

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re/Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
34	Repair Footways, Kerbs, Gutters, Patching, Guardrails, Vegetation Control	% implementation of Asset Preservation programme as per Regional Operations Implementation Plan (Repair Footways, Kerbs, Gutters, Patching, Guardrails, Vegetation Control)	OPEX	57.8%	R 21 436 000,00	90% implementation of Regional Operations Implementation Plan	<p>Programme Target: 90% Achieved 77.1%</p> <p>Footway repairs - concrete blocks: Target 13,191m2 Achieved 14,361m2 (100%);</p> <p>Footway repairs -in situ concrete: Target 823 m2 Achieved 419 m2 (50.85%);</p> <p>Footway repairs Asphalt: Target 13 373 m2 Achieved 8 440.76 m2 (63.12%);</p> <p>Skoffling: Target 926 671 m2 Achieved 2 586 217 m2 (100%);</p> <p>Chemical control: Target 281 797m2 Achieved 338 070 m2 (100%);</p> <p>Safety Barriers: Target 2058 lm Achieved 100 lm (4.86%);</p> <p>Guardrails: Target 3 024 lm Achieved 9 853 lm (100%);</p> <p>Patching: Target 34 100 m2 Achieved 39 160 m2 (100%);</p> <p>Guardrails (M'ways): Target 11404 lm Achieved 8585 lm (75.28%)</p>	<p>HR is in process of recruitment. Have received mechanical broom back from repairs are training depot employee to operate. Have received new stock of chemicals for weed spraying and also new paint stock for graffiti removal</p> <p>More resources are required to maintain required targets, welder is needed in various activities</p>	

(E) Gravel Roads – Routine Maintenance

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014-15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re/Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
35	Gravel Road Maintenance	Lane Km of gravel road maintained (blading, re-graveling, rip and re-shaping)	OPEX	1616 Lane Km	R 21 140 000,00	2000 Lane Km of gravel road maintained	1765.6 Lane Km achieved		

(F) Gravel Roads – Gravel Roads to Surfaced Roads

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014-15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action/Plans (where performance is behind schedule)
36	Upgrade: Gravel Roads to surfaced : BRAM FISCHERVILLE	Km of gravel roads surfaced : BRAM FISCHERVILLE	CAPEX	3.5 Km	R 33 000 000,00	7.1 Km of gravel roads surfaced, BRAM FISCHERVILLE	4.3 Km achieved	Due to local labour and SMME's protests, the work delayed and extra funds were requested to complete the project as per scope of work.	The matter was resolved by terminating the services of the local SMME, the work was only executed by the main contractor.
37	Upgrade: Gravel Roads to surfaced : ORANGE FARM	Km of gravel roads surfaced : ORANGE FARM	CAPEX	2.8 Km	R 44 000 000,00	8 km of gravel roads surfaced, ORANGE FARM	8.2 Km achieved		
38	Upgrade: Gravel Roads to surfaced : DIEPSLOOT WEST EXT.3	Km of gravel roads surfaced: DIEPSLOOT WEST EXT.3	CAPEX	4.8 Km	R 34 000 000,00	5.3 km of gravel roads surfaced	6.42 Km achieved		
39	Upgrade: Gravel Roads to surfaced : Doornkop/Thulani; DOORNKOP it also includes required interventions in Protea (Rsm).	Km of gravel roads surfaced : DOORNKOP	CAPEX	0.54 Km	R 23 000 000,00	3 km of gravel roads surfaced; Doornkop	0 Km achieved	Due to the late appointment of the consultant, construction commenced later than anticipated.	The consultant was appointed in October 2016 and commenced.
40	Upgrade: Gravel Roads to surfaced : LAWLEY EXT.1	Km of gravel roads surfaced : LAWLEY EXT.1	CAPEX	0 Km	R 53 000 000,00	6.8 Km of gravel roads surfaced, LAWLEY EXT.1	1.2 Km achieved	Due to poor performance by the appointed contractors. The construction is behind.	JRA anticipated applying penalties or terminate the contract. The contractor submitted a revised programme to complete work as agreed.
41	Upgrade: Gravel Roads to surfaced : IVORY PARK EXT.9	Km of gravel roads surfaced : IVORY PARK EXT.9	CAPEX	0 Km	R 42 000 000,00	9 km of gravel roads surfaced, IVORY PARK EXT.9	1.96 Km achieved	The contractor (Phase ii) entered into business rescue, this process negatively impacted on construction progress and expenditure.	JRA Contract Management Unit has intervened in the matter. A conclusion has been reached and construction resumed in Q4.

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014-15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
42	Upgrade: Gravel Roads to surfaced : Protea South Ext 1	Km of gravel roads surfaced : PROTEA SOUTH EXT 1	CAPEX	0 Km	R 30 000 000,00	2 km of gravel roads surfaced, PROTEA SOUTH EXT 1	2.9 Km achieved		
43	Upgrade: Gravel Roads to surfaced : TSHEPISONG	Km of gravel roads surfaced : TSHEPISONG	CAPEX	0 Km	R 32 000 000,00	6.2 Km of gravel roads surfaced, TSHEPISONG	2 Km achieved	The contractor (Phase II) entered into business rescue, this process negatively impacted on construction progress and expenditure.	JRA Contract Management Unit has intervened in the matter. A conclusion has been reached and construction resumed in Q4.

Programme 3 – Bridge Management

(A) Bridges – Planning

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
44	BRID 20 - Conrad Drive Bridge; Blairgowrie. Renewal Bridges (Pedestrian and Vehicles) CRAIGHALL B WARD	Preliminary Design Report (PDR) completed for the Reconstruction of Conrad Drive Bridge over Braamfontein Spruit for road widening and increase in stormwater capacity.	CAPEX	PDR, DDR was not achieved, WUL was not achieved.	R 500 000,00	Preliminary Design Report (PDR) completed for the Reconstruction of Conrad Drive Bridge over Braamfontein Spruit for road widening and increase in stormwater capacity.	Preliminary Design Report (PDR) completed; EIA application submitted to GDARD.		

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) (Progress re Milestones)	Measures taken to improve performance (Action Plans (where performance is behind schedule))
45	BRID 20 - Bridges: Overtopping (Flooding), Renewal Bridges (Pedestrian and Vehicles) JOHANNESBURG F City Wide (Ten major bridges (and 10 minor structures also) that overtop in large storms because of their low capacity need to be upsized. Investigate reasons for overtopping and safety problems and provide solutions. Bridges also need upgrade and rehabilitation.	Partial construction of 3 bridges (Overtopping) as per annual project plan Bridges: Overtopping (Flooding), City Wide (Pillars, Piers, Reinforced earth fill, Beams)	CAPEX	PDR; DDR	R 80 000 000,00	Partial construction of 3 bridges (Overtopping): Pillars, Piers, Reinforced earth fill, Beams	Target achieved - Pillars, Piers, Reinforced earth fill, Beams completed		

(B) Bridges – Construction (New)

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
46	BRID 30 - Jabulani - Molapo Bridge. New Bridges (Pedestrian and Vehicles) JABULANI D Ward (New bridge over the railway to provide access to development zone. Requires investigation and preliminary work.)	Preliminary Design Report (PDR) completed and Environment Impact Assessment Application (EIA) submitted for the Bridge construction at Jabulani - Molapo Bridge: New Bridges (Pedestrian and Vehicles)	CAPEX	PDR EIA + WUL - application not submitted	R 2 200 000,00	Preliminary Design Report (PDR) completed; EIA application submission;	Preliminary design report (PDR) completed ; The Environmental Impact Assessment EIA) application submitted	Comment: Senior Management and the JDA Senior Management have decided and agreed to transfer the project from the JRA to the JDA. JDA plans to incorporate it into their Jabulani/Molapo Precinct development plan.	
47	BRID 05 - Naledi/Protea Bridge (Between Wards 20 and 14). New Bridges (Pedestrian and Vehicles) NALEDI D Regional (Construction of a linkage across the railway line to provide safety for pedestrians and eventually shorten the vehicular movement in the area.)	Bridge construction as per annual project plan - Naledi/Protea Bridge - New Bridges (Pedestrian and Vehicles)	CAPEX	Pillars, Piers, Reinforced earth fill for ramps, Beams across railway line)	R 22 150 000,00	1 Bridge constructed (Naledi/Protea Bridge)	Construction of Naledi/Protea bridge completed		

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve Performance Action Plans (where performance is behind schedule)
48	MISCL - Pedestrian Bridge in Klipspruit West. New Bridges (Pedestrian and Vehicles) KLIPSPRUIT WEST D Ward (Pedestrian railway crossing at Fuscia Road in Ward 11 (eventually vehicular) to safely connect Klipspruit West and Chiawelo at Fuscia and Foxglove Rd.)	Detailed Design Report completed for the construction of Bridge - Pedestrian Bridge in Klipspruit West - New Bridges (Pedestrian and Vehicles) by June 2016	CAPEX	PDR	R 6 000 000,00	Detailed Design Report (DDR) completed for the construction of Bridge - Pedestrian Bridge in Klipspruit West	Detailed Design Report (DDR) completed.		
49	MISCL - Pedestrian Bridge in Slovo Park New Bridges (Pedestrian) SLOVO PARK	Detailed Design Report completed for the construction of Pedestrian Bridge in Slovo Park by June 2016	CAPEX	PDR	R 5 000 000,00	Detailed Design Report (DDR) completed for the construction of Pedestrian Bridge in Slovo Park	Detailed Design Report (DDR) completed.		

Programme 4 – Stormwater Management

(A) Stormwater – Planning

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
50	RAMS - Stormwater Asset Monitoring System. New Computer Software JOHANNESBURG City Wide	Number of Wards completed in respect of Stormwater Asset condition audit (Visual Condition assessments)	CAPEX	New	R 2 000 000,00	10 Wards completed in respect of Stormwater Asset condition audit (Visual Condition assessments)	Target: 10 Wards Achieved: 10 Wards		
51	MISCL - Integrated Roads and Stormwater Master planning. New Stormwater Management Projects JOHANNESBURG F City Wide (Determination of floodlines and all the roads and stormwater studies as part of master planning throughout the City of Johannesburg.)	Identified Stormwater Master Planning completed as per areas identified in the annual project plan.	CAPEX	SWMP: Orange Farm; Limbro Park; President Park; Ivory Park.	R 15 000 000,00	Stormwater Master Planning completed: 1. Ebony Park 2. Zandspruit 3. Carlsworld 4. Finetown/Ennerdale south 5. Weilers farm/Sweetwaters 6. Soweto western quadrant 7. Chatswaid 8. Devland	Target: 8 Stormwater Master Planning (SWMP); Achieved: 8 Stormwater Master Planning (SWMP) :		
52	SW Asset Monitoring	Number of Wards assessed – SW Asset Monitoring as per annual project plan	CAPEX	119 wards completed against a target of 128	R 5 000 000,00	64 Wards assessed – SW Asset Monitoring	Target : 64 Wards Achieved: 64 Wards		

(B) Stormwater - Network development and Upgrading (Formal stormwater network in all currently un-serviced previously disadvantaged areas)

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re: Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
53	CATCH 10 - Emergency Stormwater Improvement (Multiyear): Protea Glen Ext 1-4 (Phase 1-5), New Stormwater Catchments PROTEA GLEN D Ward (Upgrading of stormwater drainage network to eliminate ponding of the area.)	Install 75m of 1200mm Stormwater pipe in respect of Emergency Stormwater Improvements : Protea Glen Ext 1-4 (Phase 1-5)	CAPEX	New	R 5 000 000,00	Install 75m of 1200mm Stormwater pipe in respect of Emergency Stormwater Improvements : Protea Glen Ext 1-4 (Phase 1-5)	0 m achieved	Due to the delay in the appointment of the contractor. The construction has not commenced.	The contractor has been appointed and construction will commence in July 2017.
54	REHAB - Rehabilitation of Open Channels City Wide. Renewal Stormwater Management Projects JOHANNESBURG F City Wide (This project is exclusive of the Conversion of Open Drains programme; and entails the rehabilitation of stormwater open channels City Wide in former old stormwater structures.)	% Rehabilitation of Open Channels City Wide Project completed as per annual project plan	CAPEX	New	R 5 000 000,00	100% Rehabilitation of Open Channels City Wide as per annual plan	Target: 100% Achieved: 59%	The contractor had challenges with working in the continuously flowing stream.	Failure to improve on progress will lead to recommendation of terminating the contract. Letters have been issued to the contractor addressing issues of poor performance.

(C) Stormwater - Network development and upgrading (Conversion of open SW channels to underground systems)

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
55	CONV - Conversion of Open Drains to Underground/Covered Drains in Bram Fischerville. Renewal Stormwater Management Projects BRAM FISCHERVILLE C Ward	Km of Open Drains converted to Underground/Covered Drains in Bram Fischerville Project completed as per annual project plan	CAPEX	1.6 Km	R 9 000 000,00	0.8 km of open SW drains converted to underground SW systems	0.8 Km achieved		
56	CONV - Conversion of Open Drains to Underground/Covered Drains in Ivory Park and surrounding areas. Renewal Stormwater Management Projects IVORY PARK EXT.7 A Ward	Km of Open Drains converted to Underground/Covered Drains in Ivory Park Project completed as per annual project plan	CAPEX	0 Km	R 17 000 000,00	4 km of open SW drains converted to underground SW systems	4.2 Km achieved		
57	CONV - Conversion of Open Drains to Underground/Covered Drains in Ivory Park and surrounding areas. Renewal Stormwater Management Projects ORANGE FARM A Ward	Km of Open Drains converted to Underground/Covered Drains in Orange Farm Project completed as per annual project plan	CAPEX	0 Km	R 20 000 000,00	0.55 km of open SW drains converted to underground SW systems	0 Km achieved	Due the delay in procurement process, the annual target was not achieved.	The contractor was appointed in April 2016. The inception meeting was held in May 2016, the site establishment is in progress and construction will commence in July 2016.

(D) Stormwater – Rehabilitation and Maintenance

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
58	MISCL - Dam Safety Rehabilitation Renewal Stormwater Management Projects JOHANNESBURG F City Wide (Updating of inspections and urgent rehabilitation work to comply with statutory legislation and ensure public safety. Dams are moving to EISD;)	Number of Dam Walls Rehabilitated (Emmententia Dam Wall rehabilitation) : > Refurbishment of upstream Dam Wall; > Rehabilitation of Dam outlet channels from slipway	CAPEX	PDR; DDR	R 21 000 000,00	1 Dam Wall Rehabilitated (Refurbishment of upstream Dam Wall completed); Rehabilitation of Dam outlet channels from slipway completed)	1 Dam Wall rehabilitated		

(E) Stormwater – Routine Maintenance

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
59	Repair and Clearing of Stormwater Systems (K's)	Number of SW drains / Kerb Inlets (K's) cleaned	OPEX	51054	R 72 958 400,00	55000 SW drains / Kerb Inlets (K's) cleaned	Target: 55 000 Achieved: 65 311		

Programme 5 – Mobility Management

(A) Mobility – Network Development

Key No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance Progress re Milestones)	Measures taken to improve performance Action Plans (Where performance is behind schedule)
60	MOB - Alternative Energy: Alternative Power Sources (LED). New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of Energy efficiency: Light Emitting Diodes(LED) installed at traffic signals (overheads only).	CAPEX	857	R 5 000 000,00	225 Energy efficiency: Light Emitting Diodes(LED) installed	Target: 225 Achieved: 225		
61	MOB - Alternative Energy: Alternative Power Sources (UPS). New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of Uninterruptible Power Supply (UPS) units installed at critical identified intersections.	CAPEX	27	R 13 000 000,00	125 Uninterruptible Power Supply (UPS) units installed	Target: 125; Achieved: 139		
62	MOB - CCTV Cameras. New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of intersections fitted with CCTV cameras to monitor intersections and roads.	CAPEX	10	R 2 500 000,00	9 Traffic intersections fitted with CCTV cameras	Target: 9 Achieved : 10		

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress or Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
63	MOB - Remote Monitoring: Urban Traffic Control (UTC). New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of traffic signal intersections fitted with Remote Monitoring Units (RMU's) as per annual project plan	CAPEX	331	R 3 000 000,00	150 traffic signal intersections fitted with Remote Monitoring Units (RMU's)	Target: 150 Achieved: 167		
64	MOB - Traffic Signal Adaptive Control (TSAC). New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of traffic signal intersections fitted with Adaptive Control detection devices as per annual project plan	CAPEX	117	R 5 000 000,00	45 traffic signal intersections fitted with Adaptive Control detection devices	Target: 45 Achieved: 58		

(B) Mobility – Construction

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress or Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
65	MOB - Installation of New Warranted Traffic Signals In All Wards City Wide. New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of New Warranted Traffic Signals installed as per annual project plan	CAPEX	19	R 5 000 000,00	2 New Traffic Signals installed at Warranted intersections	Target: 2 Achieved: 4		

(C) Mobility – Renewal

Kpi/No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
66	MOB – Re-cabling of Old Redundant Cables at Signalized Traffic Intersections. Renewal Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of Traffic Signal Intersections re-cabled (replacement of Old Redundant Cables at Signalized Traffic Intersections)	CAPEX	100	R 15 000 000,00	90 Traffic Signal Intersections re-cabled	Target: 90 Achieved: 103		
67	MOB - SARTSM: Upgrade of Existing Signalised Intersections. Renewal Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	Number of traffic signal Intersections upgraded to SARTSM requirements as per annual project plan	CAPEX	125	R 2 000 000,00	50 traffic signal Intersections upgraded to SARTSM requirements	Target: 50 Achieved: 70		
68	MOB - Upgrading Controllers , Renewal Mobility: Intelligent Transportation System & Networks JOHANNESBURG F Regional	Number of controllers hardware upgraded at Traffic Signal Intersections as per annual project plan	CAPEX	180	R 5 000 000,00	200 controllers hardware upgraded at Traffic Signal Intersections	Target: 200 Achieved: 226		

(D) Mobility - Planning

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
69	MOB - Intelligent Transport Systems (ITS) Projects. New Mobility: Intelligent Transportation System & Networks JOHANNESBURG F City Wide	% Implementation of Intelligent Transport Systems (ITS) Project as per annual project plan:- Design, purchase and deployment of ITS	CAPEX	New	R 29 500 000,00	95% Implementation of Intelligent Transport Systems (ITS) Project as per annual project plan	Target: 95% Achieved: 0%	Implementation of the ITS DBOM project has commenced with installation of on-street equipment (such as CCTV cameras, electronic signage etc.) on the M1 & M2 freeways. Illegal mining within the road reserve and theft of power supply cables has resulted in stopping work activities until security measures have been implemented.	This Freeway Management Project will be completed in June 2017. The related Arterial Management project (on the key arterials) will commence in 2016/17. Installation of ITS equipment (CCTV & VMS) on the FMS commenced on M2 in 2015/16 and will continue in 2016/17

(E) Mobility - Maintenance

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
70	Traffic signs maintained. (Maintain route markers, tourism signs, directional signs and regulatory/ warning signs)	Number of Traffic Signs Maintained	OPEX	5577	R 17 043 070,00	2500 Traffic signs maintained	Target: 2 500 Achieved: 4 805		
71	Upgrade - upgrading of street names: kerbs with street names re-painted:	Number of street names (kerbs) painted	OPEX	37372	R 6 151 740,00	40 000 street names (kerbs) painted	Target: 40 000; Achieved: 55 203		

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72	Upgrading and maintaining faded Road Markings	Total Lane km of faded road marking upgraded	OPEX	788.3 Lane km	R 11 708 260,00	1 500 Lane km of faded road marking upgraded	Target: 1 500 Lane Km Achieved: 1 714.64 Lane Km		
73	Upgrading and maintaining street names (pole mounted street names)	Number of Street name (Poles mounted) upgraded	OPEX	358	R 5 496 400,00	3000 Street name (Poles mounted) upgraded	Target: 3 000; Achieved: 667		

(F) Mobility – Road Safety

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
74	Investigations of Road Safety requests from petitions	% of investigations completed as a result of petitions received	OPEX	111	R 5 866 000,00	100% of received petitions investigated	Target 28: Achieved: 28		

Programme 6: Internal Processes

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
75	Asset Preservation Production of asphalt in support of Rehabilitation and Renewal Roads programmes	Tons of Asphalt produced Includes external sales	OPEX	80 718,75 tons	R 5 000 000,00	120 000 Tons of Asphalt produced	Target: 120 000 tons Achieved: 81 359,27 tons	Production loss due to 640 hrs Downtime: Plant Breakdowns - 290 hrs Inclement weather - 32 hrs Stock count - 22 hrs Shortage of bitumen - 140 hrs No asphalt demand - 24 hrs Production delays - 132 hrs	JRA Board of Directors has approved the acquisition of New Asphalt Plant The New Asphalt Plant to be procured and installed in 2016/17 financial year; The issue of JRA appointed contractors purchasing Asphalt from the plant needs to be fast tracked (Credit Facility Document to be signed before June 2016) . These could have potentially added another +/- 5000 Tons of Asphalt production.
76	CS - Capital Equipment. New Plant and Equipment JOHANNESBURG City Wide	% of Capital Equipment (New Plant and Equipment) Budget procured	CAPEX	95%	R 5 000 000,00	95% implementation of Capital Equipment (New Plant and Equipment) Budget	Target 95% Achieved: 92%	During the year R 4,6 million was spent on capital equipment against a target of R5 million. Turnaround time and the budget available not adequate for additional purchases; Expenditure on the Bowsers and trailers are deferred to the new financial year given the cost for the items to be procured.	Draft specifications for all standard equipment used by the JRA so that we have ready off the shelf specifications to use when equipment is to be procured.

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77	IT - ERP Migration - New Computer Software JOHANNESBURG City Wide	% of Initiatives implemented as per annual project plan - SAP Migration .	CAPEX	New	R 20 000 000,00	100% Implementation of ERP migration	Target: 100% Achieved: 71%	The JRA was on track with the implementation when the COJ stopped the project. At that stage, the JRA had achieved 71% implementation against a pro-rata 71%	The JRA continuously engages with Group IT and Group Finance (Project Lead) to emphasize that: - JRA is prioritized for the SAP ERP system implementation; - The work already done by JRA, i.e. definition of business requirements, is incorporated into the new project, and - Both parties ensure the JRA business requirements are aligned to MSCOA.
78	EPWP Jobs created	Number of Jobs Created (a) EPWP Job Creation	OPEX	1133	(Refer JRA programmes)	2201 Jobs created (EPWP)	Target: 2 200 Jobs Achieved: 1 625 jobs	The reasons for non-conformance are summarised below: 1. Due to late appointment of contractors, jobs were not created in Q4 as planned. 2. The late appointment of the Community Liaison Officer (CLO) for M1 Double Decker and Oxford Federation, jobs were not created in Q4 as planned. 3. Due to lack of standardization of EPWP labour rate, the employment of local is delayed.	Actions taken to improve: 1. Facilitation of introductions of projects is underway. 2. The CLO for M1 Double Decker and Oxford Federation were appointed in March 2016 The overall progress in the double decker project is slow. 3. The report was compiled and awaiting the City of Johannesburg to address the issues of EPWP stipend.

Programme 7: Finance Management

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
79	Financial Management (OPEX Expenditure)	% spend on JRA's operating budget against approved operating budget (within 5 % variance)	OPEX	85.75%	R 0,00	100 % spend on JRA's operating budget (within 5 % variance)	Annual Target: 100% Achieved: 104 % JRA overspent the OPEX budget by R 36,884 million (4%)	The annual expenditure of OPEX budget is 104% (which is in the 5% variance allowed) The operating expenditure for the 2015/16 was R956, 076 million against an adjusted budget target of R919,192 million.	
80	Financial Management (CAPEX Expenditure)	% spend on JRA's capital budget against approved capital budget	CAPEX	71.5%	R 1 340 547 000	95% spend on JRA's capital budget	Target: 95% Achieved: 85.2% The annual CAPEX expenditure is R1 141 365,762 Million against a budget of R 1,340,547 million allocation (Mid-Year adjusted).	Work stoppages by local labour / SMIME's protests delayed construction implementation; Poor performance of contractors led to under spending of CAPEX; One contractor entered into Business Rescue that delayed the implementation of project	JRA engaged with Col to address the issues of EPWP stipend. Stipend increased by JRA as from 1 July 2016.. JRA on-going engagement with SMIME's to intervene in disputes. JRA CMU intervened on the matter and construction resumed especially for gravel roads projects.
81	Supply Management (BBBEE Expenditure)	75% of total procurement spend on BBBEE	N/a	88%	N/a	75% of total procurement spend on BBBEE	Target: 75% Achieved: 79.56%	Total payments made during the year amount to R 1 701 402 593, 37 million of which R 1 353 581 999,77 was spent on BBBEE suppliers. This equates to 79.56% against a target of 75%.	

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance (Action Plans (where performance is behind schedule))
82	Finance Management: - Management of financial records of the entity in accordance with any prescribed norms and standards, and are effective, efficient and transparent	% of service providers paid within 30 days.	N/a	New	N/a	95% compliance in respect of payment of all service providers within 30 days	Target: 95% Achieved: 97%		
83	Achievement of selected profitability and liquidity ratios	% Achievement of selected profitability and liquidity ratios (Current; Solvency; Remuneration to Expenditure; Maintenance to Expenditure.)	N/a	New	N/a	100% • Current ratio: 1:1 • Solvency ratio: 2:2.1 • Remuneration to Expenditure: below 48% • Maintenance to Expenditure: 5.3%	Target 100% Achieved: 75,24% Current Ratio: 1:1,303 against a target of 1:1 - target achieved (100%) Solvency Ratio 1:1,502 against the target of 1:2 - target not achieved (75.1%) Remuneration to Expenditure is 46,9% against a City target of below 35% (88.1%) Maintenance to Expenditure 2% against a target of 5,3% (37.74%)	This is due to the JRA being labour intensive and most of the work done internally. Salaries for Operations, Mobility & Freight personnel are recorded under direct road maintenance costs	

Programme 8: Governance

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re: Milestones	Measures taken to improve Performance Action Plans (Where performance is behind schedule)
84	Audit findings- external and internal audit	Number of issues raised by the AG resolved expressed as a % of total number of issues raised by the AG in the Management Letter	N/a	77.8%	N/a	100% of all findings raised by AG resolved	Findings due to be resolved: 32 Findings resolved: 30 93.75% (Note: Of 33 findings were raised, 1 finding is not yet due).	1) Delays in implementation of actions plans by Management.. 2) Action plans implemented but effectiveness still to be monitored to resolve the finding.	1. Session held by the MD with all HODs to review the quality of management action plans to resolve audit findings on the 13th June 2016. 2. Service Delivery Improvement intervention Plans developed; and some in progress of being developed to address service delivery performance issues. The plans were presented to the Service Delivery Committee and the Audit and Finance Committee. 3. Commitment made to the Audit and Finance Committee by the Managing Director to oversee the resolution of audit findings.

Kpi No	Project	Key Performance Indicators	Budget Stream	Base line 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (Where performance is behind schedule)
85		Number of audit findings raised by internal Audit resolved on set implementation dates, as % of total number of findings raised in the internal audit reports.	N/a	New	N/a	80% of all findings raised by Internal Audit resolved	Target : 80% Achieved:72.2% Findings due to be resolved: 176 Findings resolved: 127	70 findings remain unresolved as at the end of the year, of which 21 was not yet due. Reasons for non-conformance: 1) Delays in implementation of actions plans by Management.. 2) Action plans implemented but effectiveness still to be monitored to resolve the finding.	1. Session held by the MD with all HODs to review the quality of management action plans to resolve audit findings on the 13th June 2016. 2. Service Delivery Improvement intervention Plans developed; and some in progress of being developed to address service delivery performance issues. The plans were presented to the Service Delivery Committee and the Audit and Finance Committee. 3. Commitment made to the Audit and Finance Committee by the Managing Director to oversee the resolution of audit findings.

Kpi No	Project	Key Performance Indicators	Budget Stream	Baseline 2014/15	Budget (Amended)	Annual Target (Amended)	Progress (Annual)	Comments (Reasons for non-conformance) Progress re Milestones	Measures taken to improve performance Action Plans (where performance is behind schedule)
86	Detailed risk management implementation plan	% implementation of the Risk Management Plan (% Implementation of 17 activities identified)	N/a	New	N/a	100% Implementation of the Risk Annual Plan	<p>Target: Implementation of 17 Risk interventions</p> <p>Achieved: 15 interventions completed</p> <p>88.24%</p>	<p>1. Physical Assessment</p> <p>Capacity constraints were the biggest contributor for failure to achieve this KPI. However action was taken to leverage of the assessments currently being done by the Health & Safety team as they have capacity. Work has been done in this regard to align the checklists between Risk & Health Safety to ensure that all risk areas are covered as part of the assessment. The draft physical assessment plan will be taken through governance structures for ratification and approval.</p> <p>2. Assign assurance providers for the top identified risks. The was a dependency on the reviewing and updating all the risk register. This KPI was prematurely scheduled as there was a need a for a combined assurance Framework and Policy which was completed and approved in Q3 2015/2016. These will now inform the combined assurance plan which will assign assurance providers for the top identified risks.</p>	<p>1. Physical Assessment</p> <p>The draft physical assessment that has been developed in conjunction with Health & Safety will be finalised and submitted to the governance structures for approval in Q1 2016/2017.</p> <p>2. Assigning Assurance Providers for the top identified risks</p> <p>A combined assurance Framework and Policy were developed and approved in Q3 2015/2016 which were a requirement that needed to be completed before this action could be completed. A draft combined assurance plan has been developed which assign assurance providers for the top identified risks. This plan is currently being reviewed for comprehensiveness and will be taken through the governance structures for approval to close this action,</p>

Annexure C
CAPEX Expenditure

JRA CAPEX Expenditure Report Summary: as at 30 June 2016

(Based on the Mid-Year Adjustment Budget – approved by Council on 23 February 2016)

Project Description	Revised Budget (R)	Actual Expenditure (R)	Total Spend (R)	Project Description	Revised Budget (R)	Actual Expenditure (R)	Total Spend (R)
Bridges Overtopping	80 000 000	72 722 912	72 722 912	Dam safety Rehab	21 000 000	22 471 306	22 471 306
Bridge Expansion Joints	2 000 000	1 925 352	1 925 352	Emergency SW Intervention	5 000 000	5 280 313	5 280 313
Le Roux Widening	8 000 000	5 721 400	5 721 400	Environmental Compliance	1 500 000	1 516 920	1 516 920
Bridges Visual Inspection	7 000 000	4 826 425	4 826 425	Stormwater Masterplanning	15 000 000	16 555 016	16 555 016
Motorway Gantries	5 000 000	5 570 869	5 570 869	Design Future Schemes	10 000 000	9 128 166	9 128 166
Braam Spruit Morningside	1 000 000	1 009 011	1 009 011	Emergency Critical Urgent SW	30 000 000	29 946 031	29 946 031
Braam Spruit George Lea Park	1 000 000	975 562	975 562	City Deep Freight Hub (Renewal)	30 000 000	36 603 484	36 603 484
Robinson Canal Sub 4	1 200 000	1 065 297	1 065 297	Complete Streets	25 000 000	10 404 579	10 404 579
Willows Development	1 000 000	0	0	M2 Motorway Main Reef Intersect	1 000 000	637 245	637 245
Bond Street Ferndale	1 000 000	0	0	Geometric Improvements	2 500 000	1 185 696	1 185 696
Bez Valley Catchment	1 000 000	1 000 541	1 000 541	Guardrails	4 000 000	0	0
Kliptown Low Level Bridge	2 000 000	801 202	801 202	Alternative Power LED	5 000 000	4 997 803	4 997 803
Jabulani - Molapo Bridge	2 200 000	725 311	725 311	Alternative power UPS	13 000 000	12 374 699	12 374 699
Bridge Rehab - BMS	25 000 000	37 406 790	37 406 790	CCTV Cameras	2 500 000	2 543 245	2 543 245
Naledi-Protea Bridge	22 150 000	20 646 425	20 646 425	New warranted Traffic Signals	5 000 000	4 798 139	4 798 139
Gravel Rds Bramfischer	33 000 000	31 171 558	31 171 558	Intelligent Transport System	19 441 000	18 970 832	18 970 832
	34 000 000	33 729 863	33 729 863	ITS - CRR	10 069 000	8 209 473	8 209 473
	23 000 000	13 675 835	13 675 835	Recabling Intersections	15 000 000	15 986 670	15 986 670
	5 000 000	1 912 394	1 912 394	Remote Monitoring	3 000 000	2 738 375	2 738 375
	42 000 000	24 326 832	24 326 832	SARTSM	2 000 000	2 478 726	2 478 726
	53 000 000	27 544 491	27 544 491	Traffic management Centre	2 300 000	1 541 234	1 541 234

Project Description	Revised Budget (R)	Actual Expenditure (R)	Total Spend (R)
	10 000 000		0
Gravel Roads Orange Farm	44 000 000	44 451 676	44 451 676
Gravel Roads Protea South	30 000 000	26 476 716	26 476 716
Gravel Roads Tshepisong	32 000 000	11 968 338	11 968 338
Gravel Roads Kaalfontein	1 000 000		0
Gravel Roads Poorfje	2 000 000	1 111 357	1 111 357
Gravel Roads Slowoville	1 000 000		0
Pedestrian Bridge Kaalfontein	1 000 000	225 750	225 750
Pedestrian Bridge Klipspruit	6 000 000	225 750	225 750
Pedestrian Bridge Slovo Park	5 000 000	225 750	225 750
Emergency SW Protea Glen	5 000 000	596 754	596 754
Conver Open Drains Bramfischer	9 000 000	7 911 599	7 911 599
Conver Open Drains Ivory Park	17 000 000	12 767 874	12 767 874
Conver Open Drains Orange Farm	20 000 000	1 372 379	1 372 379
Conrad Drive Bridge	500 000	312 510	312 510
Pedestrian Bridge Diepsloot	500 000	231 394	231 394
New Plant & Equipment	5 000 000	4 637 274	4 637 274
Asphalt Plant Upgrade	6 000 000	2 080 050	2 080 050
Archiving Facility	5 000 000	5 818 326	5 818 326
Depot Upgrading	10 000 000	8 007 111	8 007 111
Operational Capex	10 000 000	4 687 947	4 687 947
Upgrading Head Office	10 000 000	6 575 166	6 575 166
ERP Migration New Computer Sof	20 000 000	19 318 475	19 318 475

Project Description	Revised Budget (R)	Actual Expenditure (R)	Total Spend (R)
Traffic Signal Adaptive Contro	5 000 000	4 817 511	4 817 511
Upgrade Controllers & Phasing	5 000 000	5 164 503	5 164 503
GIS Improvement	20 000 000	19 343 728	19 343 728
SW Asset Monitoring	2 000 000	2 033 183	2 033 183
Rehab Open Drains City Wide	5 000 000	4 891 756	4 891 756
Road Rehab & Reconstruction	110 000 000	110 365 337	110 365 337
Resurfacing M1 Motorway	101 756 000	63 508 412	63 508 412
Resurfacing M2 Motorway	10 000 000	6 094 141	6 094 141
Resurfacing Soweto Highway	5 000 000	8 594 965	8 594 965
Resurfacing of Roads	221 941 000	240 929 996	240 929 996
Louis Botha Corridor	2 000 000		0
Perth Empire Corridor	2 000 000		0
Westlake Road extension	20 000 000	20 000 000	20 000 000
James Street Extension	500 000	438 596	438 596
Spencer Road New Link	500 000	449 561	449 561
Jan Smuts Dualling	1 000 000		0
Ballyclare Drive Widening	500 000	338 536	338 536
Outspan Road Upgrading	500 000	267 318	267 318
Turfontein Corridor	2 000 000		0
Crownwood Road Upgrade	2 000 000		0
Katherine Road Upgrade	2 000 000		0
TOTAL CAPITAL	1 340 547 000	1 141 365 762	1 141 365 762

Technical Indicators explained

Acronym	Meaning	Explanation
PDR	Preliminary Design Report	<p>Also referred to as Concept and Viability <u>Definition:</u> Prepare and finalise the project concept in accordance with the brief, including project scope, scale, character, form and function, plus preliminary programme and viability of the project <u>Outcomes can typically include inter alia:</u> Project brief; Rights, constraints, consents and approvals; Defined services and scope of work; Site inspections, identification of necessary surveys, analyses, tests and site or other investigations where such information will be required for Detailed Designs; Determine availability of data, drawings and plans relating to the project; With the preliminary Scope been identified, there exist an opportunity, if required, to apply to:</p> <ul style="list-style-type: none"> • Gauteng Department of Agriculture and Rural Development for Environmental Authorization • Department of Water Affairs for the Water-Use-License • Heritage Council for heritage approval; if the proposed alteration qualifies for Heritage approval <p>Identify the Land owners, if new infrastructure, where new servitudes would be required and initiate the preliminary negotiations with such land owners to either as part of the project purchase the land or to go through a expropriation proses. Identification of criteria that could influence the project life cycle costs; <u>Form:</u> The Preliminary Design Report typically takes the form of a Report comprising various aspects as noted above; <u>Preparation:</u> The Preliminary Design Report is usually developed and prepared by the appointed project consultant in consultation with the respective project manager; <u>Sign-off:</u> The Preliminary Design Report is presented by the Consultant (typically), reviewed and approved by the project manager, Operations Manager and HOD</p>
DDR	Detailed Design Report	<p>Also termed Design Development <u>Definition:</u> Develop the approved concept (or Preliminary Design) to finalise the design, outline specifications, cost plan, financial viability and programme for the project <u>Typical deliverables will include inter alia:</u> Design development drawings; Outline specifications; Local and other authority submission drawings and reports;</p>

Acronym	Meaning	Explanation
		<p>Detailed estimates of construction costs; including land acquisition, Environmental Authorization terms and condition, Water-Use License terms and conditions, Heritage Council's terms and conditions.</p> <p><u>Form</u> The Detailed Design Report may not be a report as such but rather a combination or part of the deliverables</p> <p><u>Preparation:</u> The Detailed Design Report is usually developed and prepared by the appointed project consultant in consultation with the respective project manager;</p> <p><u>Sign-off:</u> The Detailed Design Report is presented by the Consultant (typically), reviewed and approved by the project manager, Operations Manager and HOD</p>
SWMP	Stormwater Master Plan	<p><u>Definition:</u> Stormwater master planning: making better use of limited budget allocations by targeting high priority stormwater projects.</p> <p>A comprehensive municipal stormwater management plan is the most cost effective approach for addressing stormwater runoff. The goal of stormwater planning is to protect or maintain the ecological balance of streams, lakes and aquatic life as well as to provide opportunities for human uses of water by mitigating the effects of urban development on the stormwater runoff quantity and quality.</p> <ol style="list-style-type: none"> Stormwater master plans assist in proactive planning to prevent problems from happening either by mitigating impacts before they create problems or by avoiding the creation of problems; prevention is cheaper than restoration. If we are to avoid the high cost of restoring degraded/damaged stormwater control structures as well as associated infrastructure we must better manage stormwater runoff before damage to infrastructure and potential loss of life occurs. Stormwater master plans are developed with public involvement and comment and so should be as comprehensive as possible in listing all known problems. Stormwater master plans give a list of prioritized problem areas thereby assisting in identifying required remediation measures and associated capital cost for better forward planning and capital budget estimation Stormwater management plans contain important information about preserving natural drainage features and functions of a watershed, and provide a list of evaluated alternatives such as using traditional pipe (grey) infrastructure versus more efficient and economic bio-engineering alternatives. <p><u>Typical deliverables</u></p> <p>Model Outline for Stormwater Master Plans <u>Problem Definition</u></p>

Acronym	Meaning	Explanation
		<p>a. <i>Water quality or water quantity problems</i></p> <ol style="list-style-type: none"> i. <i>Biological or chemical monitoring data of receiving waters;</i> ii. <i>Receiving stream or river geographic data.</i> <p><u>Existing Data Collection</u></p> <ol style="list-style-type: none"> a. <i>Geographic Information Systems (GIS) data – Stormwater infrastructure, impervious surfaces, soils, wetlands, watershed-subwatershed boundaries, culvert and bridge inventories, roads, stormwater best management practices, tree canopy cover, elevation data, slope, build out analyses and land use;</i> b. <i>Existing reports/studies of water quality problems (i.e. water quantity or water quality modelling analyses, class 3 or 4 road assessments/inventories, sanitary surveys, surface water drinking water protection plans, stormwater illicit discharge assessments, municipal capital development plans;</i> c. <i>Existing Data Analysis - Define priorities for receiving water restoration based on current data, define water quality and/or quantity goals, define data gaps and plan to fill data gaps.</i> <p><u>New Data Collection</u></p> <ol style="list-style-type: none"> a. <i>Conduct field surveys (windshield, public polls, public meetings, DPW –Street Dept. meetings, watershed walks, etc.) and compile list of sites contributing to the water quality problem;</i> b. <i>Define any field data gaps and plan to fill gaps;</i> c. <i>Field data analysis;</i> d. <i>Compile list of sources associated with defined water problem;</i> e. <i>Prioritize list based using decision matrix that can lead to feasible project selection, funding and implementation.</i> <p><u>Existing and proposed program, procedure or practice evaluation</u></p> <ol style="list-style-type: none"> a. <i>Define existing programs, procedures or practices that address problem;</i> b. <i>Define new programs, procedures or practices that could address problem.</i> <p><u>Summary and Recommendations</u></p> <ol style="list-style-type: none"> a. <i>Summarize current conditions;</i> b. <i>Propose additional system knowledge acquisition based on ii c and iii b;</i> c. <i>Proposed actions for existing development;</i> d. <i>Proposed actions for new development;</i> e. <i>Coordinate V c and V d actions with municipal capital development plans;</i> f. <i>Coordinate public comments/input.</i> <p><u>Form</u></p> <p>The SWMP is in the form of a report giving details of the existing drainage system assessment as well as the required remediation measures. The report includes the following main deliverables:</p> <ul style="list-style-type: none"> • Maps showing the existing drainage network locality and status; • Maps showing the problem areas and priority thereof;

Acronym	Meaning	Explanation
		<ul style="list-style-type: none"> • Maps showing the locality of the required remediation measures; • Summary tables in Excel format giving details of the existing as well as the required upgraded drainage network; • Digital data in a GIS format for uploading onto the Corporate GIS at the client <p><u>Preparation</u></p> <p>The Stormwater Master Plan is developed and prepared by the appointed project consultant in consultation with the respective project manager;</p> <p><u>Approval</u></p> <p>The Stormwater Master Plan is presented by the Consultant (typically), reviewed and approved by the project manager, Operations Manager and HOD</p>
WUL	Water Use License	<p><u>Definition:</u></p> <p>In line with the National Water Act (Act No. 36 of 1998), Specifically the 21 c and i listed activities (impeding and diverting the flow of a watercourse) all projects to be implemented in any water course, are regulated to ensure that a Water-Use-License Application (WULA) is made and granted before such work would legally be allowed to commence.</p> <p><u>Typical deliverables will include inter alia:</u></p> <p>Water-Use-License (letter on an official letterhead from National Department of Water and Sanitation (DWS))</p> <p><u>Form:</u></p> <p>The WULA typically takes the form of a Report comprising various aspects as described or instructed by DWS</p> <p><u>Preparation:</u></p>

Acronym	Meaning	Explanation
		<p>Preliminary Design Report from Professional Engineer (Consultant)</p> <p>Pre consultation meetings with the relevant case officer from DWS</p> <p>Application Form as supplied by DWS</p> <p>Technical report describing the activity and its impacts and mitigation thereof</p> <p>Any Specialist Studies as specified by DWS; This could involve studies such as Habitat Studies, Wetland Delineation Reports, Geotechnical Reports, floodline (1:100), etc.</p> <p><u>Sign-off:</u></p> <p>Water-Use-License</p>
EIA	<p><i>Environmental Impact Assessment</i></p>	<p><u>Definition:</u></p> <p>In line with the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998) (NEMA) and amendments, specifically The Environmental Impact Assessment EIA regulations that came into effect as of December 2014. All projects to be implemented in any Environmental Sensitive Area (as triggered by the specific listed activities), are regulated to ensure Environmental Authorization is granted before such work would legally be allowed to commence.</p> <p><u>Typical deliverables will include inter alia:</u></p> <p>Environmental Authorization (EA) (letter on an official letterhead from the Gauteng Department of Agriculture and Rural Development (GDARD))</p> <p><u>Form:</u></p>

Acronym	Meaning	Explanation
	<p>The EA typically takes the form of a Report comprising various aspects as described or instructed by GDARD.</p> <p><u>Preparation:</u></p> <p>Preliminary Design Report from Professional Engineer (Consultant)</p> <p>Application Form as supplied by GDARD</p> <p>Technical Report assessing the impacts and describing relevant mitigation</p> <p>Public Participation Meetings</p> <p>Any Specialist Studies as specified by GDARD. This could involve studies such as Habitat Studies, Wetland Delineation Reports, Geotechnical Reports, Alternative Designs, etc.</p> <p><u>Sign-off:</u></p> <p>Environmental Authorization</p>	