



ROYAL BAFOKENG  
PLATINUM  
MORE THAN MINING

# STYLDRIFT PROJECT PROGRESS UPDATE

RBPLAT ANALYST ROUNDTABLE 6 AUGUST 2019

20  
—  
19



# STYLDRIFT OVERVIEW

10.5mØ  
Main# -  
758m deep

6.5mØ  
Services# -  
723m deep

2 Settlers

4 Ore Silos

32  
Trackless  
Workshops

14 Equipped  
Stoping  
Sections

0 Trucking  
Stoping  
Sections

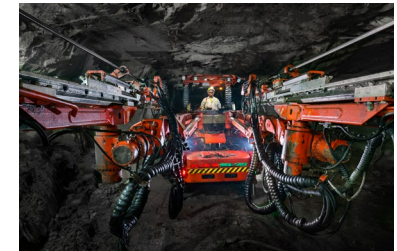
4 IMS  
Sections



320koz pa  
(4E)

4.30g/t (4E)  
delivered  
grade

230ktpm



At Steady State 2021



Where we are (H1 2019)

75.6koz  
(4E) H1

3.81g/t (4E)  
delivered  
grade

163ktpm  
peak



10.5mØ  
Main# -  
758m deep

6.5mØ  
Services# -  
723m deep

1 Settler

3 Ore Silos

24 Trackless  
Workshops

6 Equipped  
Stoping  
Sections

6 Trucking  
Stoping  
Sections

NO IMS  
Sections



# STYLDRIIFT HISTORIC PERFORMANCE



## Safety

- > **1.63 Million** FFS
- > **39.4%** improvement in SIFR
- > **35.1%** improvement in LTIFR
- > Principle of zero harm remains



## Financial

- > **Prudent** decision to slow down in 2015
- > **Steady** capital construction to complete footprint in 2020
- > High unit costs resulting from low volumes and **current** inefficiencies



## Operations

- > **Successful** transition from contractor to own construction and mining
- > Maintained critical path progress amid significant challenges with **Silo 4**
- > **Milestones** completed with consistency despite challenges
- > Exceeded required performance on **642 level development** to catch up slowdown deficit



## Focus Areas

- > **Infrastructure creation**
- > **Crew efficiency**
  - > Labour control and management
  - > IMS
  - > Re-development crews
  - > Fleet availability (TMM)
  - > Secondary support capacity improvement



# 230KTPM MILESTONE VS CURRENT PRODUCTION

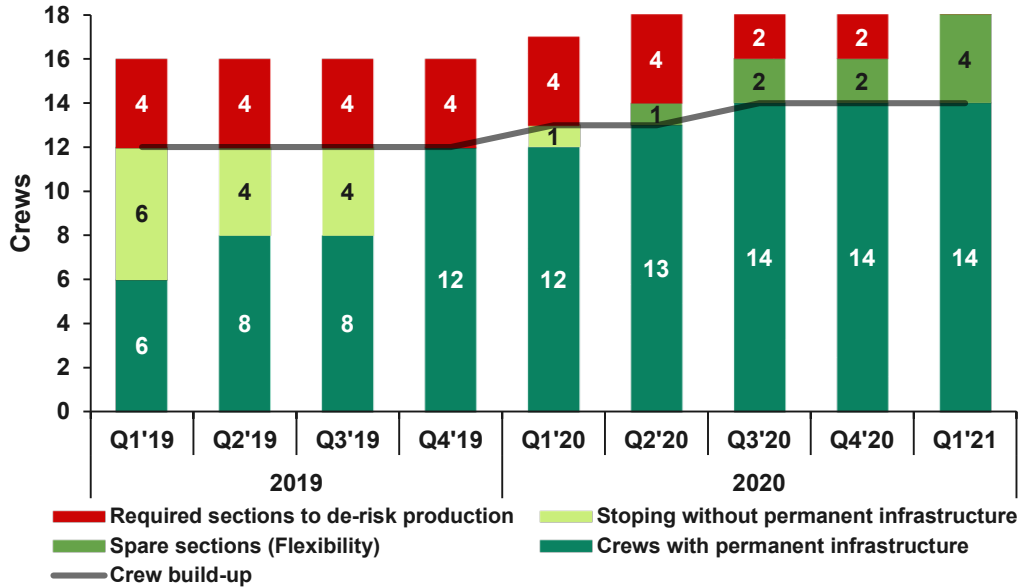
Sustainable steady state production at 230ktpm							
Area	Requirement	Q4'19	Q1'20	Q2'20	Q3'20	Q4'20	Q1'21
<b>Development</b>	Reach 5N and 4S in time for construction		✓				
<b>Section IMS</b>	Section 4S (2/4)	✗				✓	
	Section 5N (4/4)	✗					✓
<b>Infrastructure</b>	Rock handling	✗		✓			
	Water handling	✓					
	Power supply	✓					
	Workshops	✓					
	Logistics		✓				
	Ventilation	✓					
<b>Efficient crews</b>	14 crews @ 14 300t/Crew	✗				✓	

Performance improvement roadmap			
Area	Current	Future	Comment
<b>Labour</b>	12 Operational crews	14 Operational crews	All mining crews to be on board Q1'20
	Recruitment ongoing	Suitably staffed	Aggressive recruitment strategy
<b>TMM availability</b>	78%	85%	Artisan skills
			Workshop space
			TMM work rate (Tip distance/infrastructure)
<b>IMS</b>	0.68 (8/12)	1.29 (18/14)	Fundamental building block to success
<b>Geology</b>	Four stoping sections doing re-development Inefficient because they cannot move to a spare section	30% Inherent panel flexibility	Mine design caters for geological losses associated with the Merensky Currently unable to cater for section unavailability and steady state efficiencies remain at risk
		30% Section flexibility	
		70% Total flexibility	



# 230KTPM MILESTONES SUPPORT IMPROVED OPERATIONAL FLEXIBILITY

Flexibility improvement



## Main infrastructure in place

- > Rock handling
- > Logistics
- > Water handling
- > Workshops
- > Electricity
- > Ventilation

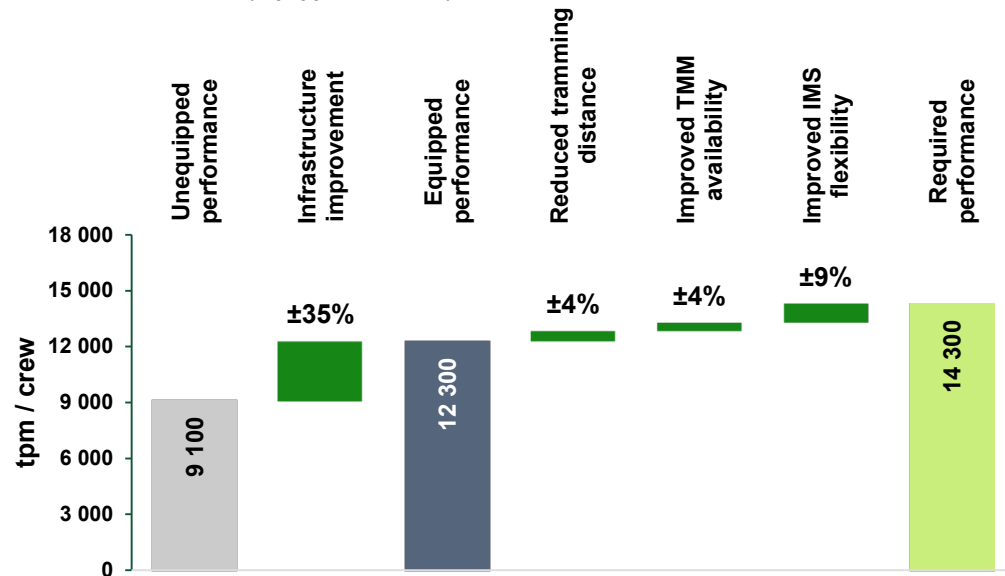
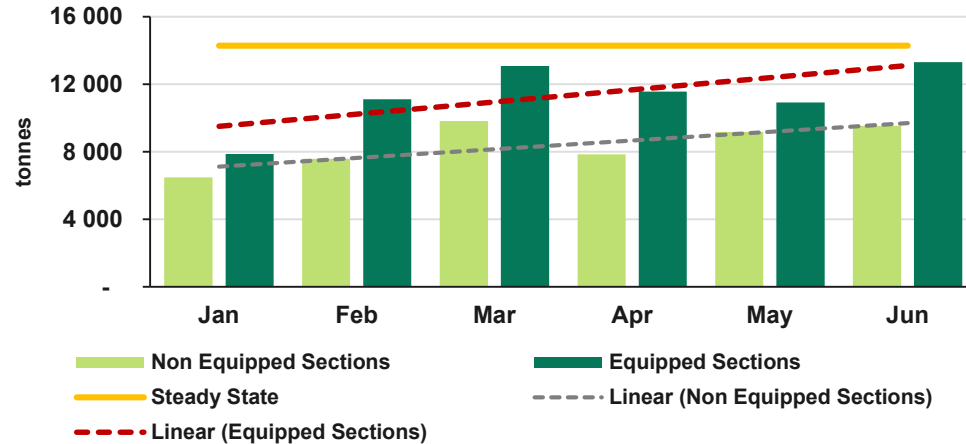
Description	Complete	2019	2020	Date
<b>Rock handling</b>				
<b>Temporary</b>	✓			
OPC 1,2	✓			
642 Level Y-Leg	✓			
<b>Silo 1</b>	✓			
OPC 3,4	✓			
<b>Silo 2</b>	✓			
UG2 bulkhead	✓			
<b>Silo 3</b>		✓		
Bulkhead 2S		✓		Q3'19
Bulkhead 3S		✓		Q4'19
Bulkhead 4S			✓	Q3'20
<b>Silo 4</b>		✓		
Bulkhead 1N	✓			
Bulkhead 2N		✓		
Bulkhead 3N		✓		Q4'19
Bulkhead 4N			✓	Q2'20
Bulkhead 5N			✓	Q1'21
<b>Water handling</b>				
<b>Temporary</b>				
SP200 Dam 1	✓			
SP200 Dam 2	✓			
<b>Permanent</b>				
Settler 1		✓		Q3'19
Settler 2			✓	Q2'20

Description	Complete	2019	2020	Date
<b>Logistics</b>				
<b>Main shaft</b>	✓			
Rock hoist	✓			
Man hoist	✓			
<b>Service shaft</b>	✓			
Water pipes	✓			
Air pipes	✓			
Fuel & lube piping	✓			
Concrete pipes	✓			
<b>Material loop</b>		✓		
2 Material bays		✓		
4 Material bays		✓		
6 Material bays		✓		Q4'19
8 Material bays		✓		Q4'19
<b>Workshops</b>				
Initial 8 workshops	✓			
Next 4 workshops		✓		Q4'19
Final 8 workshops			✓	Q1'20
<b>Electricity</b>				
6 x electrical feeds	✓			
Ngwedi sub-station	✓			
<b>Ventilation</b>				
Ventilation shaft 1	✓			
Ventilation shaft 2		✓		Q3'19
Ventilation shaft 3	✓			



# CURRENT PRODUCTION AND FUTURE EFFICIENCY IMPROVEMENT

Stopping performance



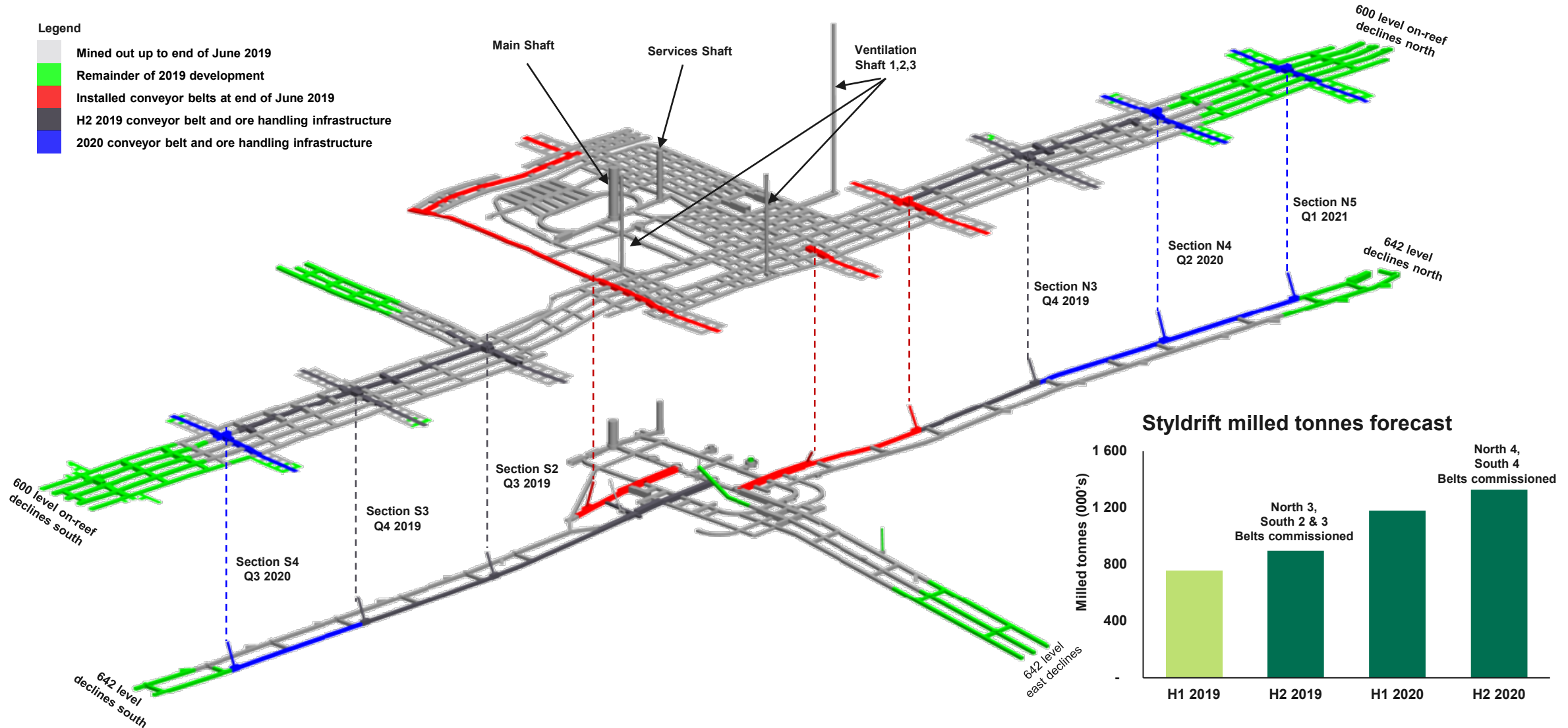
Improvement area	Description
Improved efficiency when section becomes equipped	<ul style="list-style-type: none"> <li>➤ Tipping point at close proximity to the face</li> <li>➤ Improved trammig fleet efficiency</li> </ul>
Focus areas to improve efficiency	<p><b>Tip to face distance</b></p> <ul style="list-style-type: none"> <li>➤ Capacity to extend conveyor belts doubled and to double again in 2020.</li> </ul>
	<p><b>TMM availability</b></p> <ul style="list-style-type: none"> <li>➤ Workshop space</li> <li>➤ Artisan competency, availability and upskilling</li> <li>➤ Revised maintenance strategy (maintenance scheduling, rotatable spares, critical spares etc.)</li> </ul>
	<p><b>IMS</b></p> <ul style="list-style-type: none"> <li>➤ Develop footprint to establish spare IMS sections (5N and 4S)</li> <li>➤ Sufficient face length per crew</li> <li>➤ Flexibility to move crews to effectively deal with geological losses</li> </ul>



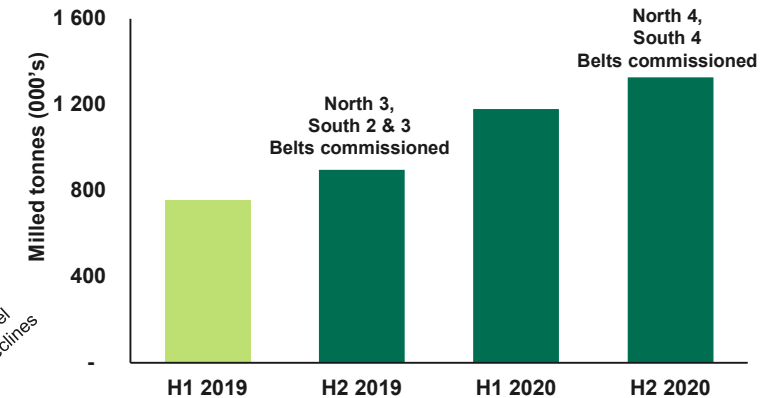
# IN CONCLUSION – INFRASTRUCTURE BUILD KEY TO 230KTPM

## Legend

- Mined out up to end of June 2019
- Remainder of 2019 development
- Installed conveyor belts at end of June 2019
- H2 2019 conveyor belt and ore handling infrastructure
- 2020 conveyor belt and ore handling infrastructure



### Styldrift milled tonnes forecast



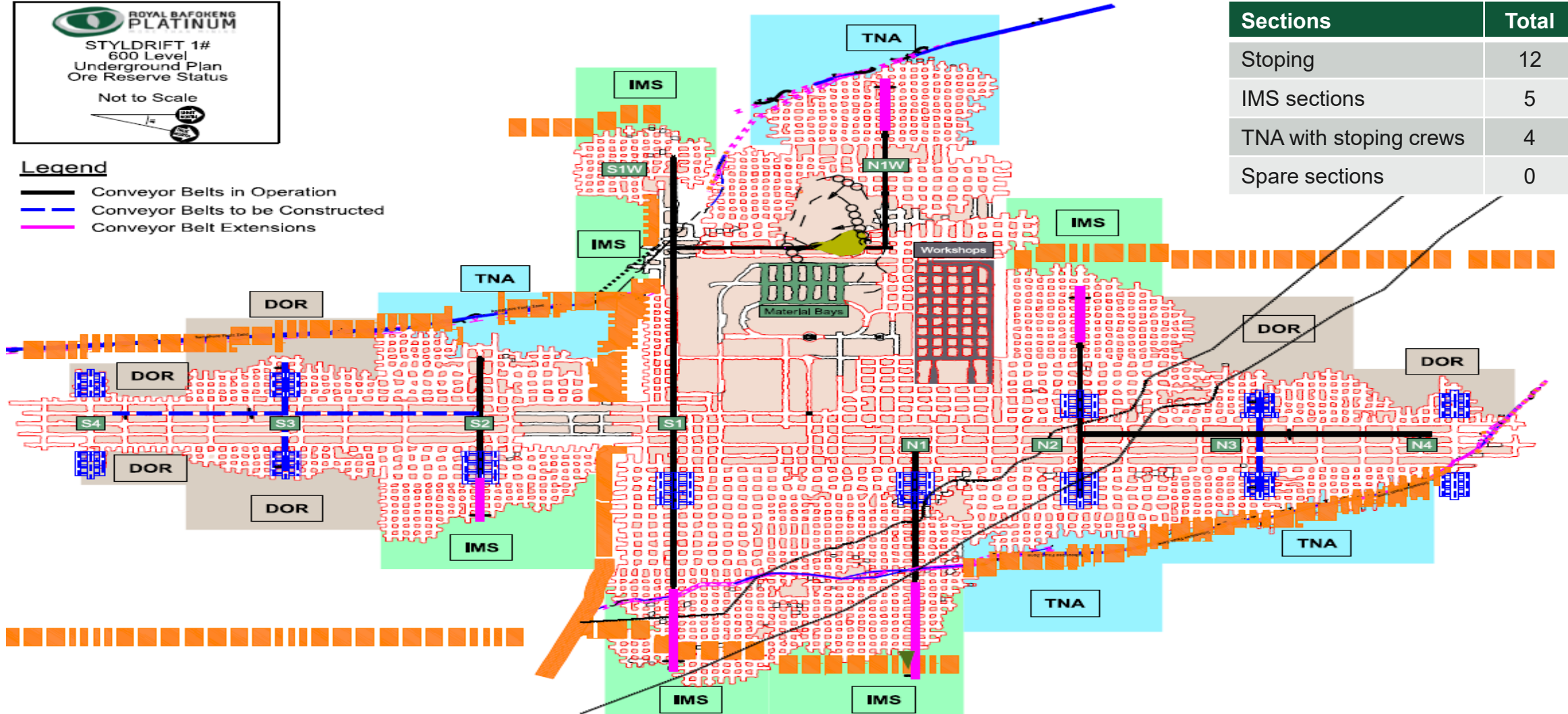


# INFRASTRUCTURE AND ORE RESERVES - CURRENT


**ROYAL BAFOKENG PLATINUM**  
 STYLDRIFT 1#  
 600 Level  
 Underground Plan  
 Ore Reserve Status  
 Not to Scale

## Legend

-  Conveyor Belts in Operation
-  Conveyor Belts to be Constructed
-  Conveyor Belt Extensions




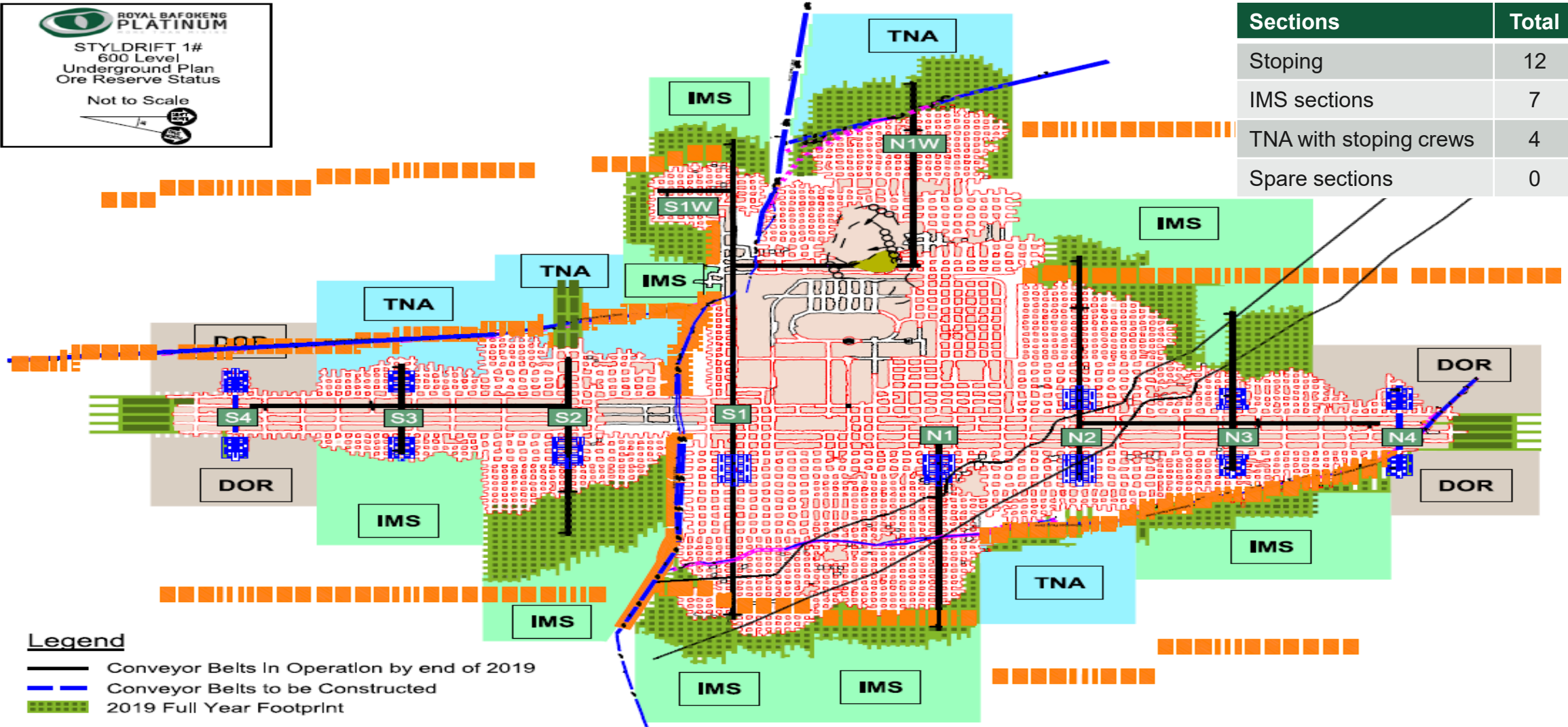
Sections	Total
Stoping	12
IMS sections	5
TNA with stoping crews	4
Spare sections	0








# INFRASTRUCTURE AND ORE RESERVES – Q4 2019


  
**ROYAL BAFOKENG PLATINUM**
  
 STYLDRIFT 1#
   
 600 Level
   
 Underground Plan
   
 Ore Reserve Status
   
 Not to Scale



Sections	Total
Stoping	12
IMS sections	7
TNA with stoping crews	4
Spare sections	0

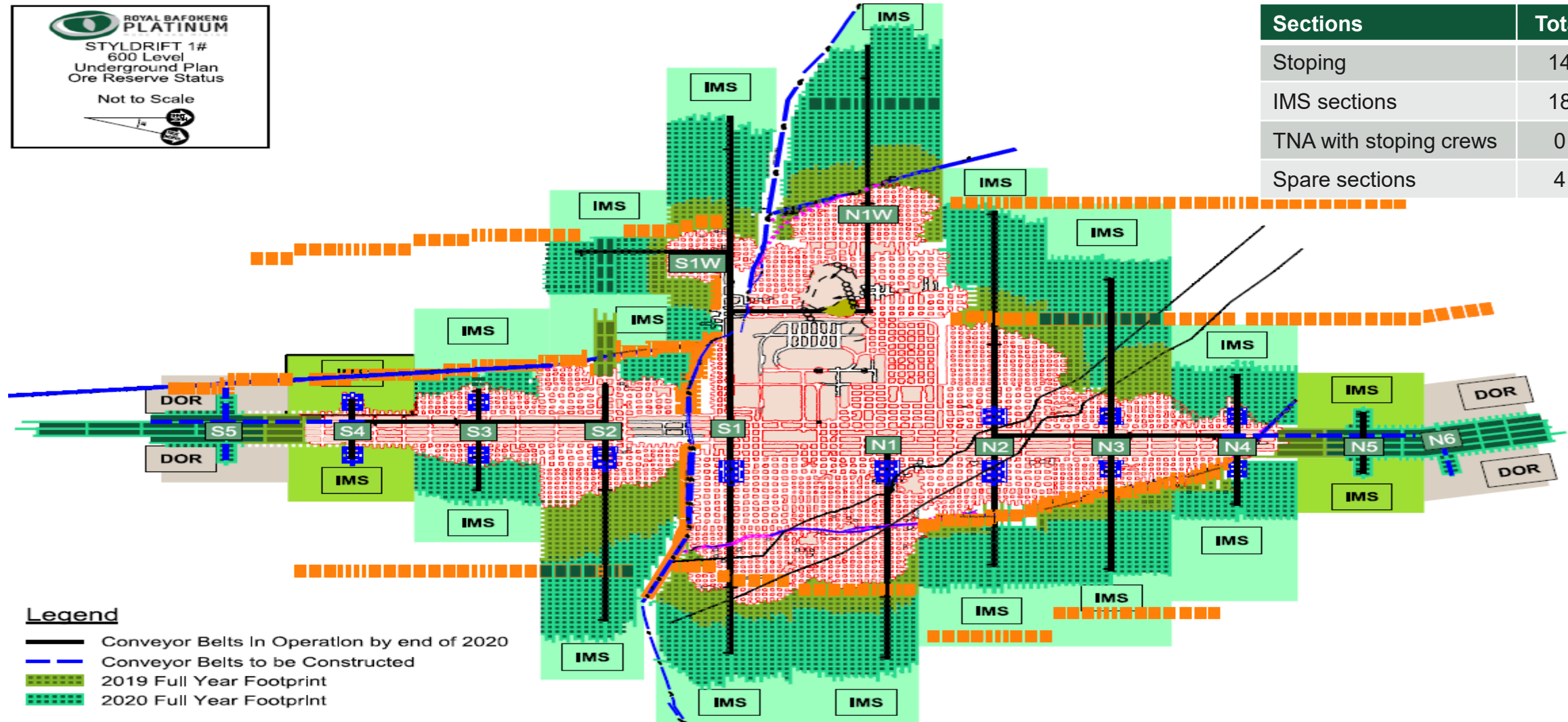
## Legend

-  Conveyor Belts In Operation by end of 2019
-  Conveyor Belts to be Constructed
-  2019 Full Year Footprint



# INFRASTRUCTURE AND ORE RESERVES – Q4 2020

**ROYAL BAFOKENG PLATINUM**  
**STYLDRIFT 1#**  
 600 Level  
 Underground Plan  
 Ore Reserve Status  
 Not to Scale



Sections	Total
Stoping	14
IMS sections	18
TNA with stoping crews	0
Spare sections	4

## Legend

- Conveyor Belts In Operation by end of 2020
- Conveyor Belts to be Constructed
- 2019 Full Year Footprint
- 2020 Full Year Footprint