

 RAND WATER	STRATEGIC ASSET MANAGEMENT QUALITY MANAGEMENT SYSTEM PROCEDURE	
TITLE: Land and Rights (Pipeline Procedure)		DOC NO: SAM LR 00010 Pr
SECTION: Land and Rights	EFFECTIVE DATE: September 2022	REV. NO: 07
AUTHOR: LAND AND RIGHTS MANAGER	FORMAT APPROVAL: QUALITY MANAGEMENT OFFICER	AUTHORISED BY: LAND SERVICES MANAGER

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1. PURPOSE

The purpose of this procedure is to describe the responsibilities of the Land Services Section in undertaking survey work of Rand Water's infrastructure. The purpose is also to describe the activities involved from initiation to completion of a project.

2. SCOPE

This procedure will apply to Rand Water's project managers, and other relevant sections that require Land and Rights input as a guideline to show the flow of activities required for implementing a project.

3. APPLICABILITY

This procedure will apply to Rand Water project Capital Execution Department, Design Office, Environmental Authorizations Compliance and all other relevant sections that require Land and Rights input as a guideline to show the flow of activities required for implementation.

4. REFERENCES

Document Title	Document No.	Location
SAGC	N/A	L&RM's Office
SAGI	N/A	L&RM's Office
SARWA	N/A	L&RM's Office

5. TERMS, DEFINITIONS AND ABBREVIATIONS

LSS - Land Services Section

M:LS - Manager: Land Services

L&R - Land and Rights

LRM - Land and Rights Manager

PAM - Planning Asset Manager

IWSMP - Integrated Water Sustainability Master Plan

IA - Infrastructure Agreement

PM - Project Manager

DOM - Design Office Manager

EMS - Environmental Management Section

WUL - Water Use License

HIRA - Heritage Identification Risk Assessment

BA - Basic Assessment

EA - Environmental Authorization

DTM - Digital Terrain Model

LiDAR - Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges to the Earth

POA - Power of Attorney

GLS - Group Legal Services

GIS - Geographic Information Section

SAGC - South African Geomatics Council

SAGI - South African Geomatics Institute

SARWA - South African Right of Way Association

TIC - Technical Information Centre

6. RESPONSIBILITY AND AUTHORITY

The Land Services Manager is responsible for ensuring that the requirements of this procedure are implemented and adhered to by all relevant sections within Rand Water.

7. ACTION / PROCEDURE / METHOD

7.1 PLAN PROGRAMME

- The Asset Planning section within Strategic Asset Management Division identifies the 5- year project plan (IWSMP) for Rand Water and obtains board approval and budgetary provisions. The Assets Department shall provide the Capital Execution Department with the 5-year project plan, as well as a detailed breakdown of projects categorized by priority and projected implementation dates
- Planning Brief/Pre Project-Implementation Review shows the details and specifications of the projects shall be provided from Planning Asset Manager to Project team

- Projects are then generated through SAP and networks created
- LSS will plan the projects in line with the timelines specified to ensure that routes are selected, landowners negotiated, other stakeholders informed so that the property and servitude rights are secured and protected

7.2 INITIATE AND IMPLEMENT PROJECT **(Needs to be read in conjunction with RACI Model - Annexure 1)**

7.2.1 Receive Survey Request (SAM LS 0001 F)

- Detailed Scope of Work from project manager, including program timeframes

7.2.2 Route Selection (1 - 2 Months)

- Identify 3 Routes for Environmental application (BA, EIA and / or WUL)
- Affected parties will investigate on site identifying water courses and other sensitive areas, including 2 x alternative routes
- Identify and confirm any encroachments onto RW's servitudes or properties
- Walk the route with Surveyor, PM, EMS, Design Office (Pipelines), Asset Planning, OPS staff, SAM Division SHEQ and other relevant stakeholders to finalize the preferred route

Final route to be agreed and signed-off with consultation with LRM, PM, Design Engineer, Asset Planning, EMS and any other stakeholders (as per Pipeline Route Selection Document SAM LR 00005 F)

7.2.3 Identify Land Owners (Deeds Search) (1 week)

- Undertake and identify legal landowners along the most cost-effective pipeline route (Preferred route)
- Confirm legal ownership where there are formal (structures) and informal (Squatters)

7.2.4 Design Office (L&R/Pipeline Draughting) (4 - 12 Weeks)

- Gather cadastral and GIS data (registered properties and servitudes) to produce Way-leaves /Property Schedules)
- Generate from latest Arial/Lidar data or past As-built data the proposed and the General and Hydraulic section designs
- Generate cross section plans for river crossings and wetland areas for Water Use License application (WULA)

7.2.5 Locate and Contact Owners (1 Weeks)

- Confirm property ownership and contact details of landowners
- Update Servitude Negotiation Checklist
- Utilize Forensic Department

7.2.6 Aerial Lidar Survey (Consultant) or Detail Survey (4 Months)

- **Detailed strip survey undertaken by surveyors or Lidar mapping by consultants' *Physical survey of route***
 - Center lines, bend points, benchmarks, etc
- *Undertake Survey / Pipeline Draughting*
- **Surveyors to provide topographical survey to design (DTM or LiDAR)**
- **Design Office / consultants appointed to undertake preliminary to detailed pipeline designs**
- **Design office to produce Valuation and servitude plans showing extent of servitude area on each property, including working strip if required**
- **Surveyors to check accuracy of Aerial data and line mapping**
- Surveyors to check the extent of encroachments impacting the route of the new pipeline/s

7.2.7 Appoint a Registered Property Valuer (3 months)

- Property valuer to undertake valuations of each servitude area and to produce a Sworn Valuation Report indicating market-related compensation payable to the landowners
- Surveyors to supply landowner/s with Valuation report (servitude areas/ working strip / crop damage). If compensation is not agreed, owner to provide independent valuation report until a win-win situation arises (both parties agree) otherwise expropriation.

7.2.8 Negotiations/Consultation Process (6 months)

- Commence the consultation process with the landowner/s
- Inform the landowner/s of Rand Water's proposed intention to accommodate infrastructure, subject to EA
- ***Negotiate the signing of Rand Water's IA (during this process minutes are taken, or a register is signed)***
- Inform the landowner/s of the conditions of the servitude including what the landowner he/she is permitted to do on the servitude. Also inform the landowner about the servitude area, existing servitude, future construction in the servitude strip and new servitude.
- Discuss and agree on the proposed new servitude area with PAM, PM, Design Engineer and landowner/s
- Negotiate working strip area required for construction purposes only (not to be registered)
- Assist GLS with the relocation of dwellers along the proposed pipeline route. Involve GLS, Strategic Customer Partnership (Regional Account Executives) if there are illegal encroachments. Meeting with the relevant stakeholders (internal and external) to resolve all encroachment issues.
- **Rand Water's Legal Department**
 - Land and Rights to take overall responsibility of the negotiation process with support from GLS
 - Surveyors to communicate to the Legal advisors the failure to secure any signed IA (negotiations) with landowner/s
 - IA's to be prepared by Land and Rights (surveyors), signed by manager GLS and landowner/s
 - Surveyors must make at least 6 attempts within 6 months to negotiate servitude agreements (industry norm). In the event that it is clear that the owner is not willing to grant Rand Water

servitude, the surveyor/s and legal advisor/s to meet to determine the best way forward, in the interest of Rand Water. LRM to inform Legal department of expropriation and submit the required documentation to GLS to action.

- Portfolio Integrated Committee and RW Board to approve expropriation for the attention of Minister: Department of Water and Sanitation

7.2.9 Environmental Authorizations (BA'S, EIA'S, WULA'S ETC)

- EAC is responsible but must work in conjunction with land services section regarding Environmental Authorization.

7.2.10 Undertaking the Design of the pipeline route (4 months)

- Surveyor and Draughting create Centre lines, bend points, etc
- Undertake survey draughting
- Surveyors to provide topographical survey to design (DTM or Lidar)
- DOM/Design office to check preliminary pipelines designs
- Design office to produce valuation and servitude plans showing extent of the servitude area on each property, including working strip if required

7.2.11 Services Detection - Locating of External Services (1 month)

- Internal surveyor / consultants to undertake detection of services (Y, X, Z) coordinates above and below ground level
- Verification of services can also be confirmed with stakeholders e.g. Eskom, Sasol, municipalities, etc
- Hand over services data to Design Office to insert on preliminary pipeline plans, including Pipeline Jacking plans

7.2.12 Manage and update As-Built drawings (For the duration of the construction period)

- Physical survey of all horizontal and vertical bends points (Y, X, Z)
- LRM to hand over the electronic As-Built data to Design Office

7.2.13 Framing of SG Diagrams once the as-builts are done by Land Surveyor (Internal or Appoint Consultants) (3 months)

- L & R to supply proposed servitude plan to Land Surveyor
- Check all SG diagrams (coordinates, property descriptions, deviations, and areas) before submission to the office of the SG for approval
- Checking of the approved diagrams for correctness

7.2.14 Servitude Registration at Deeds Office Process (Refer to Cadastral Procedure)

- L & RM to issue instruction to GLS with the approved diagram, signed infrastructure agreement/expropriation approved valuation report to appoint the Conveyancer
- L & RM to confirm the correctness of property description and valuation amounts before L & RM signs the POA

- GLS to issue the confirmation of registration to L & RM for payment of compensation.

7.2.15 Pay Compensation to the Landowner/s within 21 working days of Registration of the Servitude

- Once the registration at Deeds Office received from GLS, the signed Remittance Advise and Invoice will be from the landowners.
- Create SAP requisition and Journal entry to pay compensation to landowners from LSS Capex budget
- Submission of Invoice to Finance for payment.

7.3 CAPITALIZATION AND CLOSEOUT PROJECT

- Complete the Capitalization Form to Project Controls department
- Hand over Asset Capitalization Form and required technical information to Finance department to capitalize servitude rights by M:LS
- Finance department to inform M:LS of Assets Under Construction / Capitalized and then Archived
- Storage of survey calculations and cadastral data (R:\Land Services Section) and project file.
- Hand over to GIS section all pipeline data, approved SG diagrams, and As-builts coordinates
- GIS to capture all pipeline data (existing and proposed infrastructure), including approved SG diagrams on the GIS Portal

8. RECORD AND DATA KEEPING

Record Document	Form/Doc Number	Location	Retention Period
Weekly Report	N/A	Survey Admin Officer	5 years
Survey Request Form	SAMLR 00001F	L & RM	5 years
Negotiations Report	N/A	Survey Admin Officer	5 years

9. DOCUMENT CHANGE HISTORY

The following table contains the history of this document with a description of each revision.

Date	Previous Revision Number	New Revision Number	Description of Each Revision
14 June 2006	Rev.00	Rev.01	Change document no. to comply with corporate format
13 Oct 2009	Rev.01	Rev.02	New Template
23 April 2013	Rev.02	Rev.03	Updated Procedure
30 April 2017	Rev.03	Rev.04	Updated Procedure
30 Nov 2018	Rev.04	Rev.05	Amendment of Procedure to accommodate new structure
4 June 2020	Rev.05	Rev.06	<i>Addition the signing of final route by all stakeholders on 7.2.2.1 last bullet and 7.2.8 3rd bullet the taking of minutes during meetings with landowner was add.</i>
11 Nov 2021	Rev.06	Rev.07	<i>The framing of diagram is changed to take place after the as-builts not once the Design drawings are done. 7.2.12 and 7.2.13 were swapped.</i>

10. ANNEXURE 1 (RACI MATRIX)