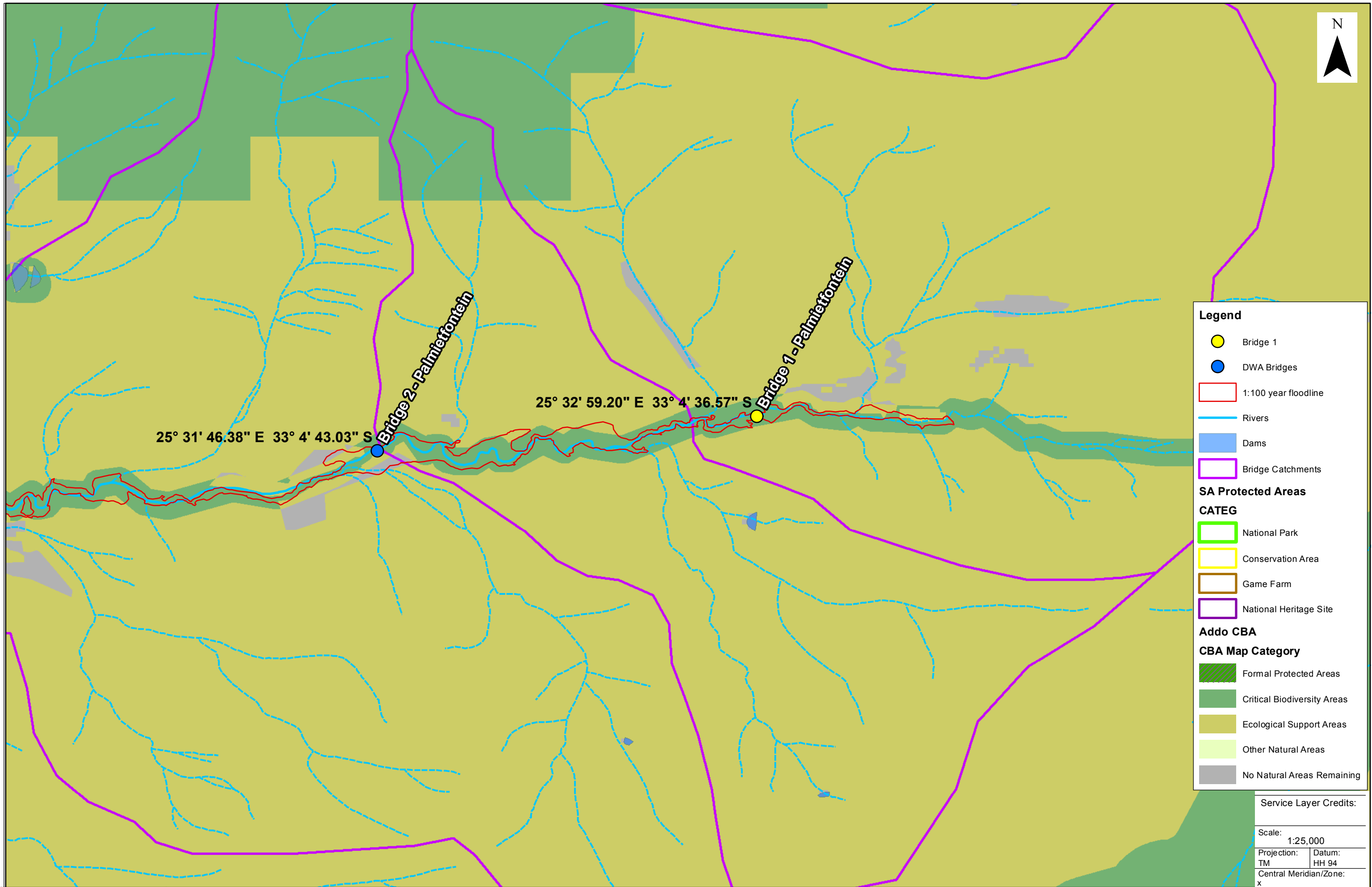


Appendix A: Maps



Legend

- Bridge 1
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	

Date:	Compiled by:
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12/01/2015	PAUJ
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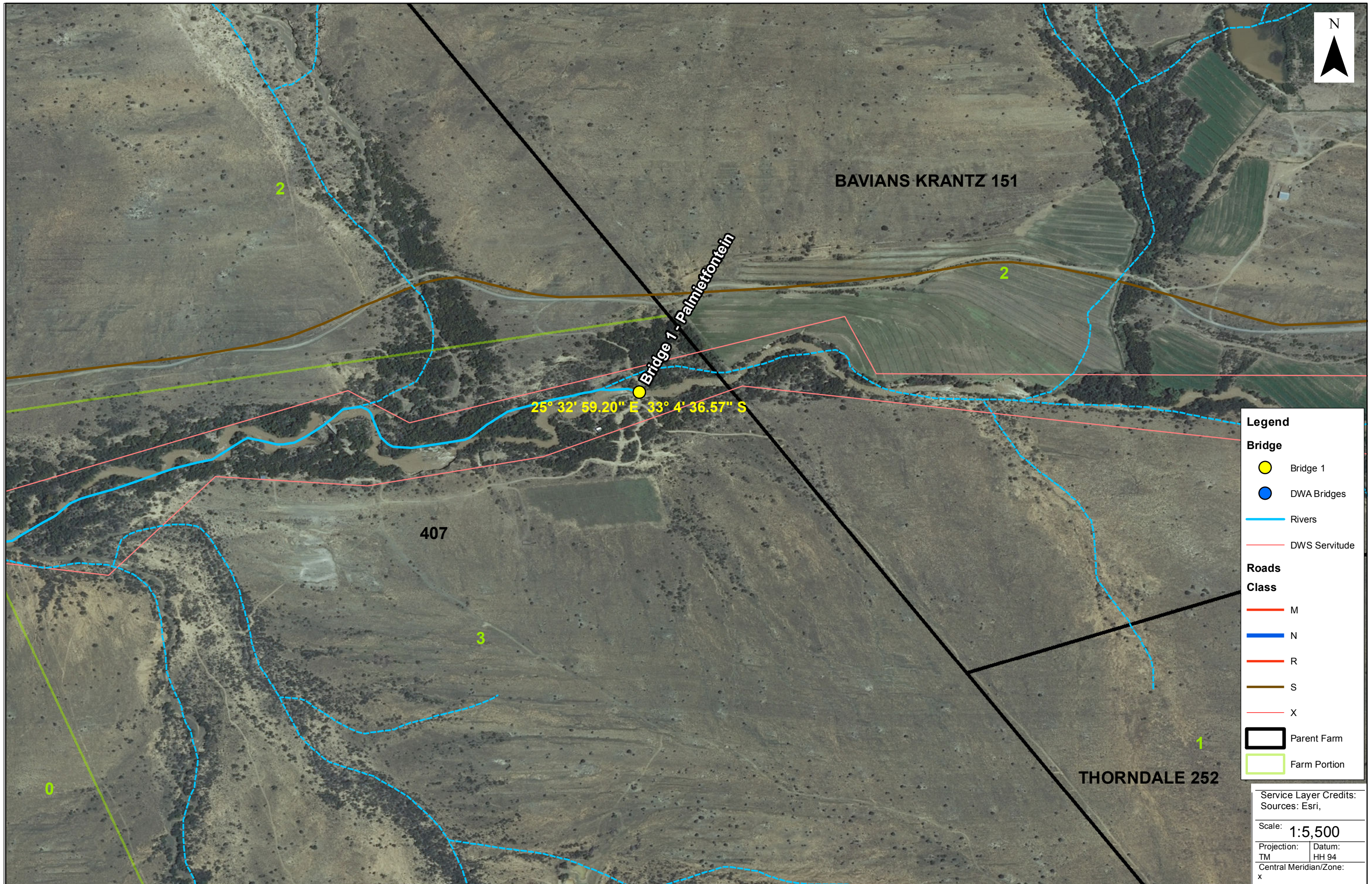
Project No:	
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472748	
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SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Sensitivity Map





Legend

Bridge

- Bridge 1
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads

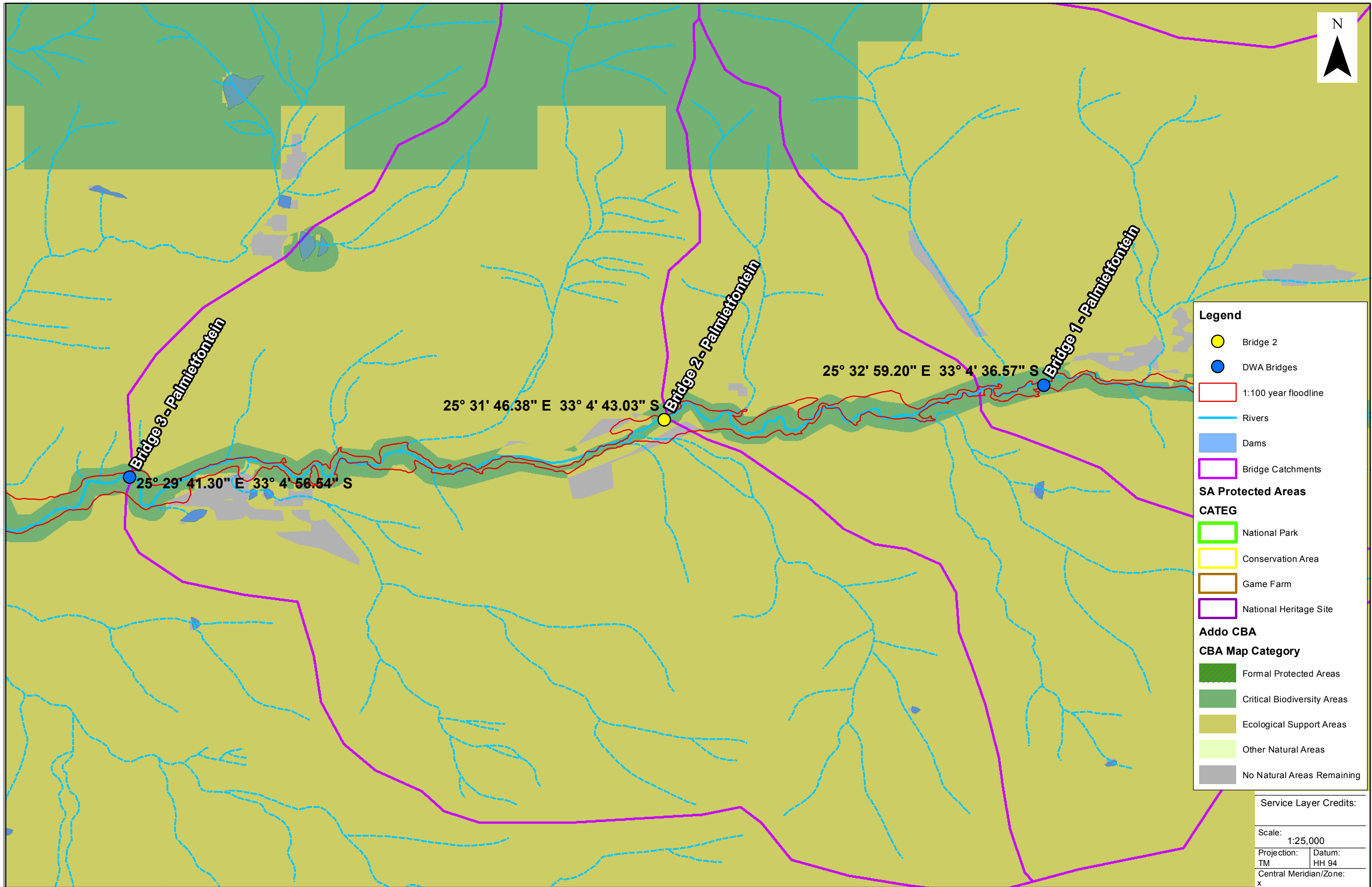
Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm
- Farm Portion

Service Layer Credits: Sources: Esri,	
Scale: 1:5,500	
Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



Legend

- Bridge 2
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Sensitivity Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	

Path: J:\472748_Skoenmakers Rehab\9 GIS\GISPROJ\MXD\Maps for BAR\472748_20150112_Sensitivity.mxd



Legend

Bridge

- Bridge 2
- DWA Bridges

River

- River

Roads

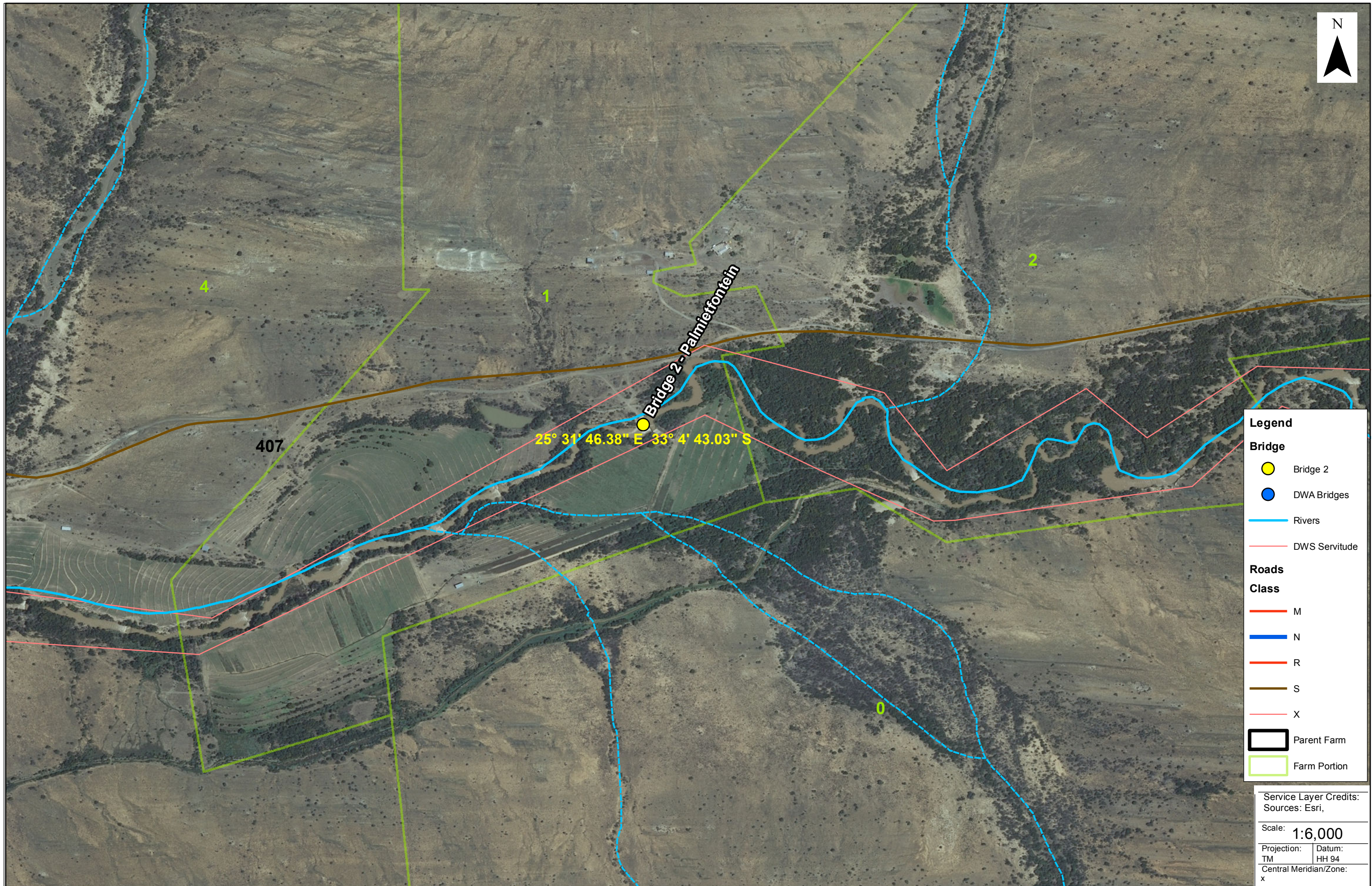
Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

Bridge

- Bridge 2
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads

Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm

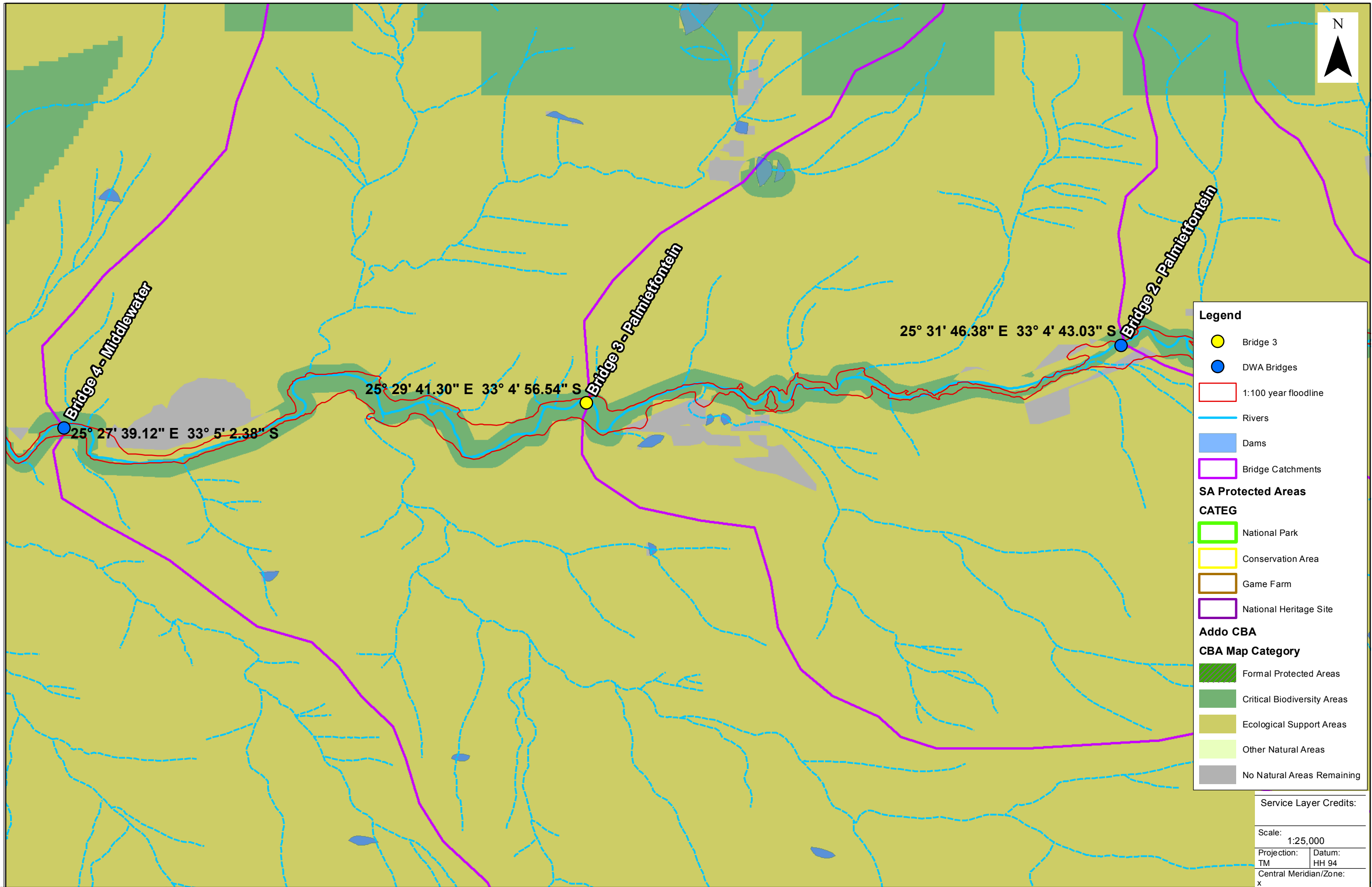
Farm Portion

- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:6,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

- Bridge 3
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

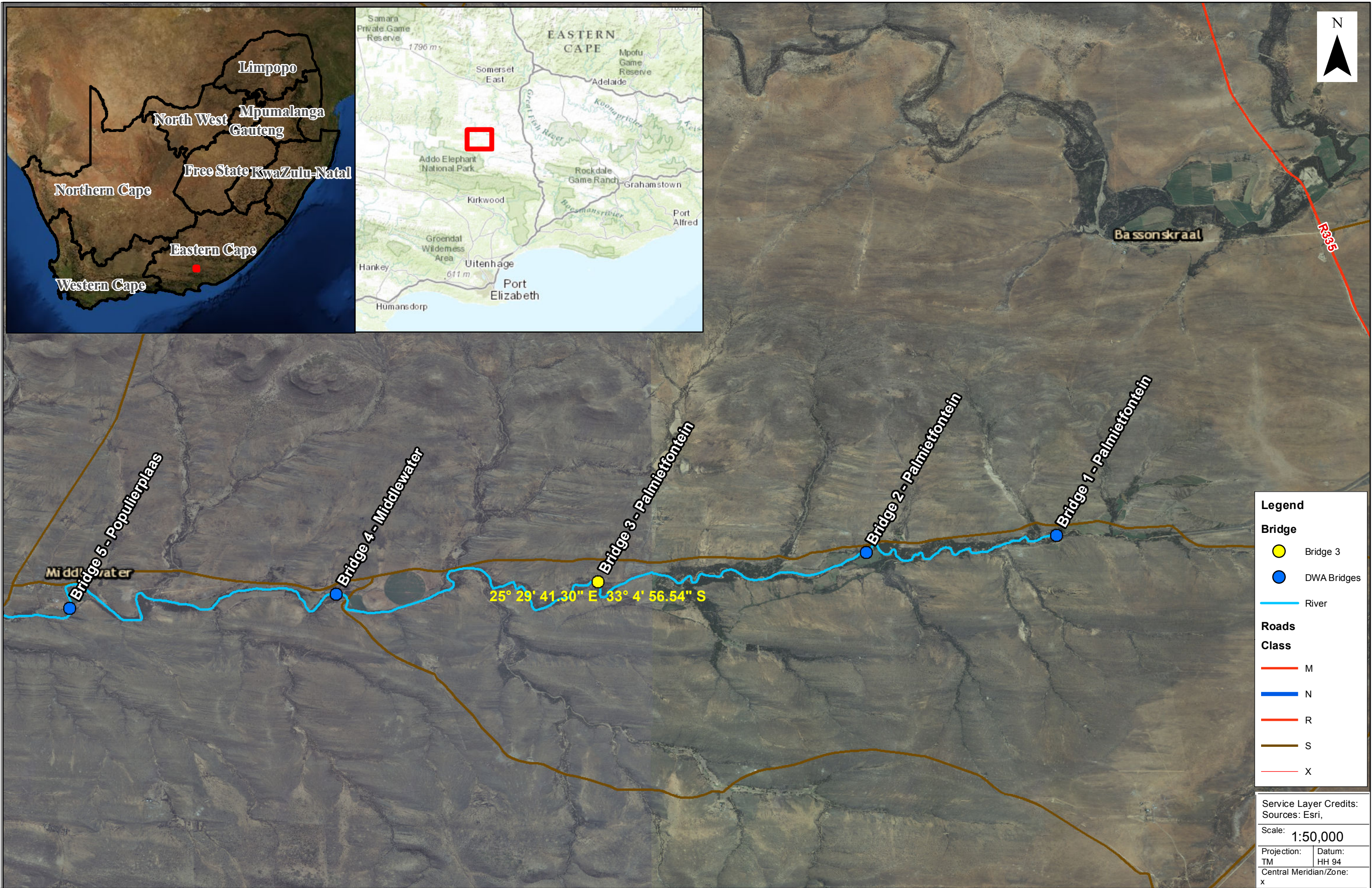
CBA Map Category

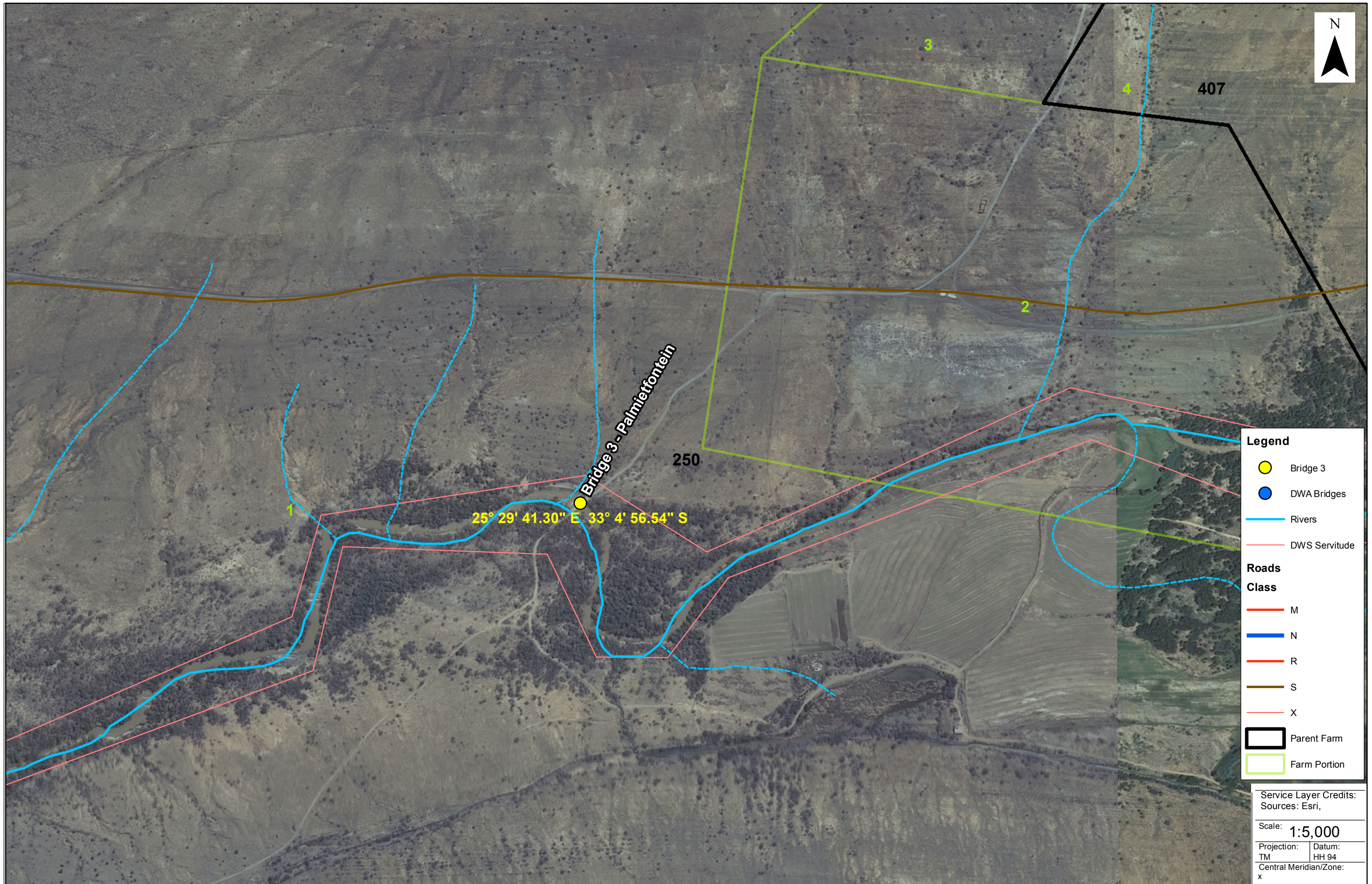
- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	





Legend

- Bridge 3
- DWA Bridges
- Rivers
- DWS Servitude

Roads Class

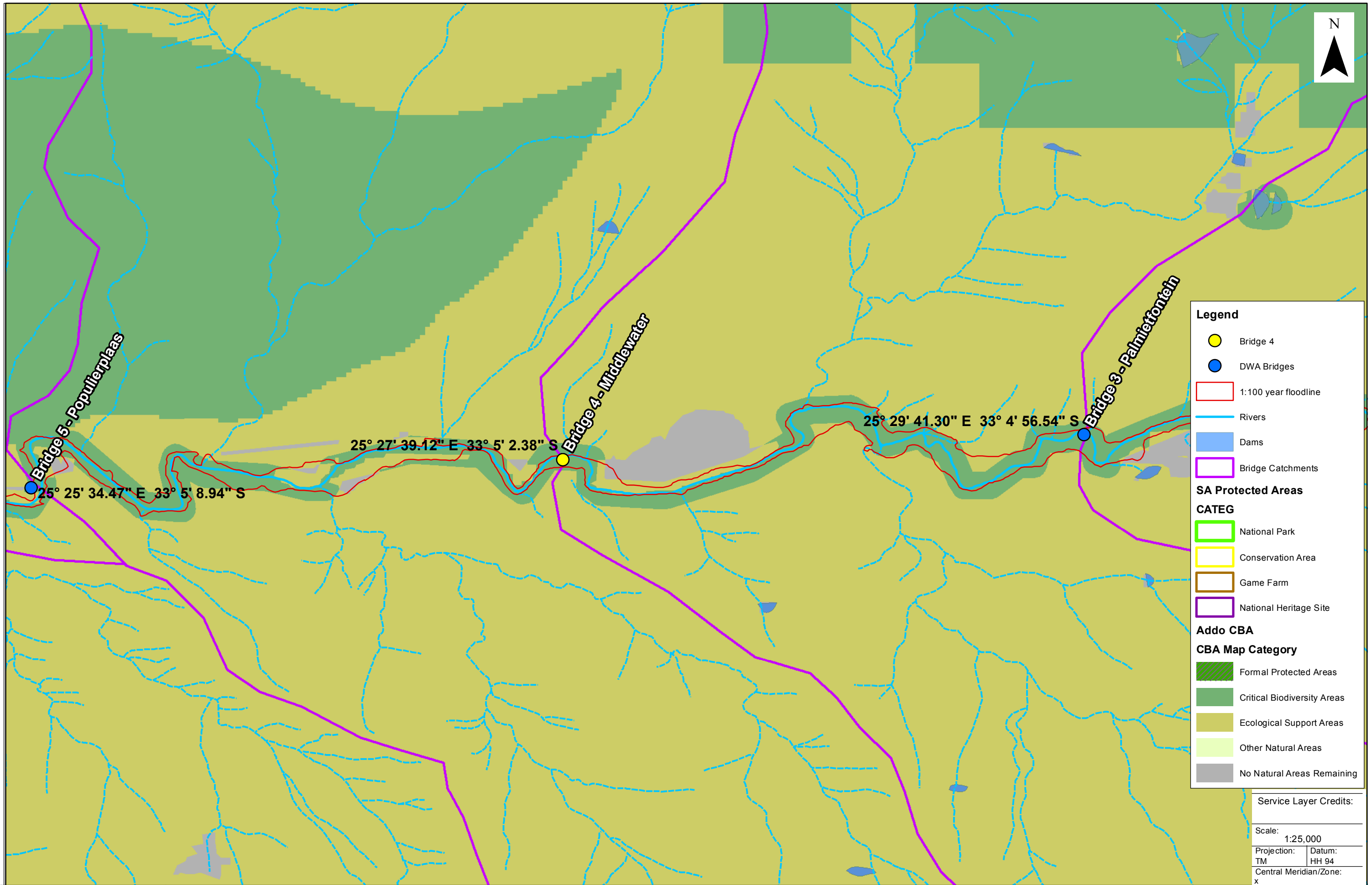
- M
- N
- R
- S
- X

- Parent Farm
- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:5,000**

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



Legend

- Bridge 4
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000
 Projection: TM Datum: HH 94
 Central Meridian/Zone: x



Legend

Bridge

- Bridge 4
- DWA Bridges
- River

Roads

Class

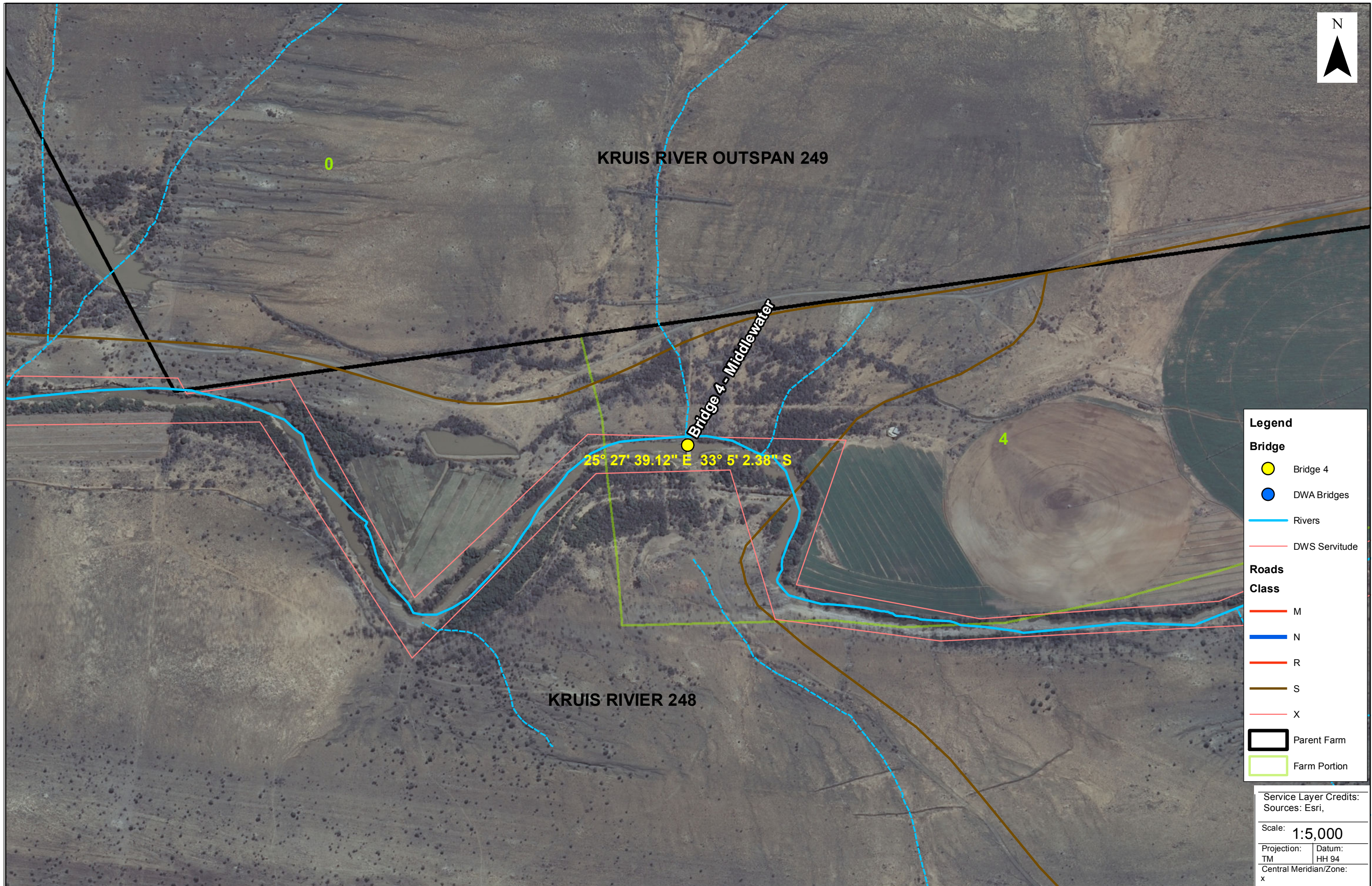
- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	

Date:	Compiled by:
12/01/2015	PAUJ
Project No:	
472748	



KRUIS RIVER OUTSPAN 249

0

Bridge 4 - Middlewater

25° 27' 39.12" E 33° 5' 2.38" S

4

KRUIS RIVIER 248

Legend

Bridge

- Bridge 4
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm

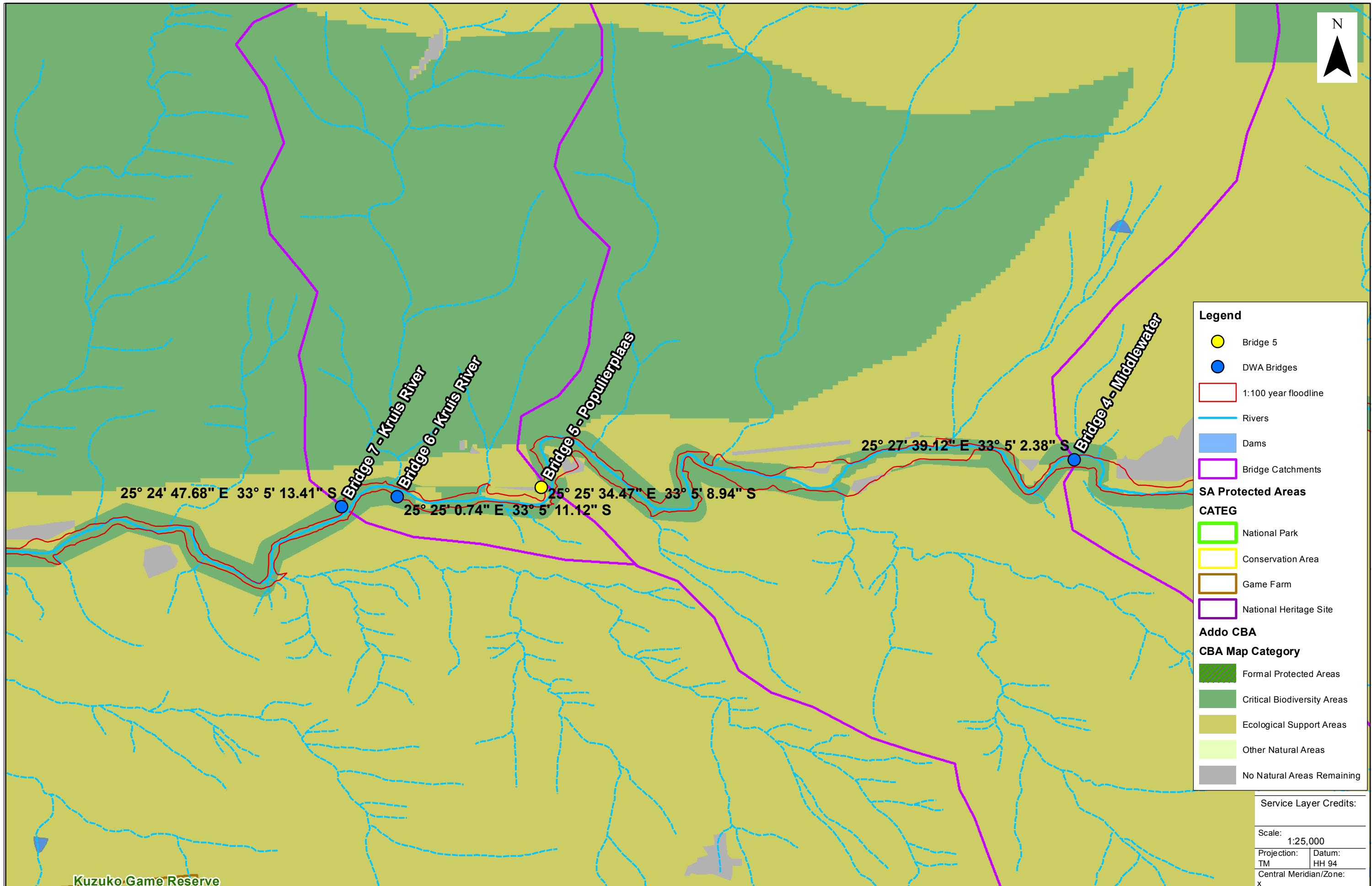
Farm Portion

- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:5,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

- Bridge 5
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Legend

Bridge

- Bridge 5
- DWA Bridges

River

- River

Roads

Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Locality Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Legend

Bridge

- Bridge 5
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads

Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm

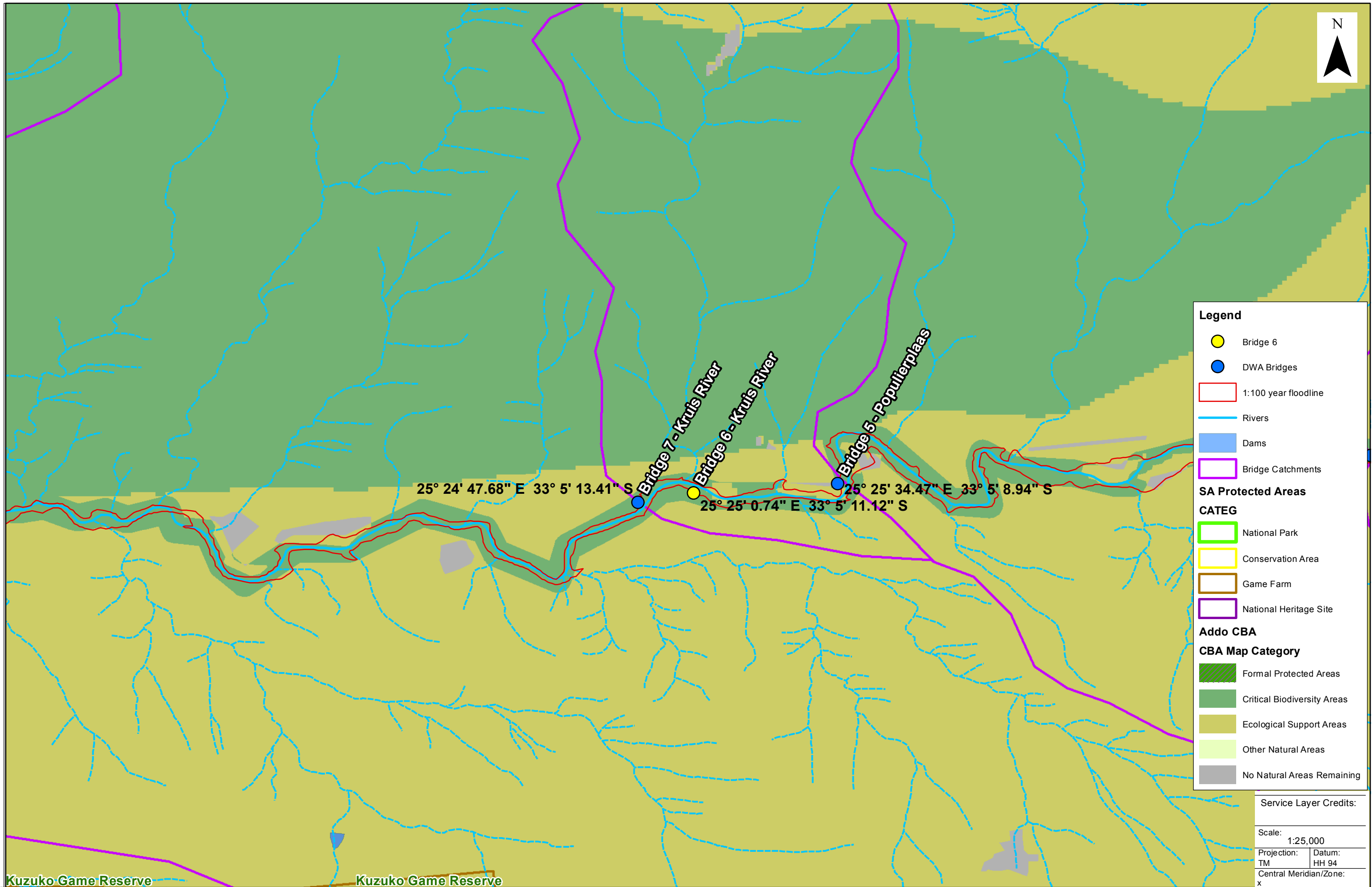
Farm Portion

- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:5,500**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

- Bridge 6
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	

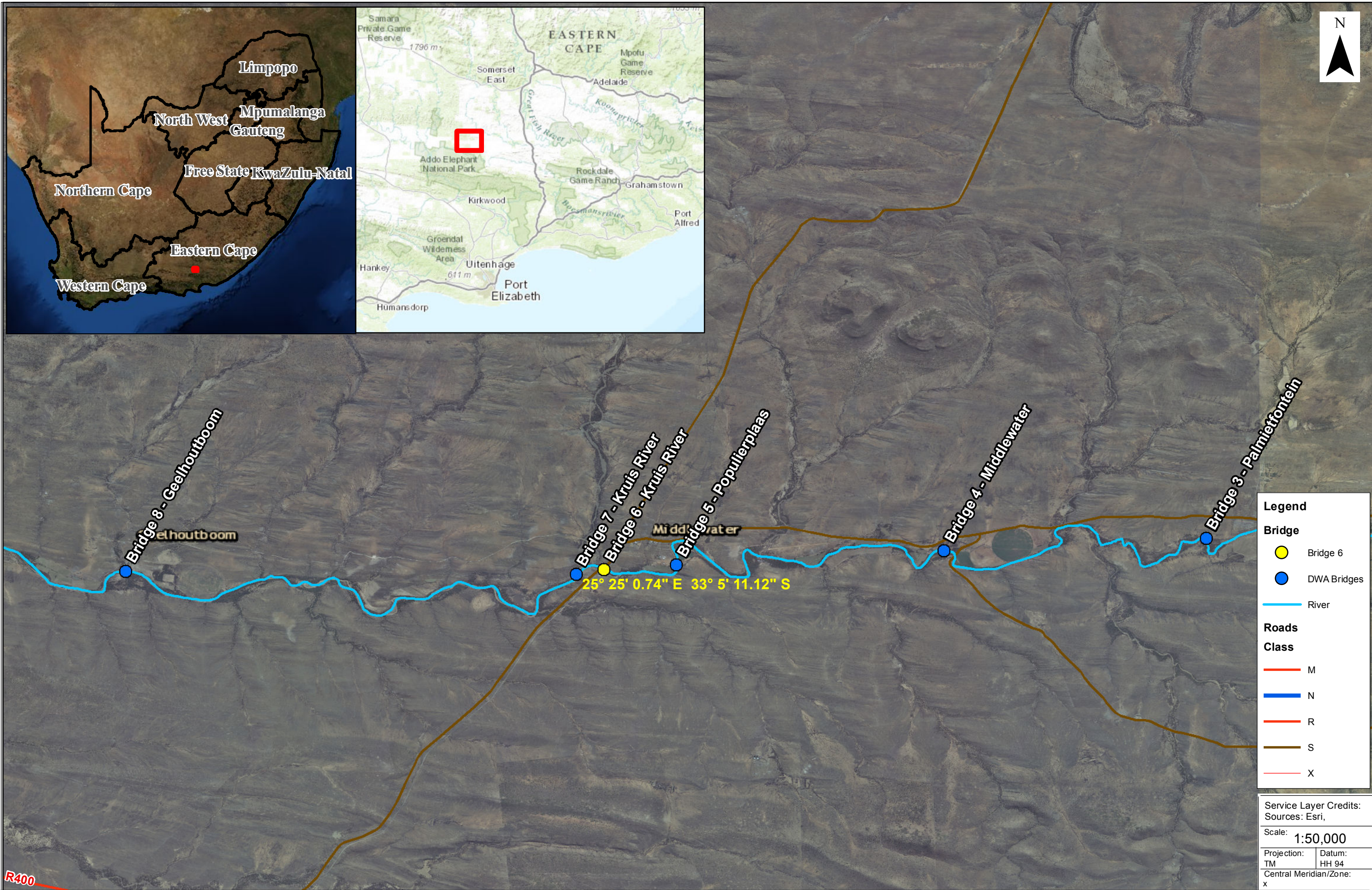
Kuzuko Game Reserve

Kuzuko Game Reserve



SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Sensitivity Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Legend

Bridge

- Bridge 6
- DWA Bridges

River

- River

Roads

Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Locality Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Legend

Bridge

- Bridge 6
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm

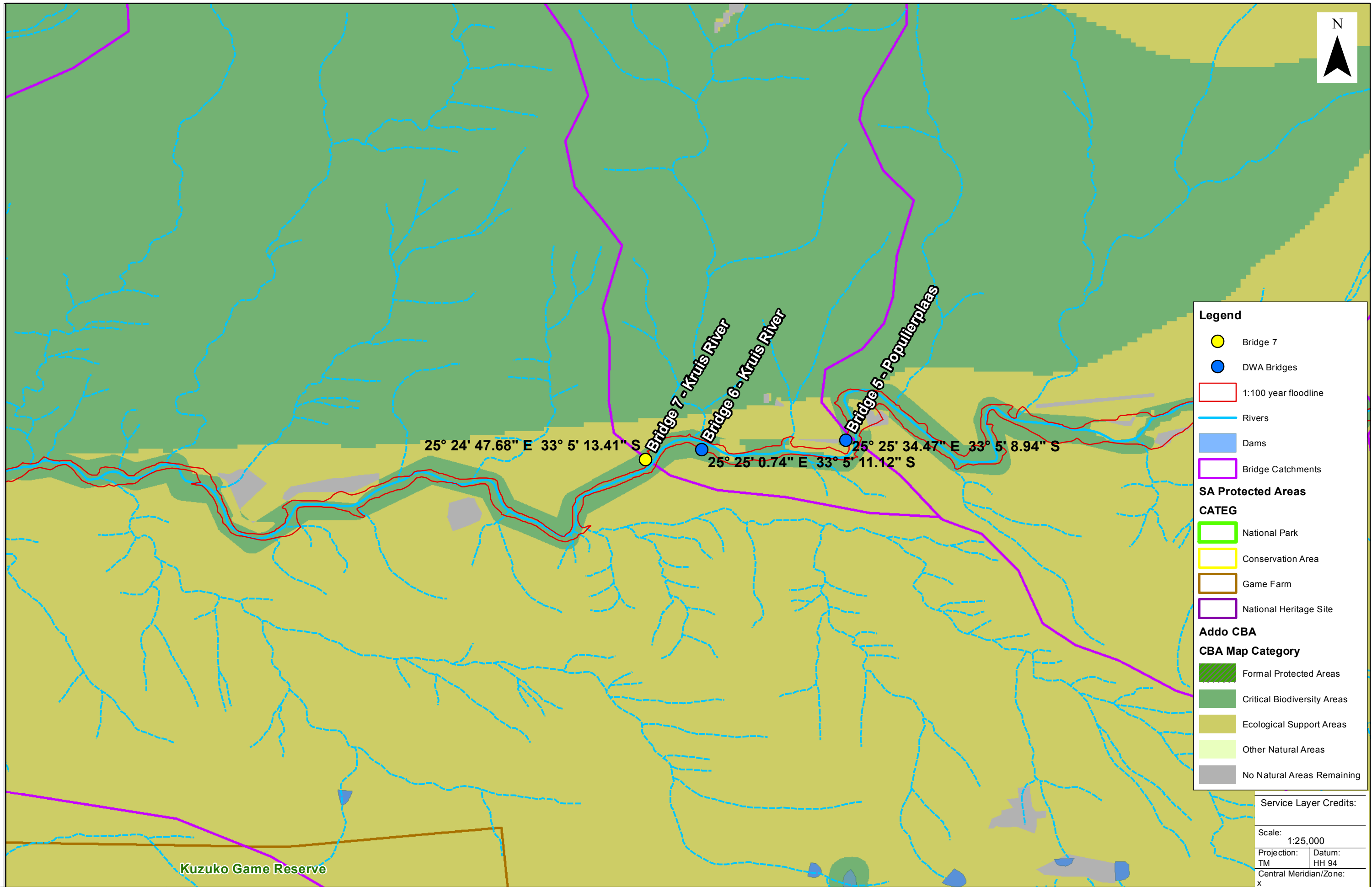
Farm Portion

- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:5,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x





Legend

Bridge

- Bridge 7
- DWA Bridges

River

- River

Roads

Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

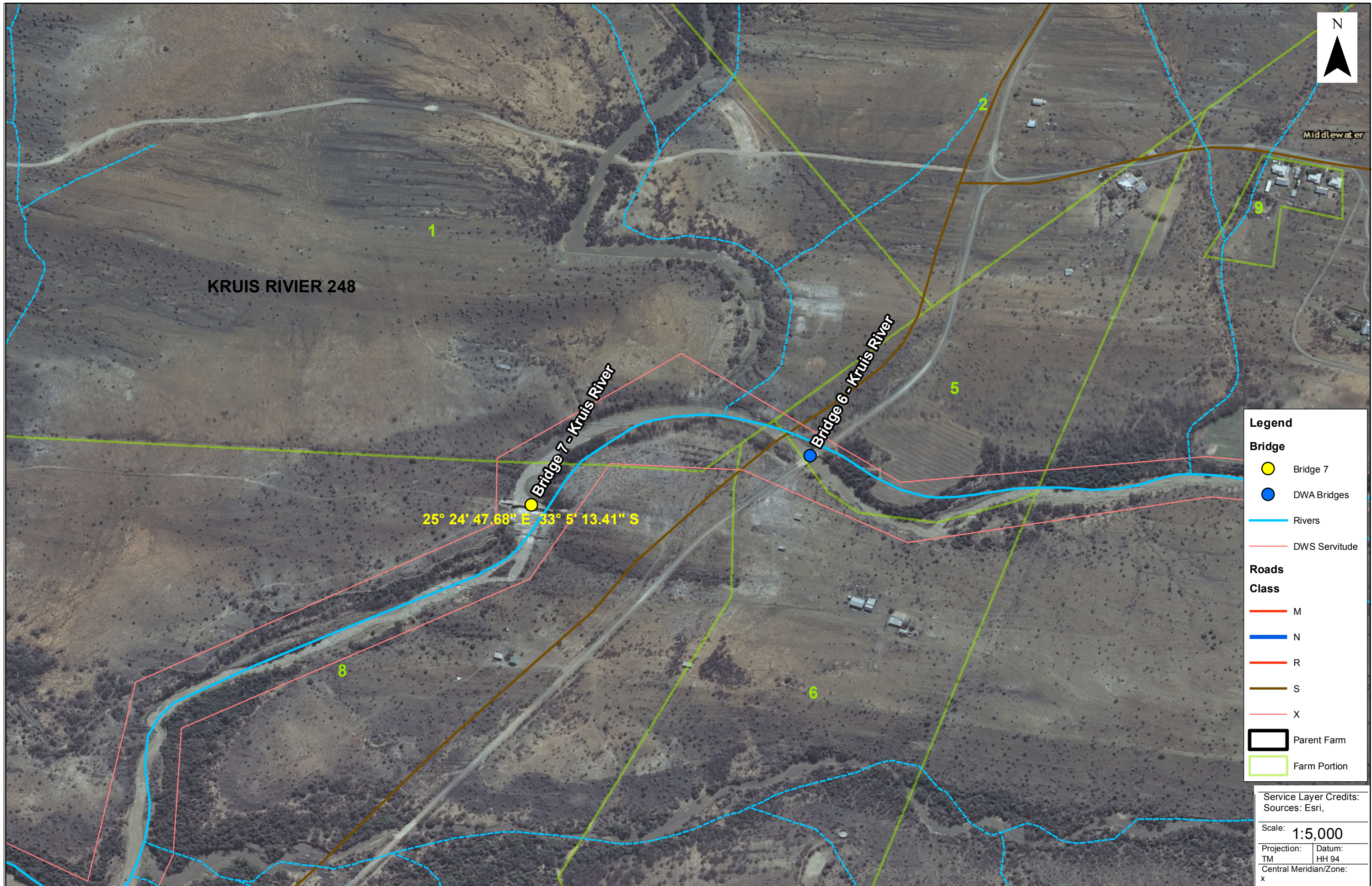
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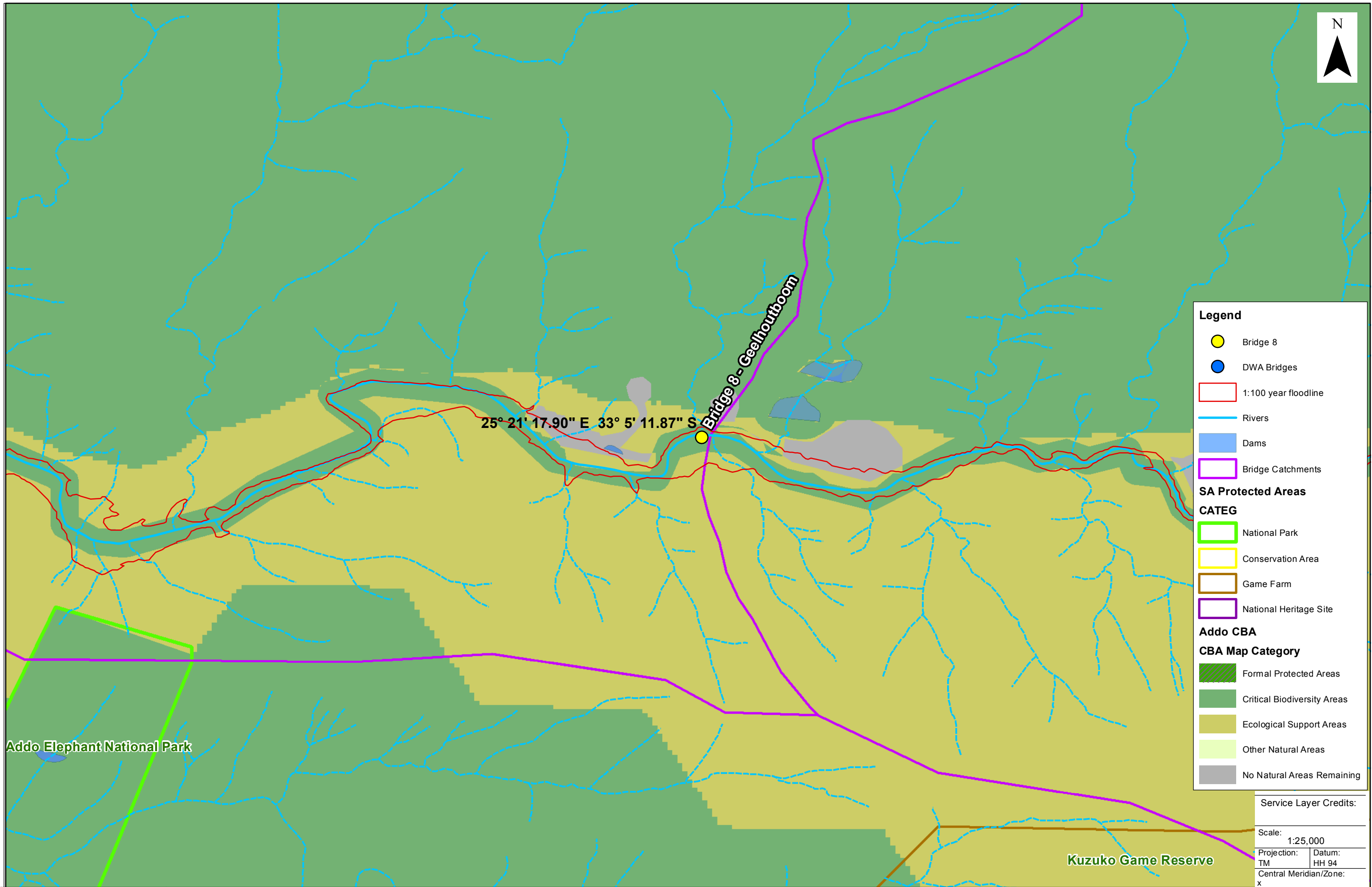


SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Locality Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Service Layer Credits: Sources: Esri,	
Scale:	1:5,000
Projection:	Datum:
TM	HH 94
Central Meridian/Zone:	x
Date:	Compiled by:
12/01/2015	PAUJ
Project No:	
472748	



Legend

- Bridge 8
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

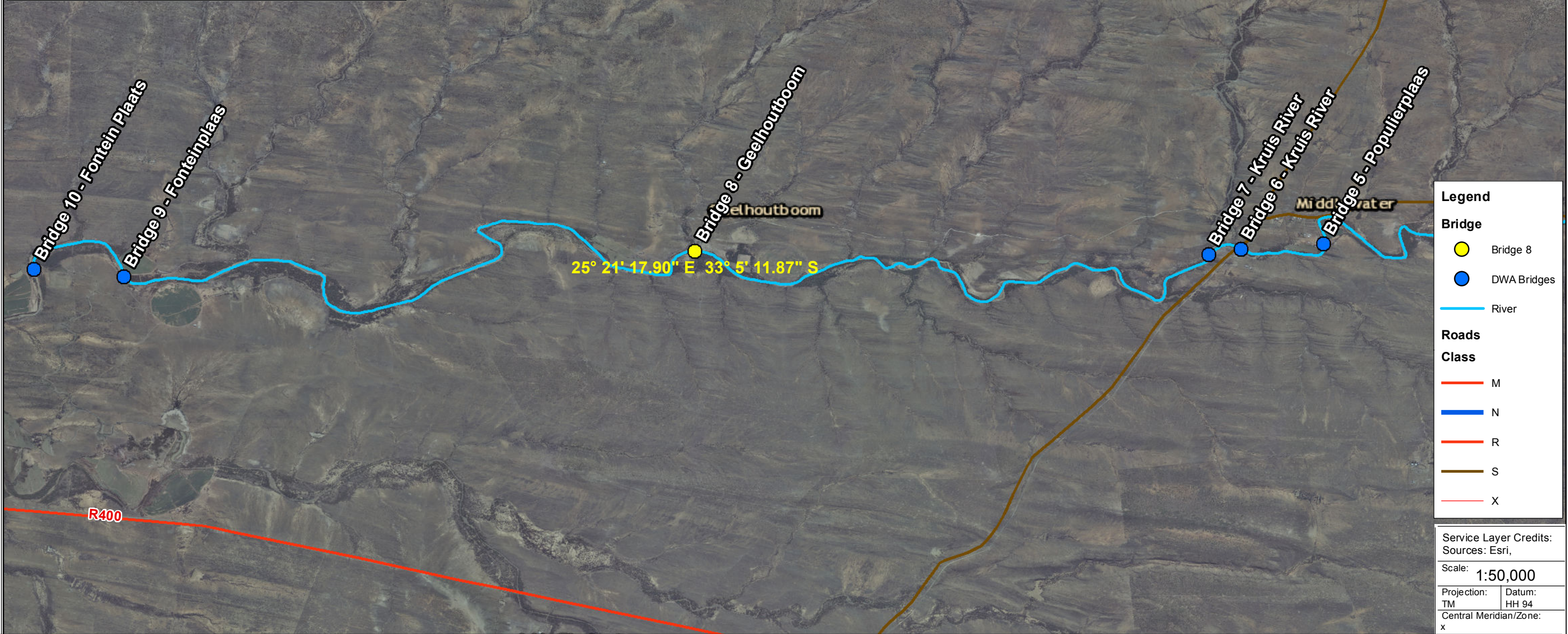
CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



Legend

Bridge

- Bridge 8
- DWA Bridges

River

- River

Roads

Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

Bridge

- Bridge 8
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads

Class

- M
- N
- R
- S
- X

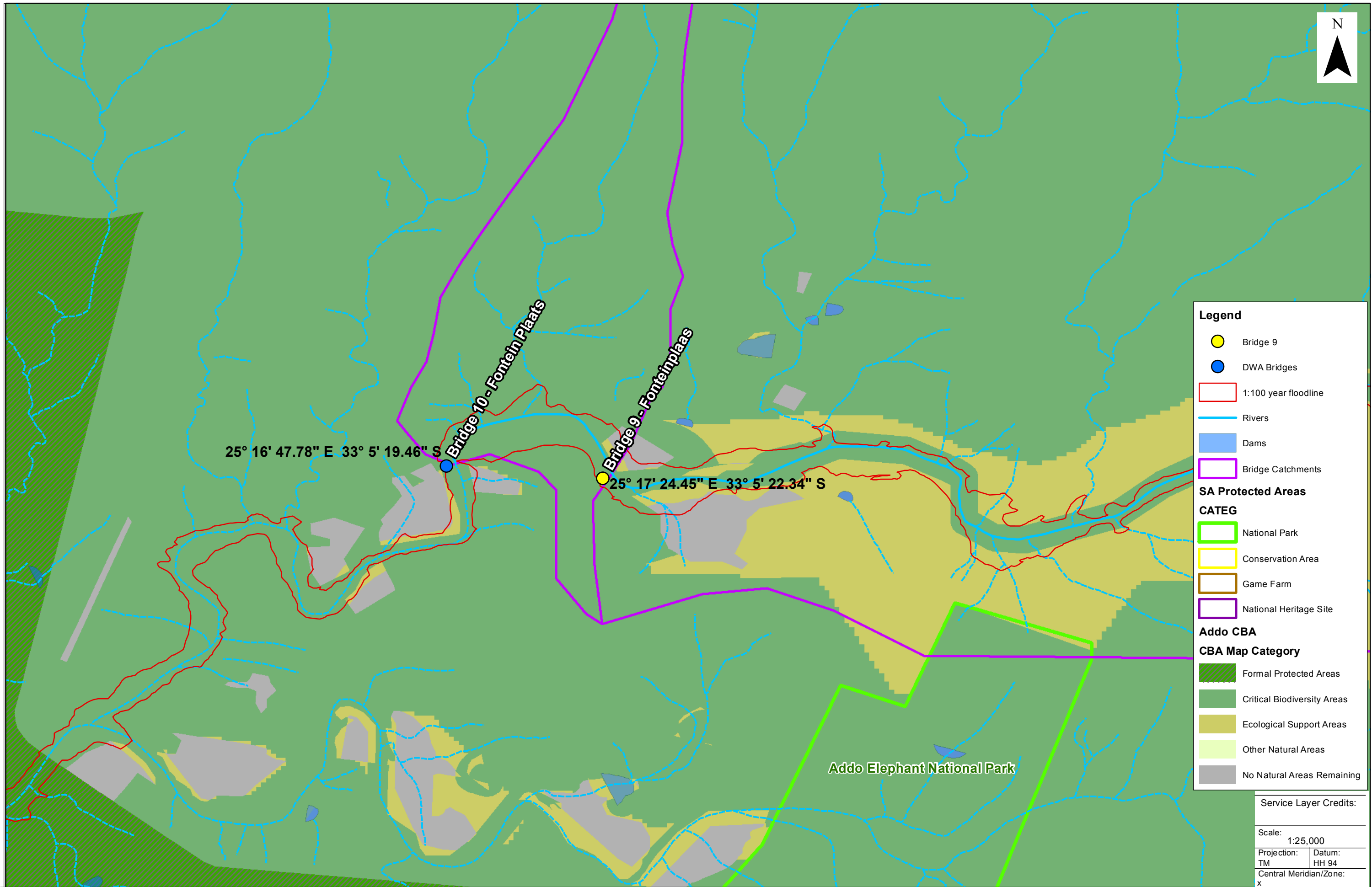
Parent Farm

- Parent Farm
- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:6,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

- Bridge 9
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



SKOENMAKERS REHABILITATION BASIC ASSESSMENT
Sensitivity Map

Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	

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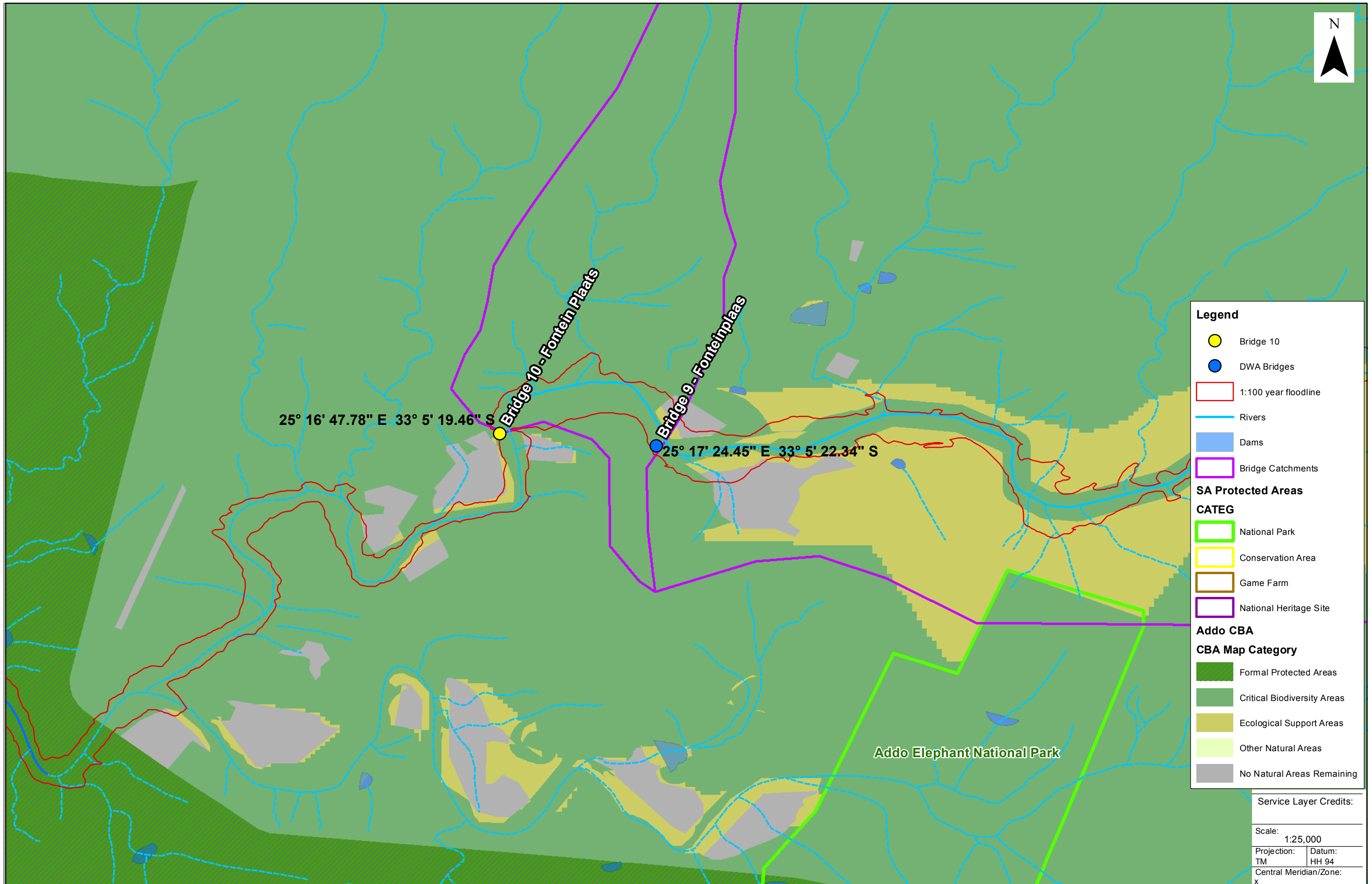


Legend	
Bridge	
	Bridge 9
	DWA Bridges
	River
Roads	
Class	
	M
	N
	R
	S
	X
Service Layer Credits: Sources: Esri,	
Scale: 1:50,000	
Projection: TM	Datum: HH 94
Central Meridian/Zone: x	
Date: 12/01/2015	Compiled by: PAUJ
Project No: 472748	



Legend	
Bridge	
●	Bridge 9
●	DWA Bridges
—	Rivers
—	DWS Servitude
Roads	
Class	
—	M
—	N
—	R
—	S
—	X
	Parent Farm
	Farm Portion

Service Layer Credits: Sources: Esri,	
Scale:	1:5,000
Projection:	Datum:
TM	HH 94
Central Meridian/Zone:	x



Legend

- Bridge 10
- DWA Bridges
- 1:100 year floodline
- Rivers
- Dams
- Bridge Catchments

SA Protected Areas

CATEG

- National Park
- Conservation Area
- Game Farm
- National Heritage Site

Addo CBA

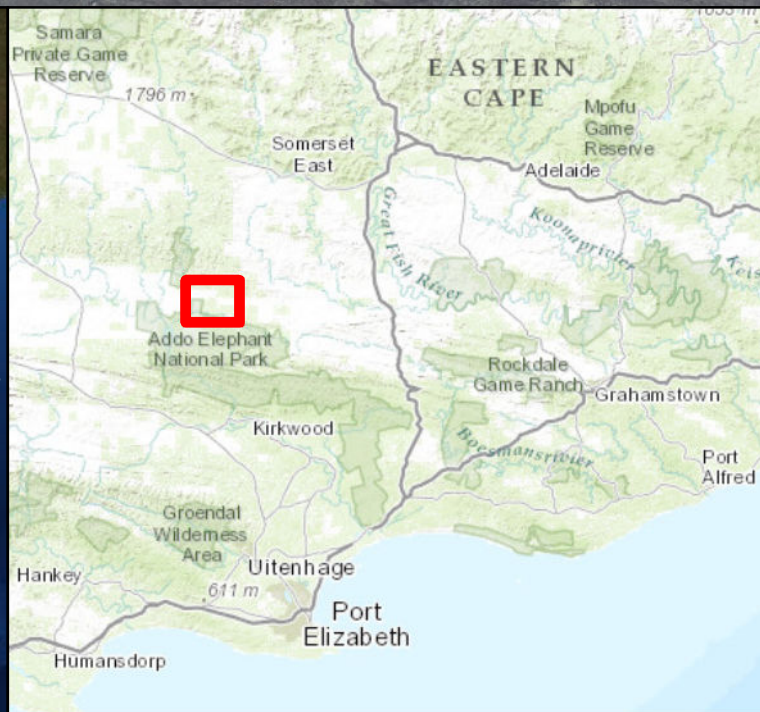
CBA Map Category

- Formal Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No Natural Areas Remaining

Service Layer Credits:

Scale: 1:25,000

Projection: TM	Datum: HH 94
Central Meridian/Zone: x	



Legend

Bridge

- Bridge 10
- DWA Bridges

River

- River

Roads

Class

- M
- N
- R
- S
- X

Service Layer Credits:
Sources: Esri,

Scale: **1:50,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x



Legend

Bridge

- Bridge 10
- DWA Bridges

Rivers

- Rivers

DWS Servitude

- DWS Servitude

Roads

Class

- M
- N
- R
- S
- X

Parent Farm

- Parent Farm

Farm Portion

- Farm Portion

Service Layer Credits:
Sources: Esri,

Scale: **1:6,000**

Projection: TM Datum: HH 94
Central Meridian/Zone: x

Appendix B: Site Photographs

Photographs of Bridge River Crossing 1

Report Number 472748





 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Crossing 1 taken from upstream.

Project No.
472748

Figure 1: Crossing 1 taken from upstream.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Bridge structure.

Project No.
472748

Figure 2: Bridge structure.

Photographs of Bridge River Crossing 2

Report Number 472748





 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Crossing 2 taken from Downstream

Project No.
123456

Figure Error! No text of specified style in document.-1 Crossing 2 taken from Downstream



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Crossing 2 taken from Upstream

Project No.
123456

Figure Error! No text of specified style in document.-2 Crossing 2 taken from Upstream

Photographs of Bridge River Crossing 3

Report Number 472748





Skoenmakers River Crossing Rehabilitation
Crossing 3 taken from downstream. Note the scour under the toe slab.

Project No.
472748



Skoenmakers River Crossing Rehabilitation
Upstream view. Note gravel and boulder deposit.

Project No.
472748



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
A view of the bridge deck.

Project No.
472748



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Downstream View.

Project No.
472748

Photographs of Bridge River Crossing 4

Report Number 472748






	Skoenmakers River Crossing Rehabilitation Crossing 4 taken from downstream. End cut washed away.	Project No. 472748
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Figure 1: Crossing 4 taken from downstream. End cut washed away.



	Skoenmakers River Crossing Rehabilitation Upstream view.	Project No. 472748
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Figure 2: Upstream view.

Photographs of Bridge River Crossing 5

Report Number 472748





Figure 1: Crossing 5 taken from downstream. Note the debris blockage.

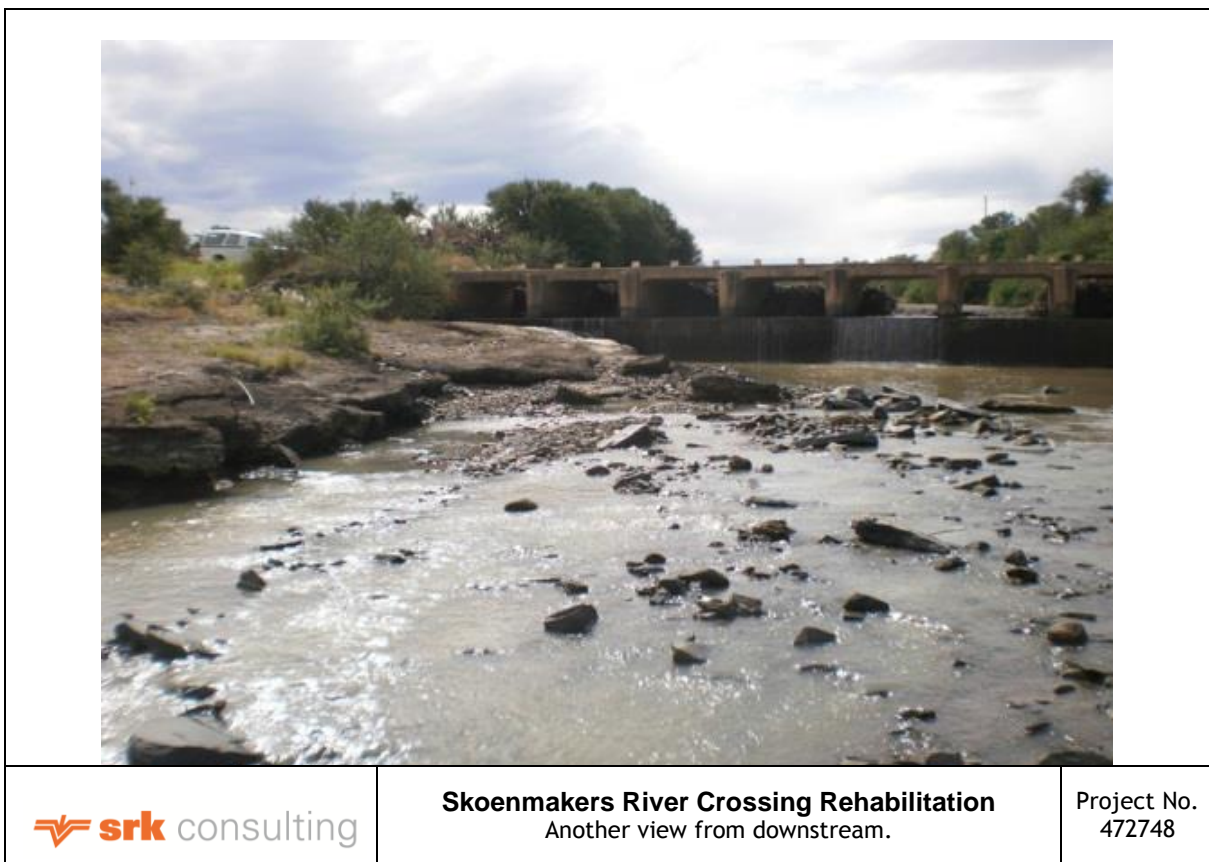


Figure 2: Another view from downstream.

Photographs of Bridge River Crossing 6

Report Number 472748





 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Crossing 6 taken from downstream.

Project No.
472748

Figure 1: Crossing 6 taken from downstream.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
End view.

Project No.
472748

Figure 2: End view

Photographs of Bridge River Crossing 7

Report Number 472748






	Skenmakers River Crossing Rehabilitation Crossing 7 taken from downstream. Note pipes on right hand side are dry due to blockage.	Project No. 472748
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Figure 1: Crossing 7 taken from downstream. Note pipes on right hand side are dry due to blockage.




	Skenmakers River Crossing Rehabilitation View from upstream. Note blocked pipes.	Project No. 472748
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Figure 2: View from upstream. Note blocked pipes.

Photographs of Bridge River Crossing 8

Report Number 472748





 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Crossing 8 taken from downstream. Note the damage on the left hand side.

Project No.
472748

Figure 1: Crossing 8 taken from downstream. Note the damage on the left hand side.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Road structure fail under gabion.

Project No.
472748

Figure 2: Road structure fail under gabion.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
A high level view of crossing 8.

Project No.
472748

Figure 3: A high level view of crossing 8

Photographs of Bridge River Crossing 9

Report Number 472748





 **srk** consulting

Skoenmakers River Crossing Rehabilitation
A view from downstream of Crossing 9.

Project No.
472748

Figure 1: A view from downstream of Crossing 9.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
A view from downstream of crossing 9. Note the failed foundation on the right hand side.

Project No.
472748

Figure 2: A view from downstream of crossing 9. Note the failed foundation on the right hand side.



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
View from upstream. Note blocked and silted pipe structures.

Project No.
472748

Figure 3: View from upstream. Note blocked and silted pipe structures.

Photographs of Bridge River Crossing 10

Report Number 472748






	Skoenmakers River Crossing Rehabilitation Crossing 10 taken from downstream.	Project No. 472748
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Figure 1: Crossing 10 taken from downstream.




	Skoenmakers River Crossing Rehabilitation Another downstream view of crossing 10.	Project No. 472748
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Figure 2: Another downstream view of crossing 10.




	Skoenmakers River Crossing Rehabilitation Upstream view. Note Silt to top of slab.	Project No. 472748
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Figure 3: Upstream view. Note silt to top of slab




	Skoenmakers River Crossing Rehabilitation Upstream view. Note silt build up.	Project No. 472748
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Figure 4: Upstream view. Note silt build up



 **srk** consulting

Skoenmakers River Crossing Rehabilitation
Bridge deck.

Project No.
472748

Figure 3: Bridge deck.