



UNLOCKING VALUE THROUGH CUTTING EDGE
TECHNOLOGY, INNOVATIVE DESIGN AND
SUSTAINABLE, LONG-TERM SOLUTIONS

TRANSPORTATION PORTFOLIO CAPABILITY STATEMENT





Our transportation portfolio at a glance

Our MPAMOT transportation portfolio serves local and national government, parastatals, industries, commercial companies, developers, and lenders on a range of transportation projects.

Our highly experienced professional civil transportation and traffic engineers provide clients with road network planning, transportation studies, airport planning and management, traffic and transportation modeling, planning and design, traffic impact studies, pedestrian facilities, traffic calming investigations, as well as transport operational plans for specific events. In addition, our team also provides solutions for the ports economy and rail.

MPAMOT (Pty) Ltd and the subsidiaries MPAMOT Africa (Pty) Ltd and MPAMOT Lesotho, provide more than 200 staff members with offices in Gauteng, Western Cape, and KwaZulu Natal and various site offices. As a consultancy with home-grown talent and multinational links, we have the ability to draw on a range of international skills and insights from our global impact network.

In this regard, MPAMOT's ability to apply broad-ranging expertise and experience gives us a decisive edge when it comes to analysing problems and coming up with creative, sustainable solutions with added value on projects.



Our service offering to our clients

Value through transportation



Highways



Bridges



Pavements



Transportation
planning



Aviation



Ports



Rail



What do we do?



Roads and highways

Feasibility studies, route evaluation and conceptual designs
Complex junction and interchange appraisal and design
Design of freeways, arterials, and other public roads
Re-construction and rehabilitation of roads
Highway safety audits



Transportation planning

Land use and transportation planning and infrastructure design
Commuter needs assessment
Regional/local network modeling
Signage, signals, and control systems
Parking, safety audits
Socio- economic
Cost-benefit analysis
Infrastructure investment appraisal



Bridges

Grade separated structures
River crossings
Rail bridges
Arch bridges
Structural steel bridges
Incrementally launched bridges
Culvert overpasses
Cable stayed structures



Pavements

Pavement design and materials
Flexible pavements
Rigid pavements
Semi rigid pavements
Assess: Initial costs, availability of materials, cost of maintenance, environmental conditions, traffic intensity, industrial waste



Aviation

Master planning
Traffic forecasting
Runway design & rehabilitation
Freight handling services
Apron designs
Terminal & Retail development and design
Infrastructure services design
Structural Engineering
Access & ring roads



Ports

Master planning
Demand forecasting
Feasibility Studies
Asset Lifecycle Management
Operations Services Design
Operations Management
Harbour and Coastal Engineering
Integrated Logistics Planning



Rail

Land use and transportation planning and infrastructure design
Commuter needs assessment
Passenger Flow Studies
Regional/local network modelling
Signage signals, and control systems
Smart mobility
Integrated parking management
Safety audits
Socio- economic cost-benefit analysis
Infrastructure investment appraisals



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Our MPAMOT transportation team has contributed to and led a wide range of flagship transportation infrastructure projects. Every project has an impact and makes a significant contribution to partners and communities.

We look forward to learning more about your project and exploring ways to assist you with your transportation projects.

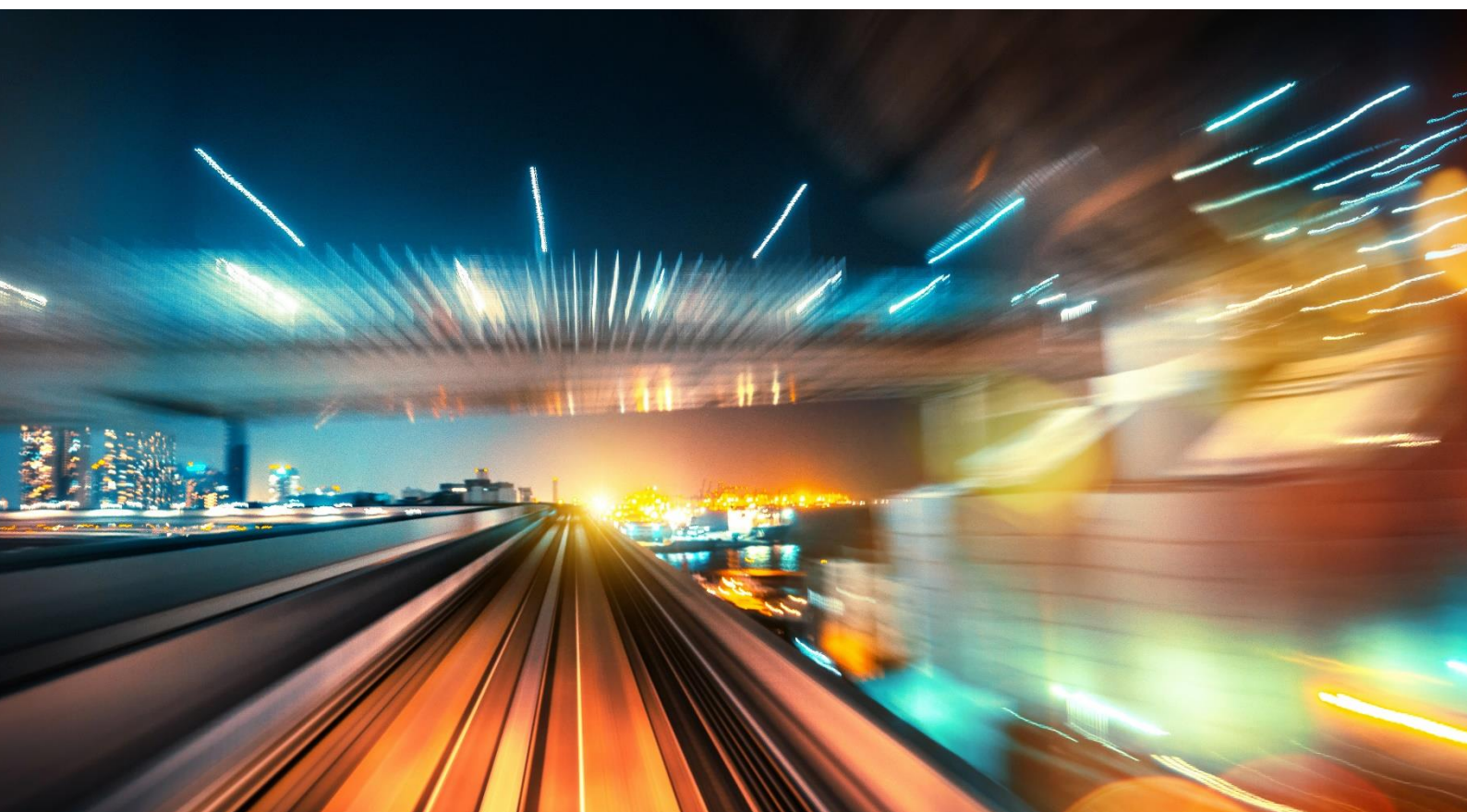
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Malani Padayachee-Saman
Chief Executive Officer
Email: AnnetteB@mpamot.com



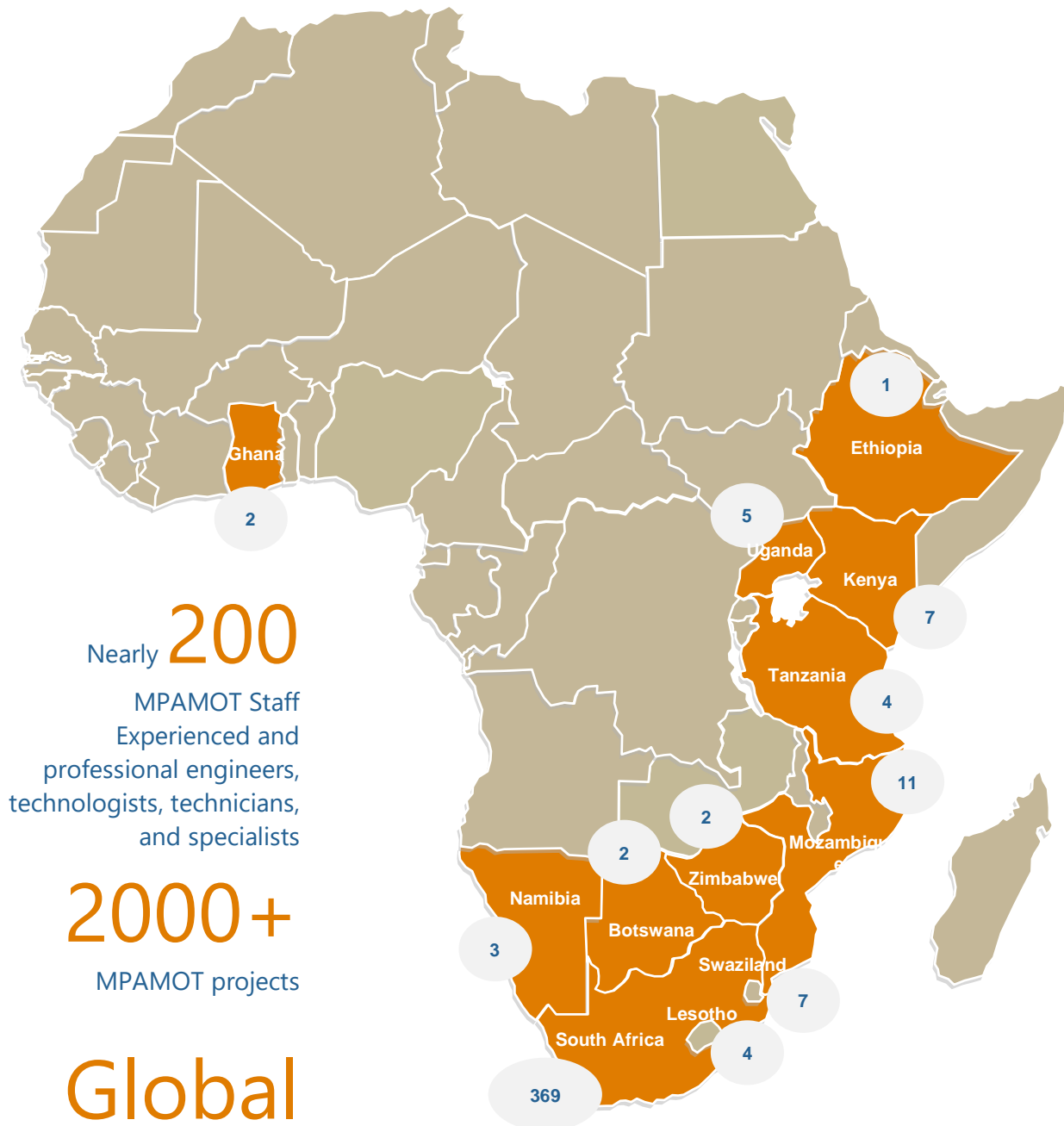
Our infrastructure management team

Our highly experienced and diverse transportation team has both local homegrown insight, and global experience that enable us to drive a full one-stop-end-to-end service throughout the project lifecycle. Empowerment and skills transfer forms part of our ethos and we have seasoned engineers that provide project oversight, mentorship, and guidance on projects. Our young engineers, technicians and technologists are supported in their experiential learning journey, and we support our candidates working towards professional registration.





Where our transportation team worked recently?



Nearly **200**

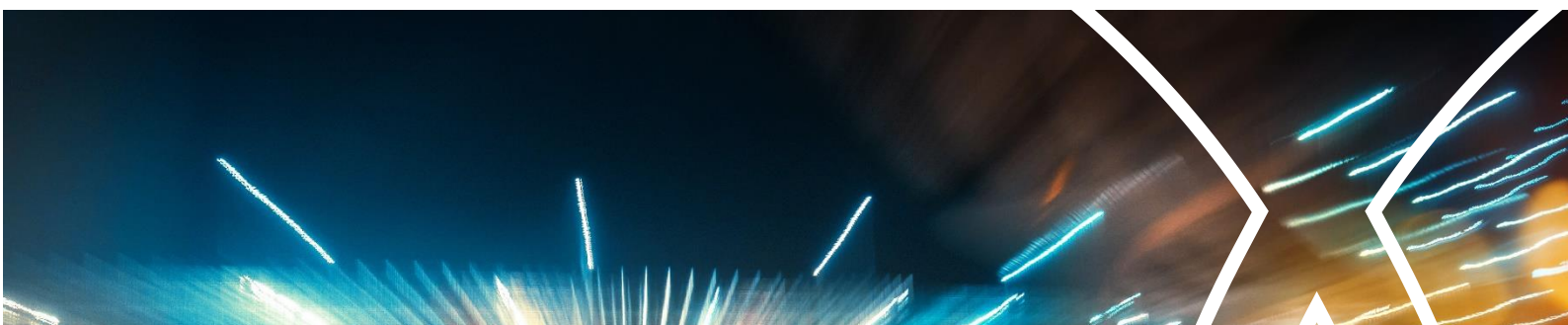
MPAMOT Staff
Experienced and
professional engineers,
technologists, technicians,
and specialists

2000+

MPAMOT projects

Global

networking partners



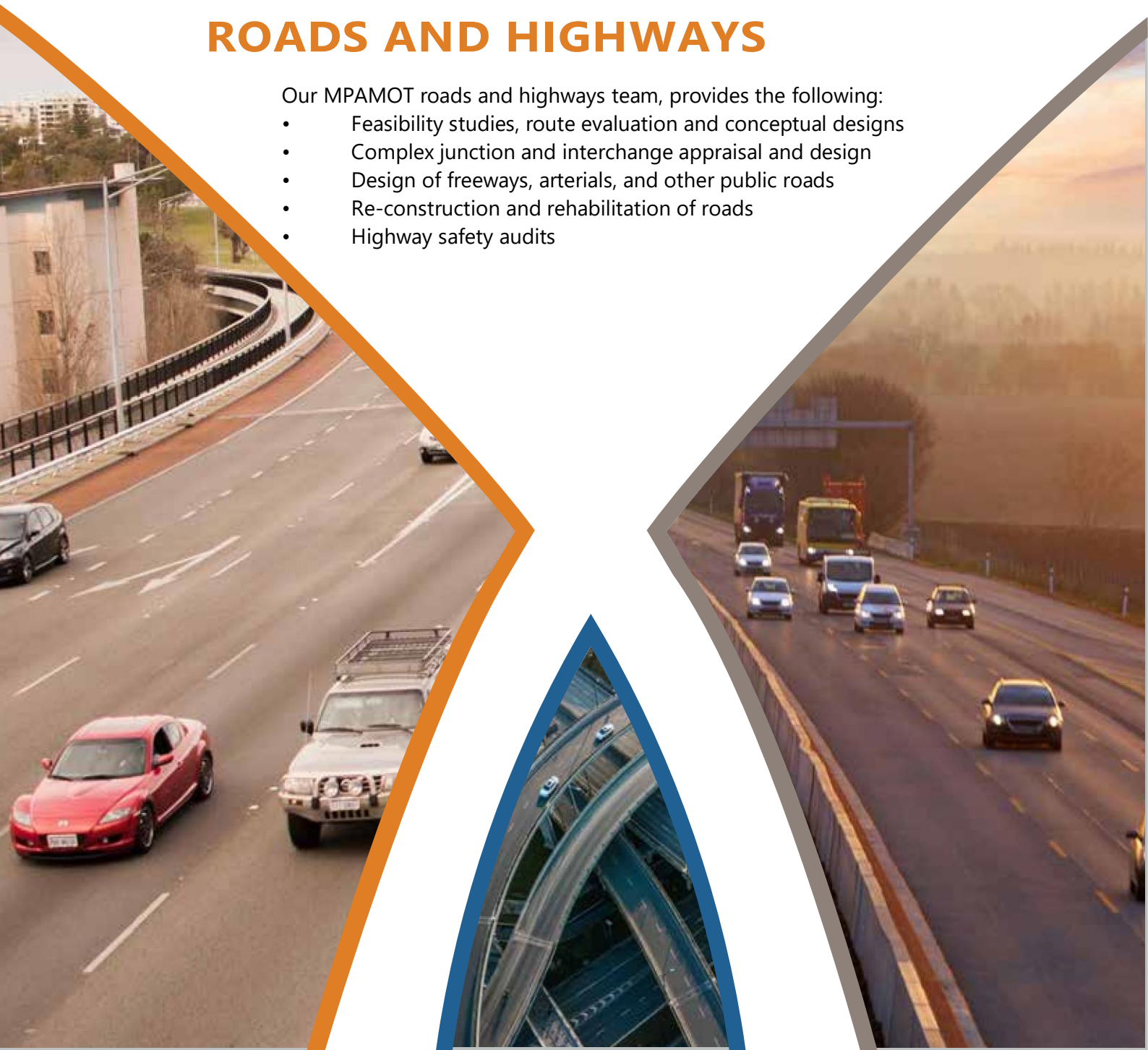


Designing and overseeing the construction of highways linking rural and urban strategic routes, businesses, and communities

ROADS AND HIGHWAYS

Our MPAMOT roads and highways team, provides the following:

- Feasibility studies, route evaluation and conceptual designs
- Complex junction and interchange appraisal and design
- Design of freeways, arterials, and other public roads
- Re-construction and rehabilitation of roads
- Highway safety audits





Kampala Entebbe Expressway

With the need for road infrastructure to the airport, the Entebbe Expressway is a 52Km long dual 2 lane carriageway that starts at the Busega junction on the Kampala Northern Bypass and terminates at Entebbe International Airport.



Our main objective is to assist UNRA in project administration and management. In Particular, we were responsible for:

- Monitoring and reviewing the design, construction, testing, commissioning, and completion of the construction works by means of auditing and review
- Carrying out routine checks on both the supervision consultant and works contractor's operations and management systems. Specifically monitor, administer, and manage the Design and Build Contract ensuring that the Supervising Consultant and Works Contractor fulfil their contractual obligations and adopt international best practice in project implementation.

Location

Kampala (Uganda)



Under the Land Acquisition services, our main objectives were to prepare feasibility study, planning, design, and construction monitoring

Client

Uganda National Roads Authority (UNRA)



- Social Impact Assessment and Resettlement Action Plan (RAP).
- Strip Maps and Valuation Report).
- Implementation of the RAP (including compensation of affected persons and properties); and,
- Undertake land expropriation

Expertise

Highways | Bridges | Project management and design review



N3-4 Toll Concession Rehabilitation

From Hilton Exchange to Mooi River Toll Plaza, N3-4 is a 46 Km long dual 2 lane carriageway that starts at the Hilton Interchange (Durban side) and ends near the Mooi River Toll Plaza (Johannesburg side).

Project

Rehabilitation of N3 between Cedara and Mooi River (N3-4 KM 1.6 to KM 46.0)



MPAMOT has been commissioned by N3TC (N3 Toll Concession) to provide design consultancy services for the rehabilitation of this route, tender documentation preparation, contract administration and site supervision as well.

Location

Kwa-Zulu Natal (South Africa)



- Concept and preliminary design previously undertaken
- Detailed design of Geometrics, Stormwater, Pavements and Structures rehabilitation

Client

N3 Toll Concession



- Social Impact Assessment and Resettlement Action Plan (RAP)
- Strip Maps and Valuation Report
- Implementation of the RAP (including compensation of affected persons and properties)
- Undertake land expropriation

Expertise

Geometric and Pavements



Additional roads – Lot D

MPAMOT is delivering this scheme through Feasibility Study, Detailed engineering design, Environmental and Social Impact Assessment.

Project

Additional roads – Lot D



Feasibility study and Detailed Engineering Design of Kitale-Gerenge (19KM), Nambole-Namanve-Namilyango-Mukono(14KM), Luweero-Butalangu (29KM) and Butalangu-Ngoma (54KM) and additional services for updating the Resettlement Action Plan for Kyenjonjo-Kabwoya Road (100KM) to incorporate World Bank Comments.

Location

Uganda



Feasibility Study, including consideration of alternative routes and pavement options, environmental and social impact study, road safety, land acquisition, preliminary design, economic and financial analysis.

Client

Uganda National Roads Authority (UNRA)



Detailed engineering design for the approved road option; including all necessary data collection, field surveys and analysis to cover all aspects of detailed design.

Environmental and Social Impact Assessment (EIA) in accordance with Ugandan legislation and NEMA guidelines. Preparation of a full Resettlement Action Plan and associated surveys to identify and value property that will be affected by the road upgrading works and the establishment of the road reserve.

Expertise

Bridge | Pavement | Geometric | Environmental

Provision of Project Management services during project implementation, acting as UNRA's agent for the administration, management, and coordination of the project.



Lot B - Kampala northern by-pass

Due to its **success** at achieving its brief from opening the **Kampala Northern Bypass**, the road has suffered from congestion, particularly during peak periods. This project is to design improvements to the bypass, by changing it from a 2-lane single carriageway into 4-lane dual carriageway through construction of parallel carriageway.

Project

Capacity improvements – Lot B (Kampala northern by-pass)



MPAMOT The scheme also includes junction improvements including converting 4 of the at-grade roundabouts into signalized grade separated interchanges and signaling the remaining 7 roundabouts. This is being undertaken in particularly difficult terrain including swamps and urban areas.

Location

Kampala (Uganda)



MPAMOT developed the feasibility study for the sections with included consideration of alternative routes, geotechnical issues, pavement options and consideration of environmental and social impacts. The feasibility study also considered road safety, land acquisition, construction costs and included economic and financial analysis of the scheme. It also included the preliminary design of the selected option.

Client

Uganda National Roads Authority (UNRA)



Following the feasibility study the detailed design is being undertaken, including the collection of all necessary data, topographic and geotechnical surveys, field studies and design using MX (the integrated computer design system). The Environmental and Social Impact Assessment was undertaken in accordance with Uganda legislation and NEMA guidelines as well as the preparation of a full Resettlement Action Plan and associated surveys to identify and value property that will be affected by the road upgrading works.

Expertise

Bridge | Pavement | Geometric | Environmental

Bidding documents based on FIDIC and the approved detailed designs were prepared following PPDA requirements for international competitive bidding.



Total Tilenga Project

Preliminary and detailed design of enabling **infrastructure to facilitate oil extraction in Northern Uganda**. Scope included road designs, pavement designs, earthworks, and a preliminary airstrip design.

Project

Preliminary Design of Buliisa Upstream Enabling Infrastructure



The client required roads to be optimally designed to carry their equipment laden vehicles to and from extraction sites. They also required optimization of routes to use such that they also benefitted the public, as the roads were to be handed over to local authorities after the project.

Location

Kenya



Earthworks designs were required for all the extraction sites, as well as for a large central facility.

Client

Total E&P Uganda



- Provided client with design expertise using past experience of road projects in Uganda.
- Completed designs of roads, platforms, and storm water, taking into consideration drainage issues.

Expertise

Bridges | Geometrics | Pavements | Airports | Civils



KwaBhoboza Interchange

Preliminary and detailed design of the **upgrade of KwaBhoboza Interchange**. The existing at grade intersection was required to be upgraded to a grade separated intersection by constructing an underpass to carry the freeway over the provincial road.

Project

Upgrade of KwaBhoboza Interchange on National Route 2



The KwaBhoboza Interchange bridge is required to be a 3-span underpass with spans of 18.5m, 24m and 18.5m on a skew angle of 41 degrees.

Location

Kwa-Zulu Natal (South Africa)



- Review and adjust concept design previously undertaken
- Preliminary and Detailed design of Geometrics, Stormwater, Pavements, Lighting and Structures
- Structures consisted of a bridge, reinforced concrete retaining walls, and mechanically stabilised earth walls

Client

Min South African National Roads Agency LTD (SANRAL)



- Review and adjust concept design previously undertaken
- Preliminary and Detailed design of Geometrics, Stormwater, Pavements, Lighting and Structures
- Structures consisted of a bridge, reinforced concrete retaining walls, and mechanically stabilised earth walls

Expertise

Bridges | Geometrics | Pavements | Electrical



Umgeni to Mount Edgecombe

The **freeway will be upgraded to provide five lanes** in both directions. It also includes the upgrade to Inanda, Queen Nandi and KwaMashu Interchanges.

Project

Upgrade of N2 Section 25 between Umgeni Interchange and Mount Edgecombe Interchange



The objective of this project is to undertake the preliminary and detailed design of the upgrade of N2 Section 25 between Umgeni Interchange and 2.2km south of Mt Edgecombe Interchange. This section of the N2 is a six-lane divided dual carriageway with three lanes in both directions.

Location

Kwa-Zulu Natal (South Africa)



- Preliminary and Detailed design of Geometrics, Hydraulics and Hydrology, Stormwater, Pavements, Lighting and Structures
- Structures included widening 5 underpasses, demolishing, and reconstructing 1 underpass, construct 2 new overpasses, 2 new underpasses, 2 new pedestrian bridges, adding steel walkways to 4 bridges, lengthening 3 culverts, and constructing 2 new culverts as well as various retaining walls, median barriers, and sign gantries
- Land acquisition

Client

South African National Roads Agency LTD (SANRAL)



- Review and adjust concept design previously undertaken
- Preliminary and Detailed design of Geometrics, Stormwater, Pavements, Lighting and Structures
- Structures consisted of a bridge, reinforced concrete retaining walls, and mechanically stabilized earth walls

Expertise

Bridges | Geometrics | Pavements | Hydrology



Isipingo to Edwin Swales

The **freeway will be upgraded to provide Six lanes in both directions**. The existing underpasses will need to be widened and the overpasses replaced to span over the widened freeway.

Project

Upgrade of N2 Section 25 between Isipingo Interchange and Edwin Swales Interchange



The objective of this project is to undertake the detailed design of the upgrade of this section of the N2 including a free-flow interchange. This section of the N2 is a six-lane divided dual carriageway with three lanes in both directions.

Location

Kwa-Zulu Natal (South Africa)



- Detailed design of Geometrics, Hydraulics and Hydrology, Stormwater, Pavements, Lighting and Structures
- Structures include the widening of 5 underpasses, lengthening of 15 culverts, demolition of 1 overpass, demolition, and reconstruction of 5 overpasses as well as retaining walls, median barriers, and sign gantries.
- Land acquisition

Client

South African National Roads Agency LTD (SANRAL)



- Review and adjust concept design previously undertaken
- Preliminary and Detailed design of Geometrics, Stormwater, Pavements, Lighting and Structures
- Structures consisted of a bridge, reinforced concrete retaining walls, and mechanically stabilised earth walls

Expertise

Bridges | Geometrics | Pavements | Hydrology



Upgrade of N1 Section 14 between Trompsburg Interchange and Fonteintjie

The objective of this project was to undertake the preliminary and detailed design of the upgrade of this section of the N1.

Project

Upgrade of N1 Section 14 between Trompsburg Interchange and Fonteintjie



The project was originally intended to be for the rehabilitation of the existing road. However, due to the policy of making allowance for bi-directional traffic accommodation during rehabilitation of the existing road and the substandard hydraulic capacity of two river bridges and three culverts, SANRAL decided to build a new carriageway adjacent to the existing road, remove the substandard bridges and culverts and use the existing road formation as a foundation for the future dual carriageway.

Location

Freestate (South Africa)



- Preliminary and Detailed design of Geometrics, Hydraulics and Hydrology, Stormwater, Pavements and Structures
- Structures included 3 bridges, replacing 5 culverts, and lengthening a further 5 culverts and an agricultural underpass
- Land acquisition
- Accommodation of existing service

Client

South African National Roads Agency LTD (SANRAL)



- Review and adjust concept design previously undertaken
- Preliminary and Detailed design of Geometrics, Stormwater, Pavements, Lighting and Structures
- Structures consisted of a bridge, reinforced concrete retaining walls, and mechanically stabilised earth walls

Expertise

Bridges | Geometrics | Pavements | Hydrology



TRANSPORTATION PORTFOLIO

BRIDGES

Our Bridges team provides the following:

- Grade separated structures
- River crossings
- Rail bridges
- Arch bridges
- Structural steel bridges
- Incrementally launched bridges
- Culvert overpasses
- Cable stayed structures





TRANSPORTATION PORTFOLIO

PAVEMENTS





Our MPAMOT pavements team provides the following:

- Effective and efficient delivery of projects to the required specifications and standards of both MPAMOT and the client.
- An understanding of the inter disciplinary nature of projects and how these can delay projects if not managed correctly and properly.
- A technical understanding of pavement design, pavement construction, asset management and contract administration.

We look forward to learning more about your project and exploring ways to assist you with your pavement's projects.



Rex Kelfkens,
Pavements discipline lead
Email: rexk@mpamot.com



Our pavements team specialises in:

- Pavement design and materials
- Flexible pavements
- Rigid pavements
- Semi rigid pavements
- Assess: Initial costs, availability of materials, cost of maintenance, environmental conditions, traffic intensity, industrial waste.



Stanford to Riviersonderend periodic road maintenance

Project

Periodic Maintenance of Main Road 267 between Km 0.34 and Km 50.58 – Stanford to N2/ Riviersonderend



The objective of this project was to undertake the periodic maintenance of Main Road 267 between Km 0.34 and Km 50.58 – Stanford to N2/Riviersonderend. Pavement defect repair, reseal, drainage maintenance and maintenance of major drainage structures

Location

Western Cape



Client

Western Cape Government: Department of Public Works



Expertise

Pavements

The design included the detailed visual assessment of the road, traffic calculation to determine standard axial loads, drainage conditions, as well as safety assessments of the road based on a topographical survey. In addition to the road design, the condition of the existing major structures was evaluated, and maintenance activities were also proposed. The pavement has an average surface width of 6.8m with a 1.5m to 2.0m gravel shoulder on either side. For this project, the final design was a reseal surface using a 14mm single seal constructed using New Crumb Rubber Technology (NCRT) binder as a tack layer, and a Cat65 emulsion (60:40 dilution) as a cover spray. The section of road that will undergo periodic maintenance runs from km0.34 to km50.58, a total length of 50.24km. The estimated construction period is 19 months.



Improvement and management of gravel roads over three years

Project

The improvement and management of gravel roads for 2020/21, 2021/22 and 2022/23



The objective of this project is to provide assistance with any aspects of the improvement and management of the gravel road network in the Western Cape for 2020/21, 2021/22 and 2022/23.

Location

Western Cape



Client

Western Cape Government: Department of Public Works



Expertise

Pavements

The team was responsible for the following:

- Identification of natural materials suitable for re-gravelling roads through geological investigation, test pitting and materials testing
- Landowner consultations
- Environmental investigations
- Application for mining authorization
- Application for a temporary departure from current land use
- Land expropriation and mining plans
- Environmental control during mining operations
- Preparation and submission of closure reports
- Updating of borrow pit information on the client's Materials Information Management System
- Preparing maintenance management plans (MMPs) and obtaining environmental approvals for maintenance work conducted by the Department's agents
- Scoping and design of all aspects of gravel road maintenance projects
- Management of projects over wide geographic areas in cooperation with the Department and District Municipalities
- Assistance with the asset management processes that are used to select gravel roads for improvement or upgrade
- Assistance with the design of gravel road improvements and/or upgrades



Rehabilitation of Divisional Road 1111 between Kalbaskraal and Malmesbury: Km 12.310 and Km 23.500

Project

Rehabilitation of Divisional Road 1111 between Kalbaskraal and Malmesbury



The objective of this project is to undertake the rehabilitation of Divisional Road 1111 between Kalbaskraal and Malmesbury: Km 12.310 and Km 23.500.

Location

Kwa-Zulu Natal (South Africa)



Client

South African National Roads Agency LTD (SANRAL)



Expertise

Pavements

This design entailed the following:

- Detailed visual assessments of the existing pavement as well as drainage facilities and existing road furniture.
- Traffic calculation to determine the design axial loads of the pavement.
- Geometric realignment of the pavement.
- The re-instatement of drainage facilities, such as minor pipe culverts, side drains etc.
- Repairing and/or replacing damaged or old road signs,
- Road markings to ensure road safety criteria are met in terms of posted speeds and geometric alignment,
- Guardrail requirements along the road in terms of safety and geometric requirements.
- Maintenance of major drainage structures which comprise of 2 bridges and 23 major culverts.
- Expropriation of private property to accommodate the realignment.

The final design required the widening of the road prism, the recycling of the existing base and subbase as the new upper selected layer, the construction of a cement stabilized subbase and a crushed stone base, as well as a 13.2mm Cape Seal as the surfacing. Included in the contract is the reconstruction or lengthening of a number of cast-in-situ culverts located both within and outside the limits of the road rehabilitation section. Work outside the rehabilitation limits will entail the construction of bypasses to maintain the flow of public traffic, and then, after culvert construction is complete, backfill and road layers will be done to tie in with the existing road. Appurtenant works included road markings, road signs, guardrails, fencing, services (Eskom, Telkom, water, and sewer services exist along the road), street lighting, weed control, routine maintenance, landscaping and environmental requirements.



TRANSPORTATION
PORTFOLIO
TRANSPORTATION
PLANNING



Our transportation planning team provides the following services:

- Land use and transportation planning and infrastructure design
- Commuter needs assessment
- Regional/local network modeling
- Signage, signals, and control systems
- Parking, safety audits
- Socio- economic analysis
- Cost-benefit analysis
- Infrastructure investment appraisal.



Project: Preparation of airport master and development plans for four regional airports
Location: Free State, Western Cape, Northern Cape, South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Traffic and Transportation Planning
Role: MPAMOT was part of a professional team for the development of masterplans for four regional airports, George, Bram Fischer (Bloemfontein), Kimberley and Upington. MPA was responsible of assessing the traffic and transportation supply, demand and requirements for the possible future masterplans for each airport. Our responsibility also includes bulk services and

Project: Bus Rapid Transport (BRT) Infrastructure design
Location: Alexandra to Midrand, South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Traffic Engineering
Role: MPAMOT was appointed to prepare a concept design for bus rapid transportation infrastructure between Alexandra and Midrand, northern Johannesburg.

Project: Proposed township establishment for a large-scale mixed-use development, Dalpark Ext.32, Carnival City
Location: Dalpark, Brakpan, South Africa
Client: G5 Properties (G5), in collaboration with Sun International and Jade Group
Expertise: Traffic and Transportation Engineering
Role: MPAMOT was appointed to prepare a traffic impact study in support of the township application. intend to develop a large-scale mixed-use development on a portion of land to the west of the existing Carnival City, Boksburg.

Project: Nyibe Township (New Ermelo)
Location: Ermelo, Mpumalanga, South Africa
Client: A4 Consulting
Expertise: Traffic Engineering
Role: MPAMOT (Pty) Ltd was appointed to prepare a traffic impact and access study in support of a proposed township establishment in a place currently called New Ermelo. It is located to the south-east of Ermelo town, along the eastern side of the N2 (Voortrekker Street). The site is located within the Msukaligwa Local Municipality, and it is at the south-eastern edge of the Ermelo town. The purpose of the application is to formalise the existing township plan and land use. The traffic assessed the existing and future access to the proposed township. The study also assessed the internal road network for the township, which is a mis of collector and access roads.



TRANSPORTATION PORTFOLIO

AVIATION

- Master planning
- Traffic forecasting
- Runway design & rehabilitation
- Freight handling services
- Apron designs
- Terminal & Retail development and design
- Infrastructure services design
- Structural Engineering





Project: ACSA Air Traffic Forecast Services
Location: South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Transportation, aviation
Role: Traffic advisor to prepare and present an independent traffic forecast study for its 22 airports in the Republic of South Africa.



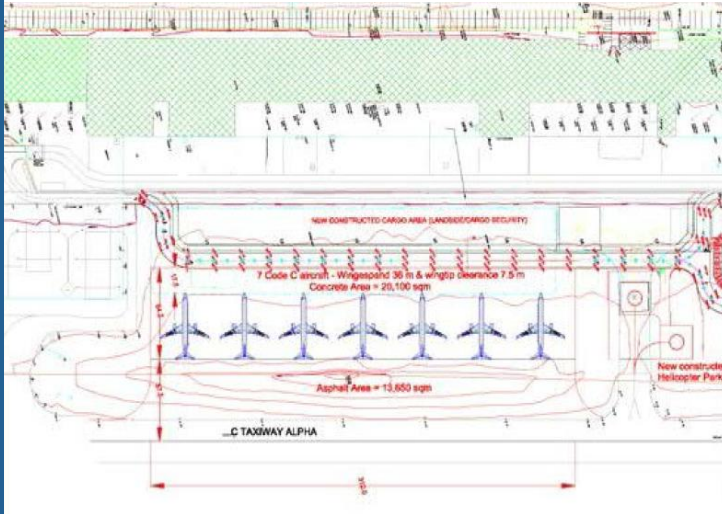
Project: Charlie Apron at O.R Tambo International Airport
Location: O.R Tambo International Airport, South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Transportation, aviation
Role: Joint venture partners were responsible for the design, documentation and site supervision related to this project.



Project: Echo Apron at O.R Tambo International Airport
Location: OR Tambo, South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Transportation, aviation
Role: Airport planning, design, contract supervision, contract implementation.



Project: Economic and Technical Evaluation of ACSA's Three Major Airports
Location: Johannesburg, Cape Town and Durban, South Africa
Client: Airports Company South Africa Ltd (ACSA)
Expertise: Transportation, aviation
Role: To undertake an economic and technical evaluation of the three major airports and the new replacement Durban airport at La Mercy.



Project: Golf Apron at O.R Tambo International Airport.

Location: OR Tambo, Johannesburg, South Africa

Client: Airports Company South Africa Ltd (ACSA)

Expertise: Transportation, aviation

Role: To investigate alternative locations for the construction of the 7 code C stands that were part of the original RAS scope of works. ACSA had identified Golf Apron as the best option. To perform detailed design.



Project: King Shaka International Airport.

Location: La Mercy, Durban, South Africa

Client: Airports Company South Africa Ltd (ACSA)

Expertise: Transportation, aviation

Role: Project

Management of the civil and structural engineering aspects of the project coordination and integration of all technical aspects including civil, structural, electrical, lighting, mechanical, fuel and structural engineering.



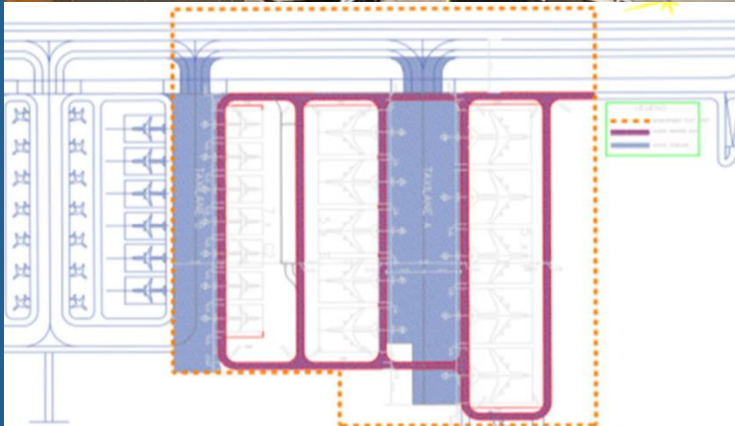
Project: ACSA Air Traffic Forecast

Location: South Africa

Client: Airports Company South Africa Ltd (ACSA)

Expertise: Transportation, aviation

Role: Airport traffic forecasting, Technical advisory services



Project: Remote Apron Stands at O.R Tambo International Airport

Location: OR Tambo, Johannesburg, South Africa

Client: Airports Company South Africa Ltd (ACSA)

Expertise: Transportation, aviation

Role: Civil and electrical engineering design, act as supervision consultants and the Principal Agent for the project.



Project: South African Airways – Route Network Strategy Review

Location: La Mercy, Durban, South Africa

Client: Department: Public Enterprises (Government of the Republic of South Africa)

Expertise: Transportation, aviation

Role: Appointed to undertake a strategic review of the South African Airways Group (SAA).

Project Name and Description	Services Performed	Member Firm(s) Involved	Date		Location	Owner Details
			Start	Finish		
O.R Tambo International Airport Midfield Terminal Development	Planning and preliminary design of airfield and external road infrastructure	Consortium	2008	2013	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>
King Shaka International Airport Various Landside Works	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT	2010	2011	Durban	Airports Company of South Africa <i>Duncan Barry</i> <i>(t):(032) 438 8300</i>
King Shaka International Airport Greenfield Airport Development	Lead Consultant responsible for services coordination, design of landside and airside roads and parking, aprons and taxiways	MPAMOT / Goba BKS / Young & Satharia	2006	2010	Durban	Airports Company of South Africa <i>Duncan Barry</i> <i>(t):(032) 438 8300</i>
O.R Tambo International Airport Remote Apron Stands Development	Planning, Design & Construction Supervision / Contract Implementation (Partial completion)	MPAMOT	2006	2010	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Kobus Nel/ Piet Agema</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>
Centurion Aerospace Village (CAV)	Macro Design for the Centurion Aerospace Village – Airside (works incl.: hangers, taxiways, taxi lanes, aprons, hangers, office buildings, etc.	MPAMOT	2009	2009	Waterkloof Air Force Base - Pretoria	Department of Trade and Industry / Denel <i>Chris Versluis</i> <i>Manager –Denel</i> <i>(t):(011) 927 3399</i>
O.R Tambo International Airport Golf Apron Development	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT	2008	2010	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Kobus Nel / Piet Agema</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>
OR Tambo International Airport Delta Apron Development	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT	2008	2010	OR Tambo International Airport	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>(011)921 6262</i>
Echo Apron Planning and Design Echo Apron at O.R Tambo International Airport) (old Johannesburg International Airport)	Planning, Design & Construction implementation	MPAMOT/ Africon	1998	2007	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>David Schultz / Riaan Swanepoel</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>
O.R Tambo International Airport Long term Car Park (5000 bays) –Super South	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT/ Africon	2006	2007	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>David Schultz / Riaan Swanepoel</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>

Project Name and Description	Services Performed	Member Firm(s) Involved	Date		Location	Owner Details
			Start	Finish		
Charlie Apron Planning and Design New Charlie Apron at O.R Tambo International Airport (old Johannesburg International Airport)	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT/ DEC	2002	2004	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>David Schultz / Riaan Swanepoel</i> <i>Project Manager (ACSA)</i> <i>(t):(011)921 6262</i>
O.R Tambo International Airport Charlie & India Taxiway Extension	Planning, Design & Construction Supervision / Contract Implementation	MPAMOT/ Africon	1999	2001	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>(011)921 6262</i>
Perimeter Road Durban International Airport The project included for the rehabilitation of 2 km and new construction of 4 km of perimeter road passenger terminal apron at the Durban International Airport.	Mott MacDonald were responsible for the design, contract management and supervision for the Perimeter Road around the Durban International Airport. This road was a combination of surfaced and gravel roads and was specifically designed to allow access to all parts of the airside area by emergency vehicles.	MPAMOT	1999	2000	Durban International Airport, Kwa-Zulu Natal	Airports Company of South Africa <i>Arvind Jeewan</i> <i>+27 32 436 6641</i>
Airports Company of South Africa Investigation, pavement design, contract documentation and construction supervision of reconstruction and extensions to Apron and Taxiway	Planning, Design & Construction / Contract Implementation	MPAMOT / Africon	June 2001	Mch 2002	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>(t):(011)921 6262</i>
Car Park Facilities O.R Tambo International Airport (old Johannesburg International Airport)	Car Park Facilities, Civil Design, Contract Administration & Construction Monitoring	MPAMOT	1996	1997	O.R Tambo International Airport (old Johannesburg International Airport)	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>(t):(011)921 6262</i>
Runway Rehabilitation Cape Town International Airport	Runway rehabilitation, 25% JV Partner	MPAMOT / Africon		1998	Cape Town International Airport	Airports Company of South Africa <i>Mr B. Stoffles</i> <i>(t): (021) 935 3885</i> <i>(c): 082 307 7201</i>
Retail Development O.R Tambo International Airport (old Johannesburg International Airport)	Retail Development, 25% JV Partner	MPAMOT/ Africon		1999	O.R Tambo International Airport (old Johannesburg International Airport, Gauteng)	Airports Company of South Africa <i>Riaan Swanepoel</i> <i>(t):(011)921 6262</i>
Gate Gourmet Offices and preparation Centre Cape Town International Airport	All structures and civil design for Gate Gourmet Offices and Preparation Centre	MPAMOT		1997	Cape Town International Airport	Airports Company of South Africa <i>Mr B. Stoffles</i> <i>(t):(021) 935 3885</i> <i>or</i> <i>(c):082 307 7201</i>



TRANSPORTATION PORTFOLIO

RAIL





Project: ENRC – Tete to Nacala Railways Line
Location: Mozambique
Client: Eurasian Natural Resources PLC (ENRC)
Expertise: Transportation, rail
Role: Following our initial work at pre-feasibility stage, we were appointed to develop the outline design as well as procurement and project management advice of the heavy haul freight railway line to transport coal from the mines being developed in Tete Province to the port of Nacala on the Indian Ocean.



Project: Transnet Capital Projects – Iron Ore Line Expansion
Location: Sishen - Saldanha South Africa
Client: Transnet Capital Projects
Expertise: Transportation, rail
Role: Linking the line to a new mine in Sishen South, removing bottlenecks in access to the port of Saldanha, upgrading the power supply.



Project: Swaziland FEL-3 Study: Feasibility Study for the Engineering Works for the New 144 km Link Line between Lothair in Mpumalanga and Sidvokodvo in Swaziland
Location: Swaziland
Client: Transnet Capital Projects
Expertise: Transportation, rail
Role: Feasibility study for the Engineering works of the preferred

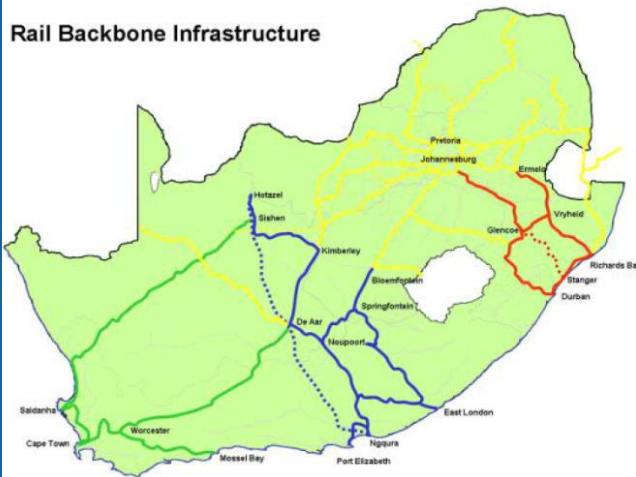


Project: Transnet Capital Projects – Cross Border Rail Links: South Africa to Botswana, Namibia and Zimbabwe
Location: South Africa to Botswana, Namibia and Zimbabwe
Client: Eurasian Natural Resources PLC (ENRC)
Expertise: Transportation, rail
Role: Pre-feasibility Studies were undertaken to determine existing levels of freight traffic along with future demand, which drove the optioneering of feasible routes for new railways from Gauteng to Botswana, Namibia and Zimbabwe.



Project: Pre-Feasibility Study (FEL-2) to develop a Rail Link from Ermelo Utilising the Buhrmanskop-Lothair – Branch line to Connect with the Swaziland Rail Network
Location: Swaziland
Client: Transnet Capital Projects
Expertise: Transportation, rail
Role: Pre-feasibility Study.

Rail Backbone Infrastructure



Project: Gauteng Basin Rail Links
Location: Gauteng, South Africa
Client: Eurasian Natural Resources PLC (ENRC)
Expertise: Transportation, rail prefeasibility
Role: Prefeasibility studies to determine upgrades required to the rail infrastructure for Gauteng and its surrounds. The studies were to cost effectively meet demand over the next 30 years through operations and infrastructure upgrades as well as to minimise delays due to metro traffic interaction. This included production of alignments for new rail lines and prefeasibility design of new mega-intermodal facilities within Gauteng to support future freight demand. The study also included the need for links into neighbouring countries such as Botswana.



Project: Gautrain – Overhead Conductor Distribution System (OCDs) Rectification
Location: Gauteng, South Africa
Client: Bombardier Transportation
Expertise: Transportation, rail
Role: To improve the performance of the contact wire/pantograph interface, necessary due to the excessive wear on the carbon strips. To assess the installed design criteria versus the design. The aim of the project was to make the systems compliant to specification, at the least cost option.



Project: Gautrain Phase 2 Cost Review
Location: Gauteng, South Africa
Client: DBSA in conjunction with the Gautrain Management Agency
Expertise: Transportation, rail
Role: We undertook commercial and contractual management review with our overall report being passed on to our Joint Client the DBSA. We have been required to work through the feasibility study and design inputs provided by other consultants to the Gautrain Management Agency (GMA) such that broad consensus on approach and outcomes can be agreed.



Project: Swaziland Railways Work Package 4 FEL-3 Feasibility Study Engineering Designs for Upgrade Section of the Railway between Sidvokodvo and Phuzumoya in Swaziland
Location: Swaziland
Client: Swaziland Railways
Expertise: Transportation, rail
Role: Feasibility study for WP4 Engineering designs for the upgrade of a 35km section of SR line between Sidvokodvo and Phuzumoya in Swaziland.



Project: Upgrade of Park Station Phase 1, 2 & 3
Location: Johannesburg CBD, Gauteng, South Africa
Client: Transnet Capital Projects
Expertise: Structural, rail
Role: Appointed as structural engineers for the conversion to a new concourse of the existing parking area suspended over active railway lines, between the old 1st and 3rd class concourses of the Johannesburg

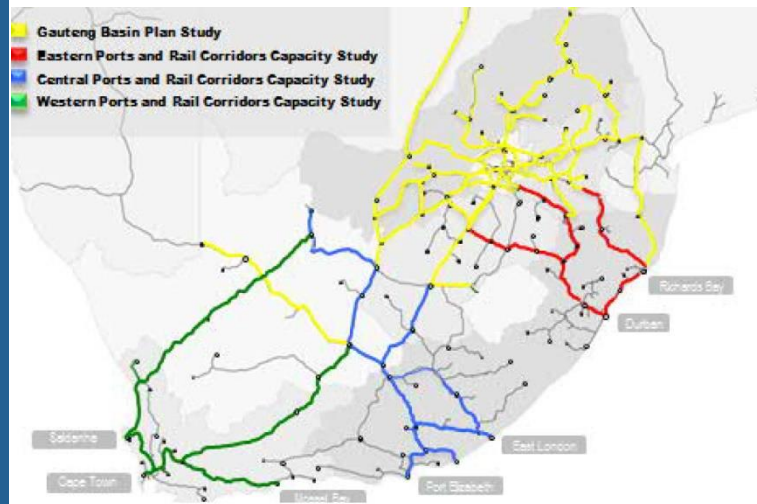


TRANSPORTATION PORTFOLIO

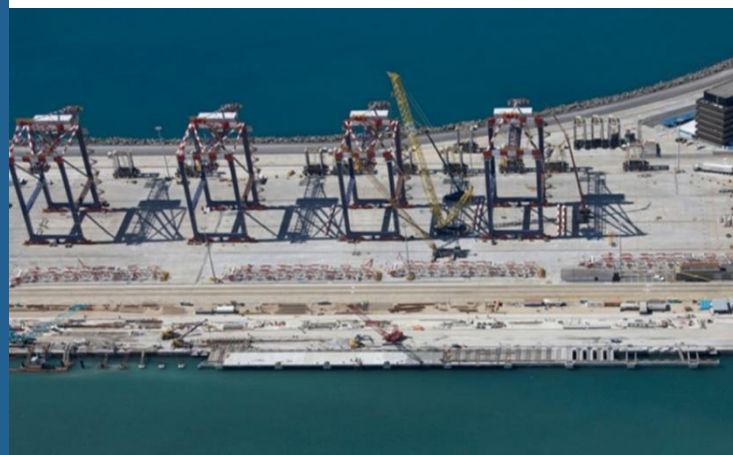
PORTS



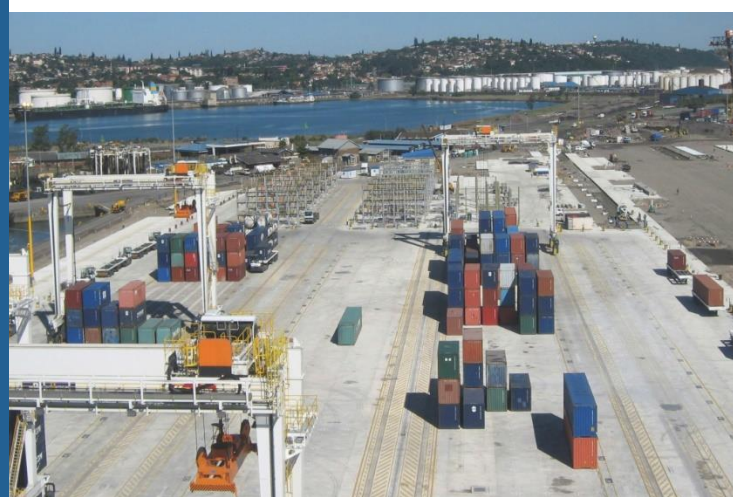
- Master planning
- Demand forecasting
- Feasibility Studies
- Asset Lifecycle Management
- Operations Services Design
- Operations Management
- Harbour and Coastal Engineering
- Integrated Logistics Planning



Project: Transnet Capital Projects
 – National Infrastructure Plan
Location: South Africa
Client: Transnet Capital Projects
Expertise: Transportation, rail
Role: The National Infrastructure Plan was created from a series of studies undertaken to integrate the development of rail and ports throughout South Africa. Three corridor studies were undertaken covering the Eastern, Central as well as the Western corridor.



Project: Transnet Capital Projects
 – Capital Expansion Programme
Location: South Africa
Client: Transnet Capital Projects
Expertise: Transportation, ports
Role: Capital expansion programme at the peak of this programme of work, we had over 300 staff working with Transnet in South Africa.



Project: Transnet Capital Projects
 – Ports and Rail Corridors Studies
Location: South Africa
Client: Transnet Capital Projects
Expertise: Structural, rail
Role: Appointed to conduct a set of pre-feasibility Studies to determine the required upgrades to the South African Ports and Rail network as a direct result of increased import and export traffic through the key Ports in the East, Central and West of the country.



Why MPAMOT?

Business management and innovation

MPAMOT Group drives innovation and operational efficiency through implementation of world-class business management system, resulting in alignment of group and subsidiary operations, and positioning MPAMOT Group to scale and grow operations in Africa.

MPAMOT (Pty) Ltd has selected Deltek Vantagepoint and Deltek Talent in the Cloud. MPAMOT will partner with Silversoft South Africa to implement the Deltek tailor-made business management suite for the MPAMOT group and subsidiaries. This drives innovation and streamlined business processes for the group and subsidiaries through the implementation of an industry leading business management system.

This allowed us the align and optimise group and subsidiary business systems that will streamline and drive workplace efficiency, promote organisational collaboration, information storage, and simplify decision making, through a single industry-focused business management suite that delivers best practice for Consulting Engineers.

This promotes organisational collaboration throughout their excellent talent pool, and ultimately increase efficiency. Allowing MPAMOT to achieve its ultimate strategic goal. MPAMOT will enhance innovation by utilising leading cloud technology to automate and enhance the entire project lifecycle. Similarly, it optimised service delivery, people engagement, project, and operations management, further cementing the firm's reputation for being an innovator in the consulting engineering industry.





MPAMOT manages the entire process from prefeasibility stage, to planning, engineering design, procurement, construction monitoring, and post-construction assessments. Our team of professional engineers and project managers provide innovative designs, while considering traffic planning to improve access and ease congestions. We enhance operational efficiencies, provide cost effective long- term solutions, and manage health, safety, and sustainability on each project.

Products and services: Construction monitoring

The level of service and the degree of monitoring required will also vary in proportion to the size and complexity of the development. In each case we consult with clients to assist them to select a range of services that are best suited for their needs. As part of our Construction Monitoring services, we typically provide:



Statutory compliance

Monitoring of compliance with statutory requirements e.g. obtaining and maintaining consents, permits and approval and complying with their respective requirements.



Environmental compliance

Monitoring compliance with environmental licences and their respective conditions.



Health and safety

Monitoring compliance with statutory health and safety requirements and associated method statements as specified / agreed prior to financial close.



Developer organisational and key staff changes

Monitoring changes to changes to the Developer organisational structure and changes to key staff and supply chain.



Developer project management systems

Monitoring Development implementation and compliance with project management systems and their alignment with widely recognised good industry practices.



Construction costs and programmes

Monitoring the progress of works against budgeted cost and scheduled programme / milestones. Reviewing and opining on time and cost to complete tests.



Design and construction quality

Monitoring the compliance of design practices applied with good industry practices, assessing the quality assurance systems and their implementation and the opining on the alignment of the actual works with the design.



Milestone completion and withdrawal request certification

Opining on the achievement of milestones and certifying withdrawal requests raised by the concessionaire.



Contracts

Assisting with the interpretation of technical matters in contractual documentation and advising on amendments.



Disputes

Providing expert technical advice in respect of disputes that arise between parties during construction.



Tests on completion

Witnessing the implementation of tests on completion.



Contact us

We welcome your comments, thoughts and suggestions on how we can partner to increase our value to all our stakeholders. Contact us by email, phone or follow us on social media.

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