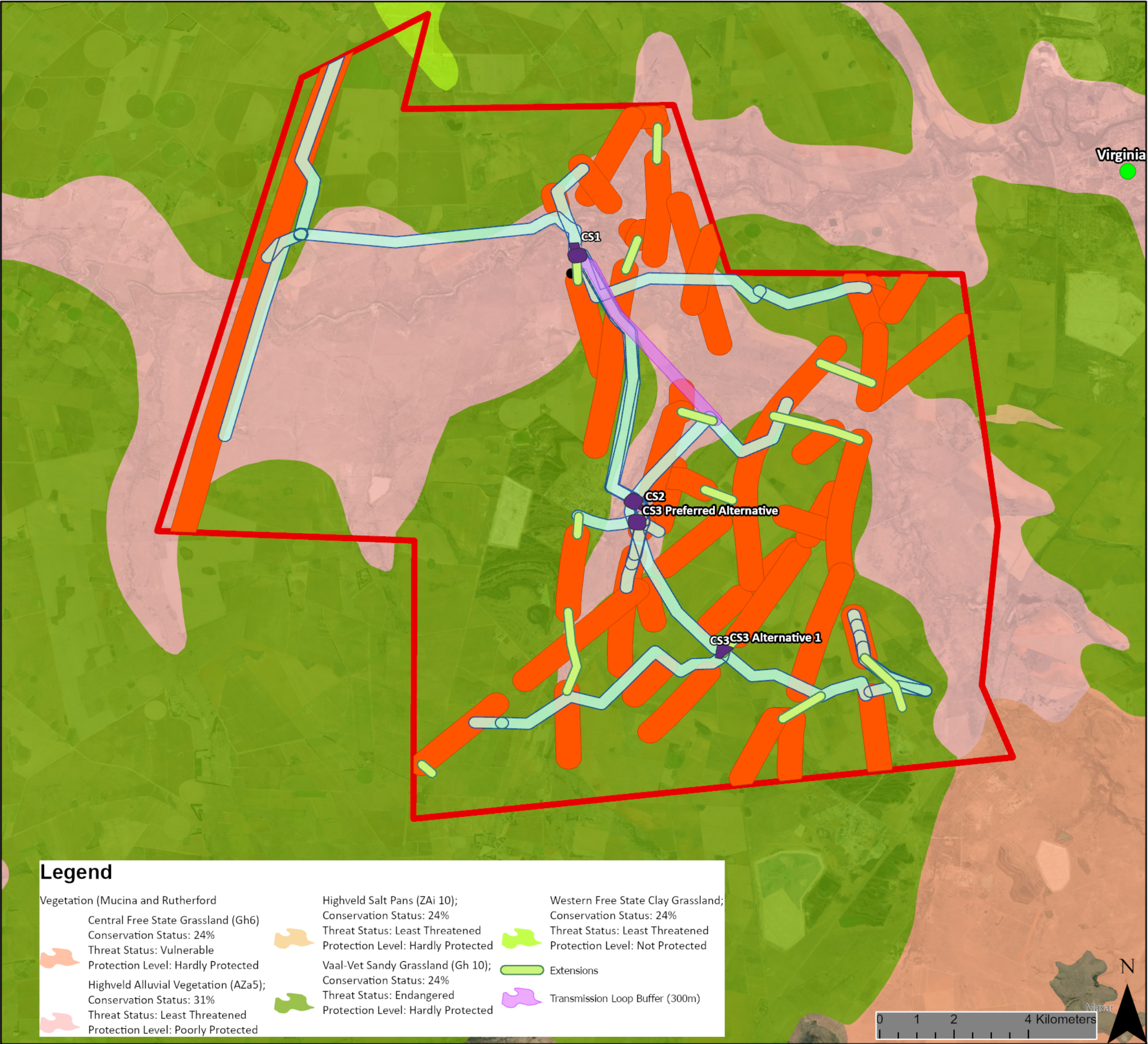
Legend

-  Study Area
-  Places
- Infrastructure**
 -  LNG/LHe Plant
 -  Compressor Stations
 -  Extensions
- Project Footprint Buffer Zones**
 -  Pipeline (300m)
 -  Wells Tansects (600m)
 -  Transmission Loop Buffer (300m)
- Topology**
 -  1280.00000 - 1373.33333
 -  1373.33334 - 1466.66667
 -  1466.66668 - 1560.00000

Data Sources:
CSG; ESRI, SANBI, DHSWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Topology

Date: 2022/06/22
EIMS Ref: Topology
Compiled: CM
Reviewed: BW
Approved: LW





Legend

Vegetation (Mucina and Rutherford)

Central Free State Grassland (Gh6)
 Conservation Status: 24%
 Threat Status: Vulnerable
 Protection Level: Hardly Protected

Highveld Alluvial Vegetation (AZa5);
 Conservation Status: 31%
 Threat Status: Least Threatened
 Protection Level: Poorly Protected



Highveld Salt Pans (ZAI 10);
 Conservation Status: 24%
 Threat Status: Least Threatened
 Protection Level: Hardly Protected

Vaal-Vet Sandy Grassland (Gh 10);
 Conservation Status: 24%
 Threat Status: Endangered
 Protection Level: Hardly Protected



Western Free State Clay Grassland;
 Conservation Status: 24%
 Threat Status: Least Threatened
 Protection Level: Not Protected



Transmission Loop Buffer (300m)

Vegetation

1473 Tetra4 Cluster 2 Project

Legend



Study Area



Places



Transmission Loop Buffer (300m)



Pipeline (300m)



Wells Tansects (600m)



Compressor Stations



Extensions



LNG/LHe Plant

Data Sources:

CSG; ESRI, SANBI, DHSWS
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: Vegetation

Date: 2022/07/19

EIMS Ref: Vegetation

Compiled: CM

Reviewed: BW

Approved: LW

