



COMMODITY FLOW DIAGRAMS

Richards Bay Terminal – Premium Berths

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Richards Bay Terminal: Premium Berths

Export

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Key

	Preferred Conveyor Route		Transfer Point Between Conveyors
	Client (Private) Conveyor Route	702	Berth Number
	Alternate Conveyor Route	X	Dust Units



MAGNETITE

Grades:

- 1) Export Magnetite, 2) Iron Oxide
- 3) Coal Wash

Magnetite Density:

3.0 tons/m³

Back Actor

Cycle Time: 8.6min

Actual Rates

Wagon Rate: 7 /hr

Throughput Rate: 420 tons/hr

Arrival: CMR wagons
Wagon Capacity: 60tons

Tipping: Cycle time: 3.4min per wagon.

Wagon Rate: 18 wagons/hr. **Actual:** 8 W/hr

Throughput Rate: 1080 tons/hr.

Actual: 480 tons/hr

Payloaders:

Capacity: 6–8 Tons/scoop

Payloaders **'Backstack'**
Commodity

Capacities

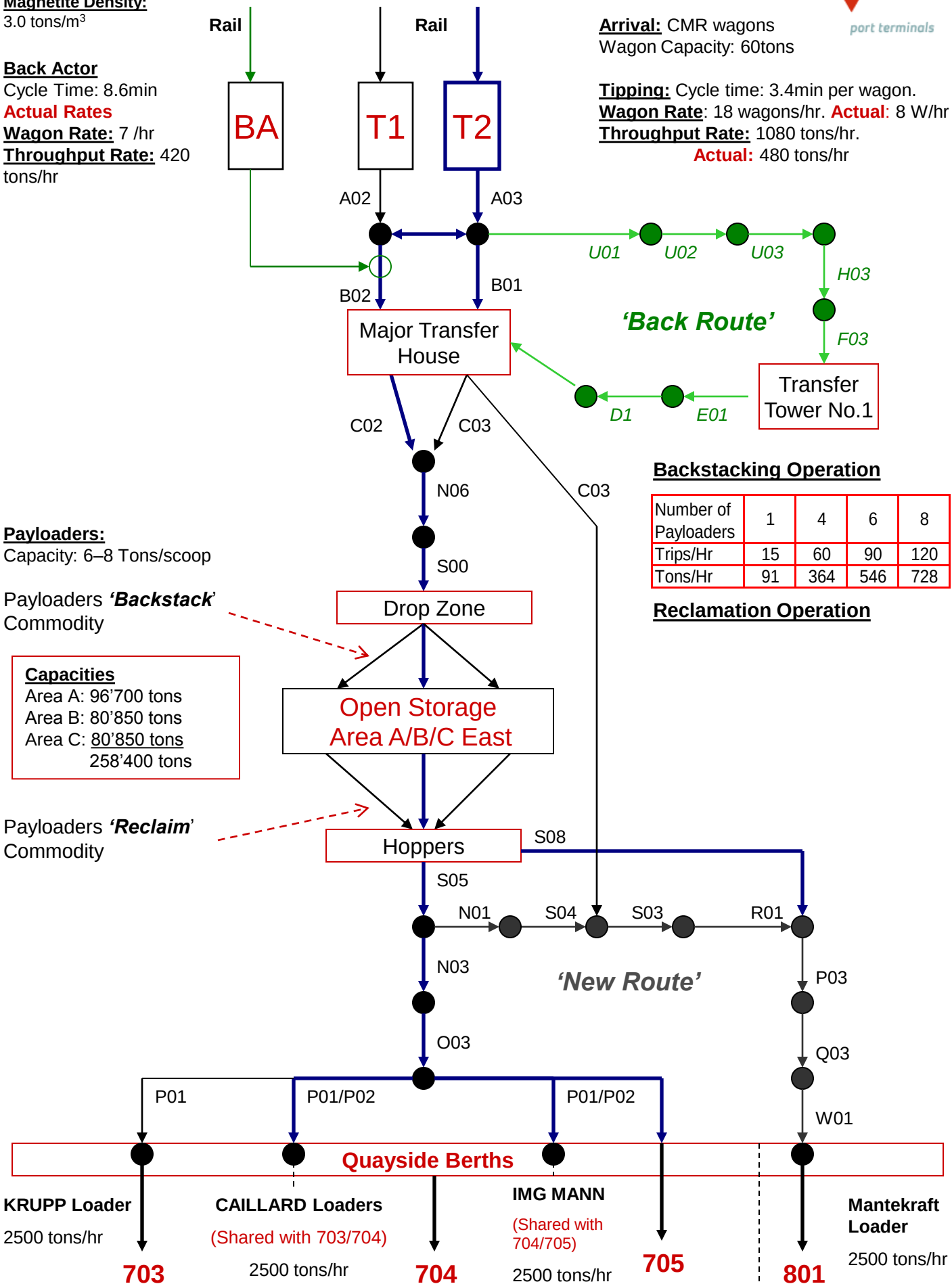
Area A: 96'700 tons
Area B: 80'850 tons
Area C: 80'850 tons
258'400 tons

Payloaders **'Reclaim'**
Commodity

Backstacking Operation

Number of Payloaders	1	4	6	8
Trips/Hr	15	60	90	120
Tons/Hr	91	364	546	728

Reclamation Operation



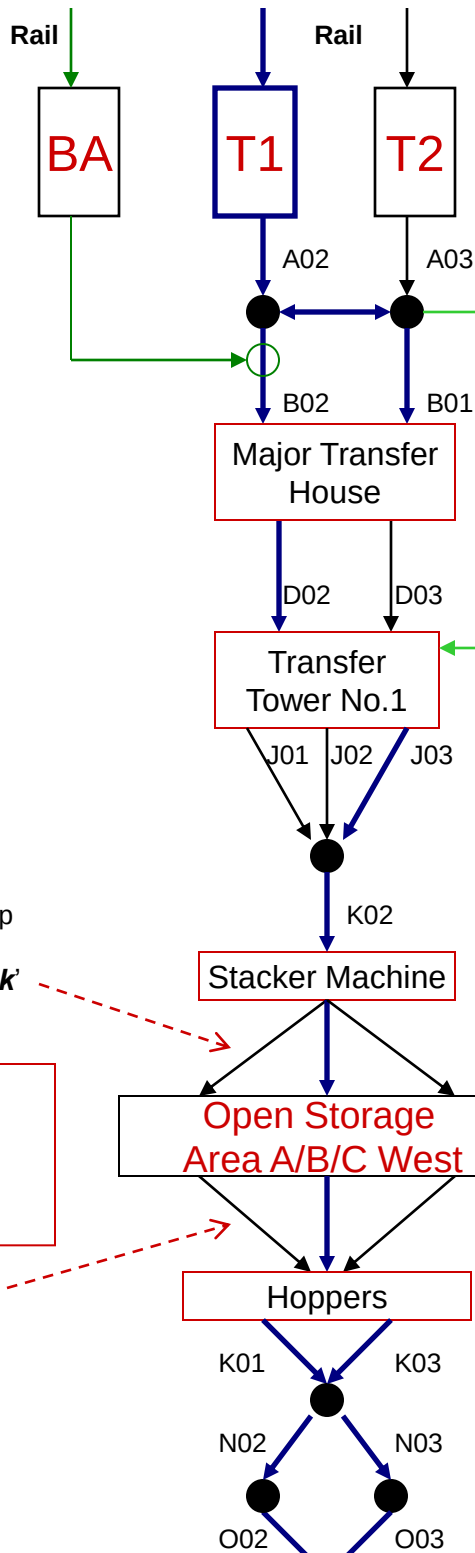
2.67 tons/m³

Throughput Rate: 420 tons/hr

1. UG2 - 4PL
2. CR - BY - C06
3. CR - BY - C04
4. CR - BY - C01
5. OR GA1
6. DL - A10 / DL A00
7. CR - RP - U01
8. CR - RP - U02
9. CROCODILE
10. CR - CG - A22
11. CR - CN - A69
12. CR - CM - A44
13. CR - CG - A23
14. CR - CN - A34

Payloaders **'Backstack'** Commodity

Payloaders 'Reclaim' Commodity



Actual: 715 tons/hr

'Back Route'

1/14/2010 13:15		DBT - Storage Pro 03		AMENDED	
C-AREA		B-AREA		A-AREA	
-10		-10		-10	
-5		-5		-5	
0		0		0	
5		5		5	
10		10		10	
15		15		15	
20		20		20	
25		25		25	
30		30		30	
35		35		35	
40		40		40	
45		45		45	
50		50		50	
55		55		55	
60		60		60	
65		65		65	
70		70		70	
75		75		75	
80		80		80	
85		85		85	
90		90		90	
95		95		95	
100		100		100	
105		105		105	
110		110		110	
115		115		115	
120		120		120	
125		125		125	
130		130		130	
135		135		135	
140		140		140	
145		145		145	
150		150		150	
155		155		155	
160		160		160	
165		165		165	
170		170		170	
175		175		175	
180		180		180	
185		185		185	
190		190		190	
195		195		195	
200		200		200	
205		205		205	
210		210		210	
215		215		215	
220		220		220	
225		225		225	
230		230		230	
235		235		235	
240		240		240	
245		245		245	
250		250		250	
255		255		255	
260		260		260	
265		265		265	
270		270		270	
275		275		275	
280		280		280	

Quayside Berths

KRUPP Loader
2500 tons/hr

CAILLARD Loaders
(Shared with 703/704)

IMG MANN
Loader
2500 tons/hr

703

704

COAL / ANTHRACITE

Grades:

1. Anthracite Coal

Coal Density:

0.95 tons/m³

Road Truck

Arrival

Capacity: 32 Tons

J02 slab

Capacity: 3000 tons

2 x Payloaders (6-8 Tons/scoop)

Rate: 600 tons/hr

Payloaders:

Capacity: 6-8 Tons/scoop

Rail Arrival: CFR Wagons

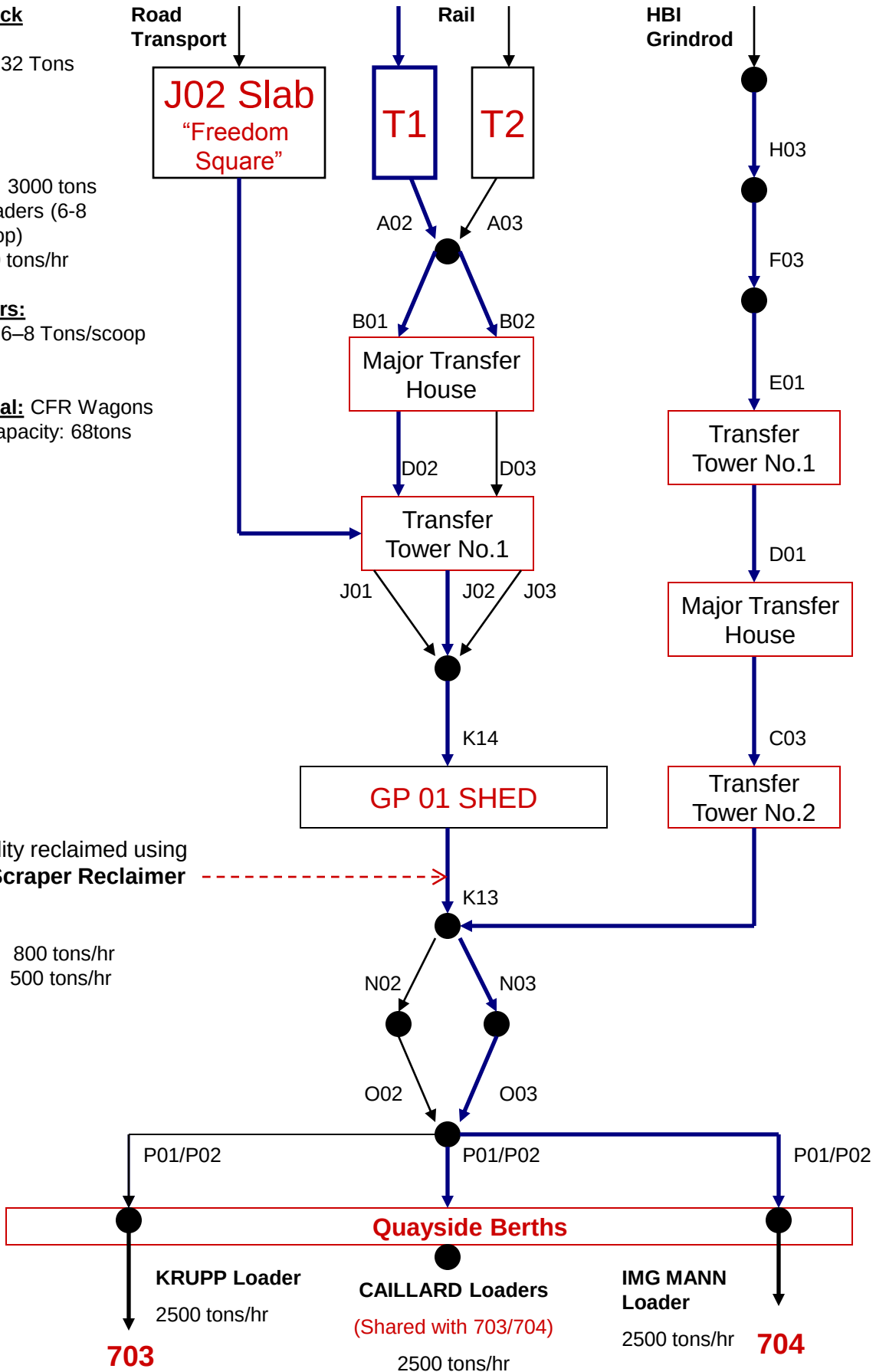
Wagon Capacity: 68tons

Commodity reclaimed using
Export Scraper Reclaimer

Rate:

Capacity: 800 tons/hr

Norm: 500 tons/hr





VERMICULITE

Vermiculite Density:

0.6 – 1.05 tons/m³

GRADES

1. Micron
2. Super Fines
3. Fines
4. Medium
5. Large

Arrival: CSM (58 tons)

Tipping: Cycle time: 3.4min per wagon.

Wagon Rate: 18 -20 wagons/hr.

Actual: 14 W/hr

Throughput Rate: 1080 tons/hr.

Actual: 812 tons/hr

'Back Route'

Storage Capacities:

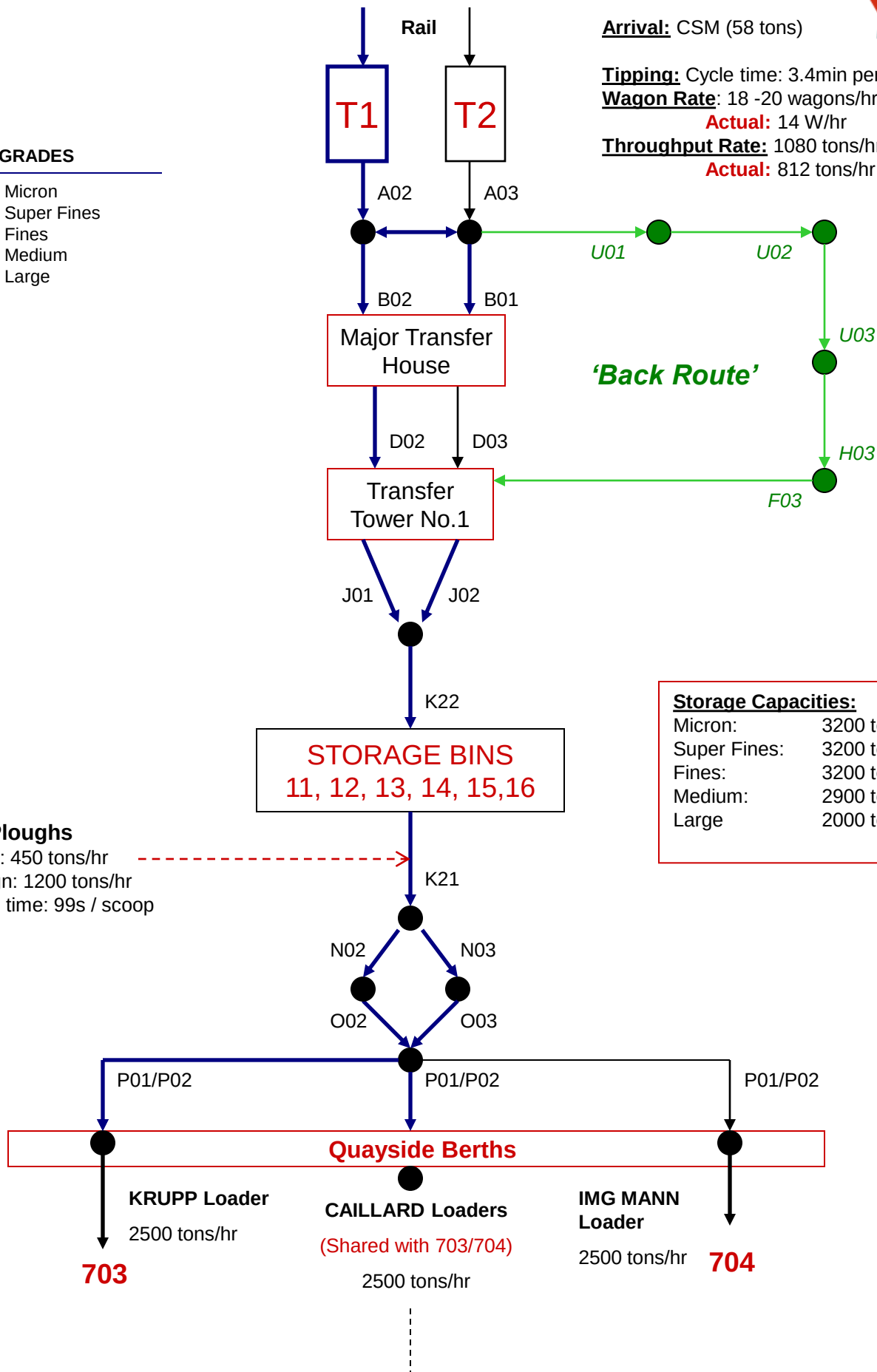
Micron:	3200 tons
Super Fines:	3200 tons
Fines:	3200 tons
Medium:	2900 tons
Large	2000 tons

2 x Ploughs

Norm: 450 tons/hr

Design: 1200 tons/hr

Cycle time: 99s / scoop



Grades:
> Single Grade

Coal Density:
1.88 tons/m³

ROCK PHOSPHATE



X - Dust Units

Arrival: Wagons (58 tons)

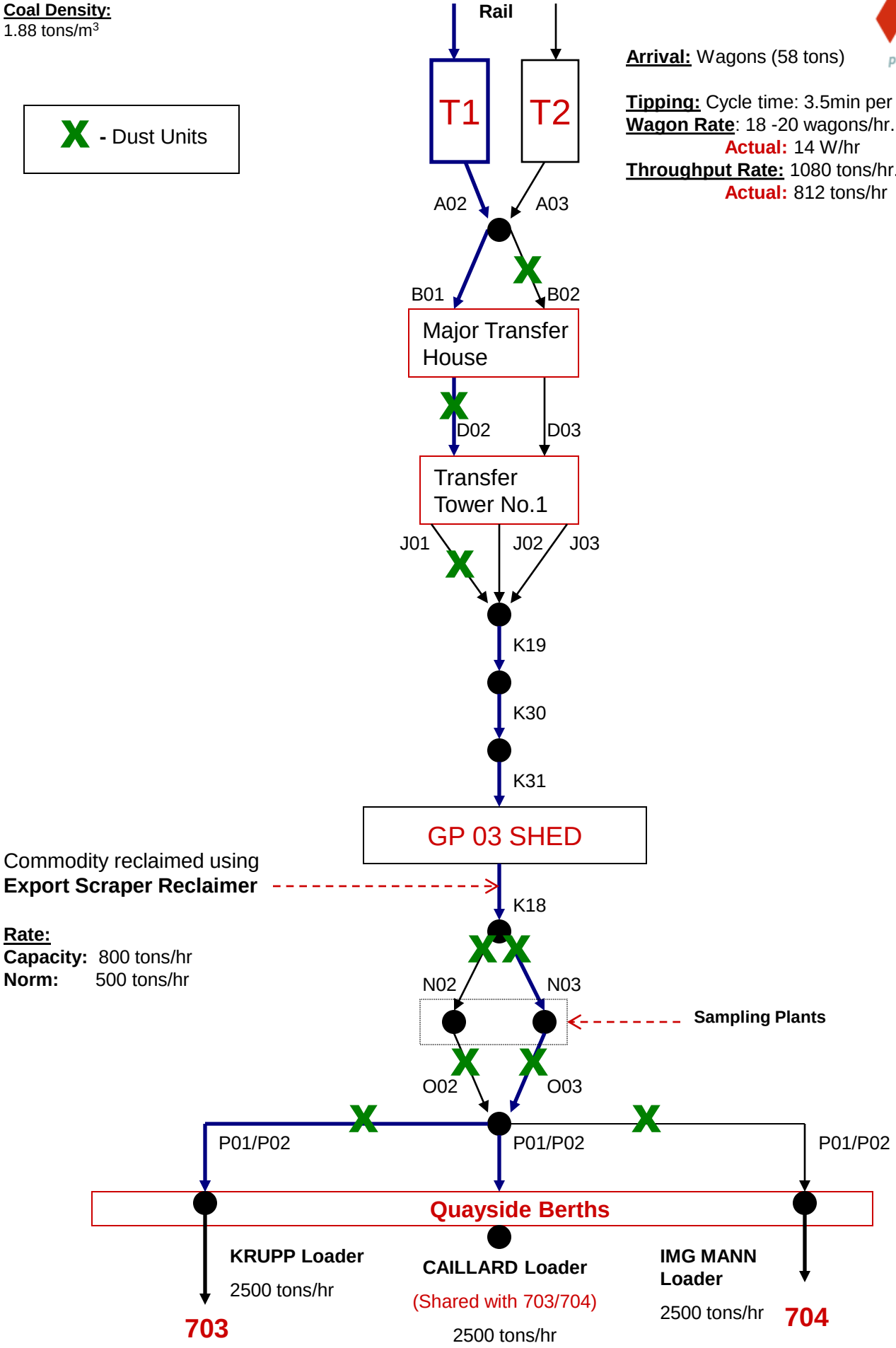
Tipping: Cycle time: 3.5min per wagon.

Wagon Rate: 18 -20 wagons/hr.

Actual: 14 W/hr

Throughput Rate: 1080 tons/hr.

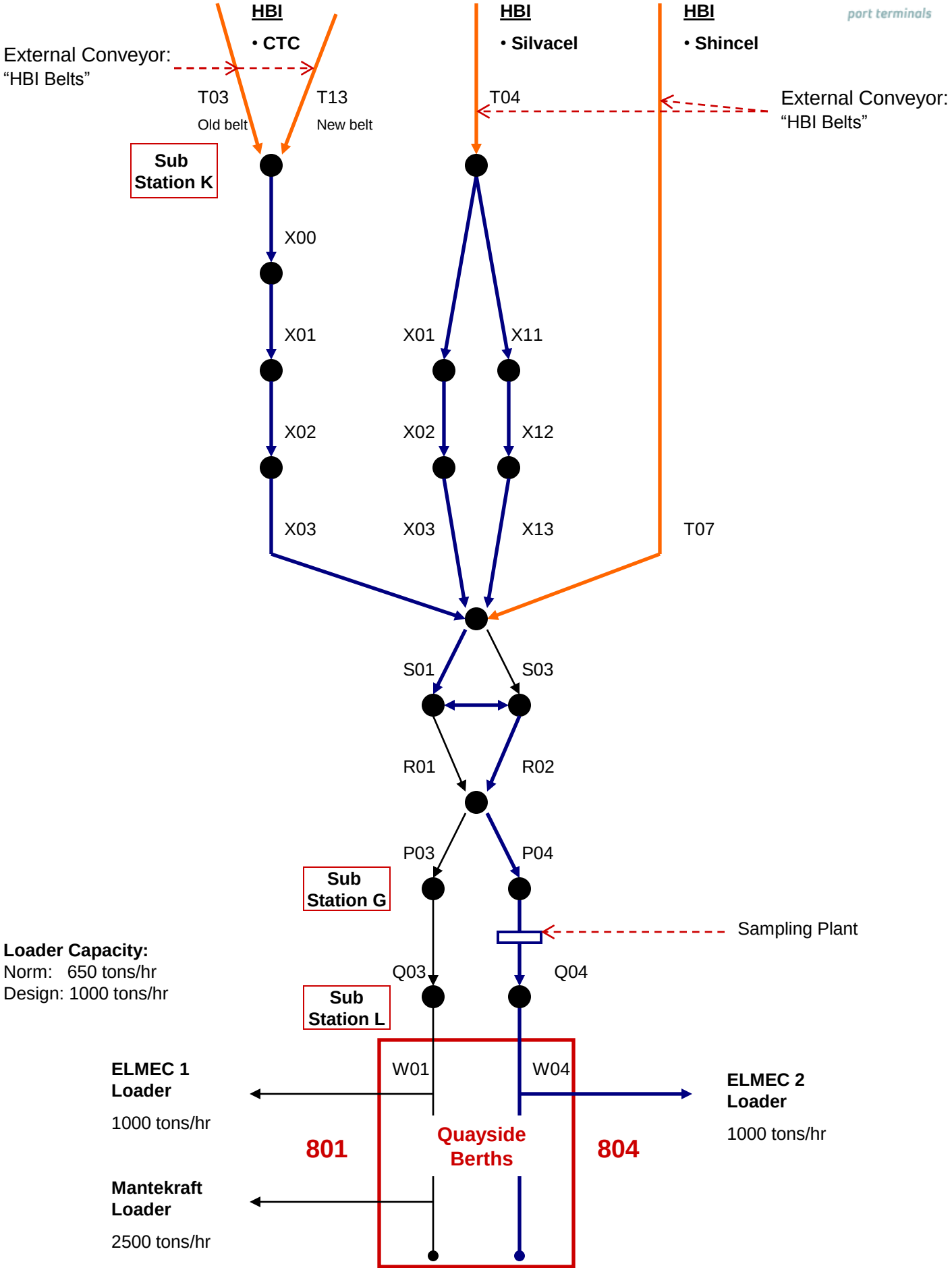
Actual: 812 tons/hr



WOODCHIPS



W/C Density:
0.3 tons/m³



CHLORIDE

Vermiculite Density:

2.12 tons/m³

GRADES

Storage Capacities:

Arrival:

Tipping: Cycle time: min per wagon.

Wagon Rate: wagons/hr.

Actual: W/hr

Throughput Rate: tons/hr.

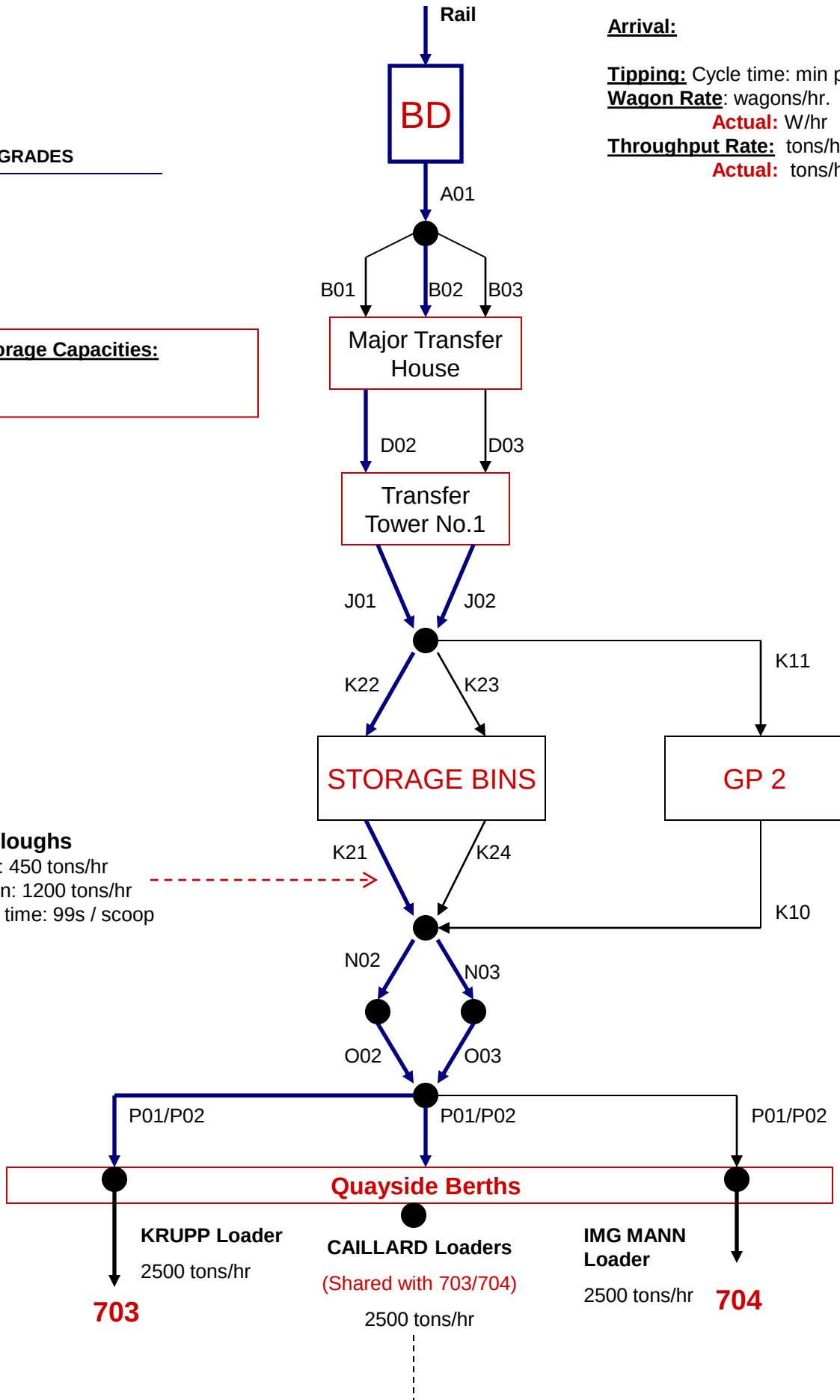
Actual: tons/hr

2 x Ploughs

Norm: 450 tons/hr

Design: 1200 tons/hr

Cycle time: 99s / scoop





ANDALUSITE

Vermiculite Density:

1.6 tons/m³

GRADES

Storage Capacities:

Arrival:

Tipping: Cycle time: min per wagon.

Wagon Rate: wagons/hr.

Actual: W/hr

Throughput Rate: tons/hr.

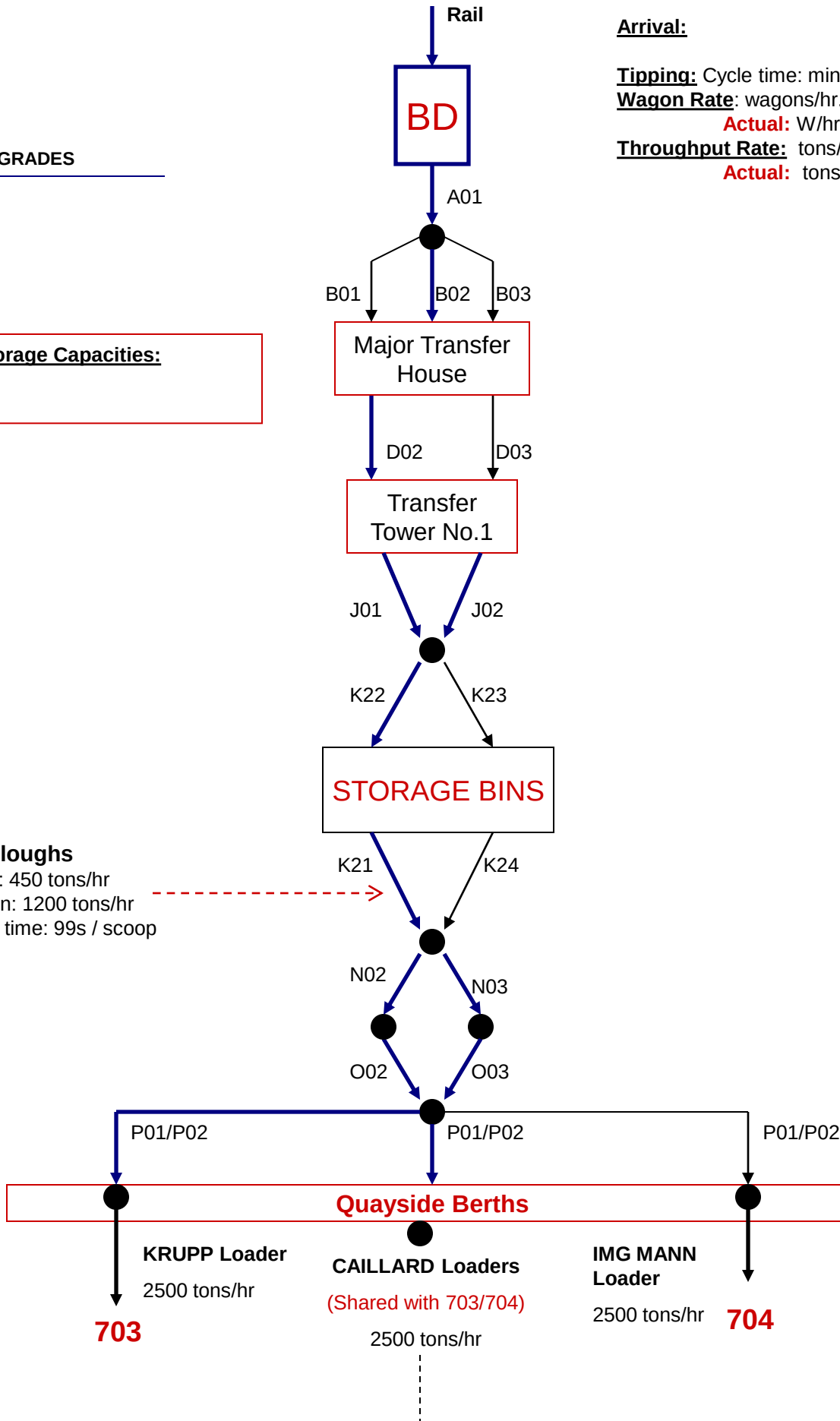
Actual: tons/hr

2 x Ploughs

Norm: 450 tons/hr

Design: 1200 tons/hr

Cycle time: 99s / scoop



ALUMINA

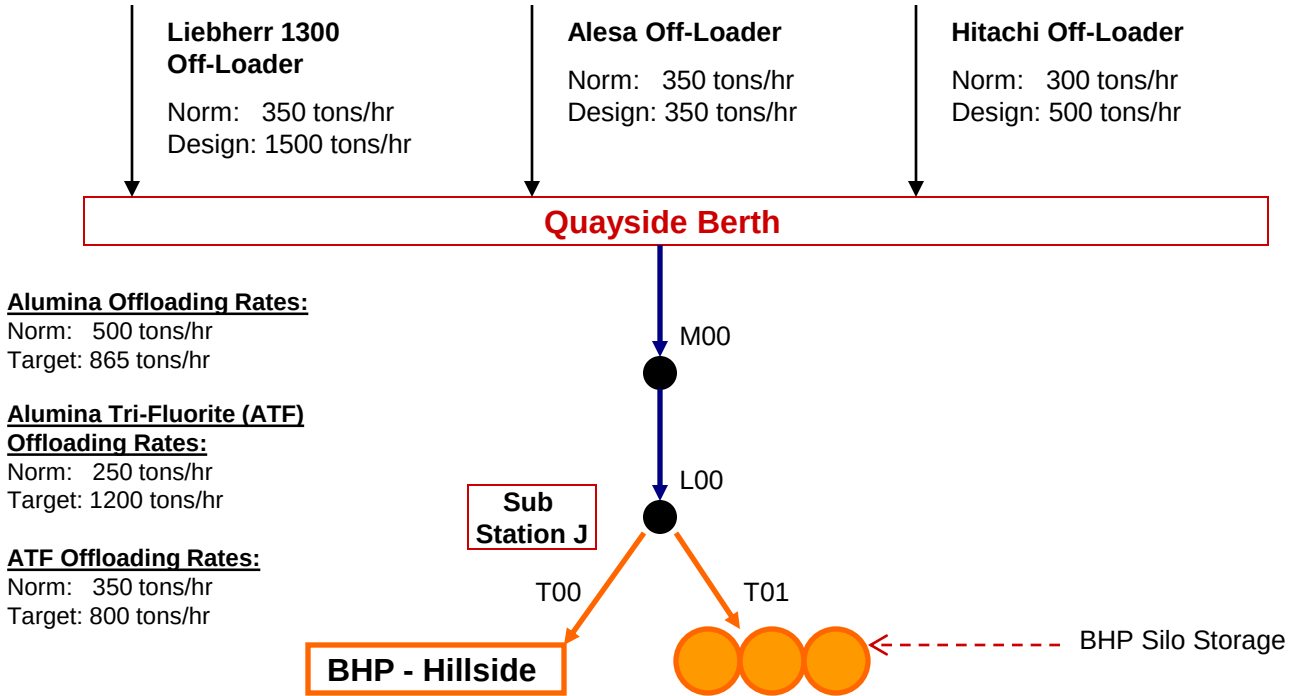
609

Grades:

1. Worseley
2. Alcoa

Density:

1.0 tons/m³



Density:

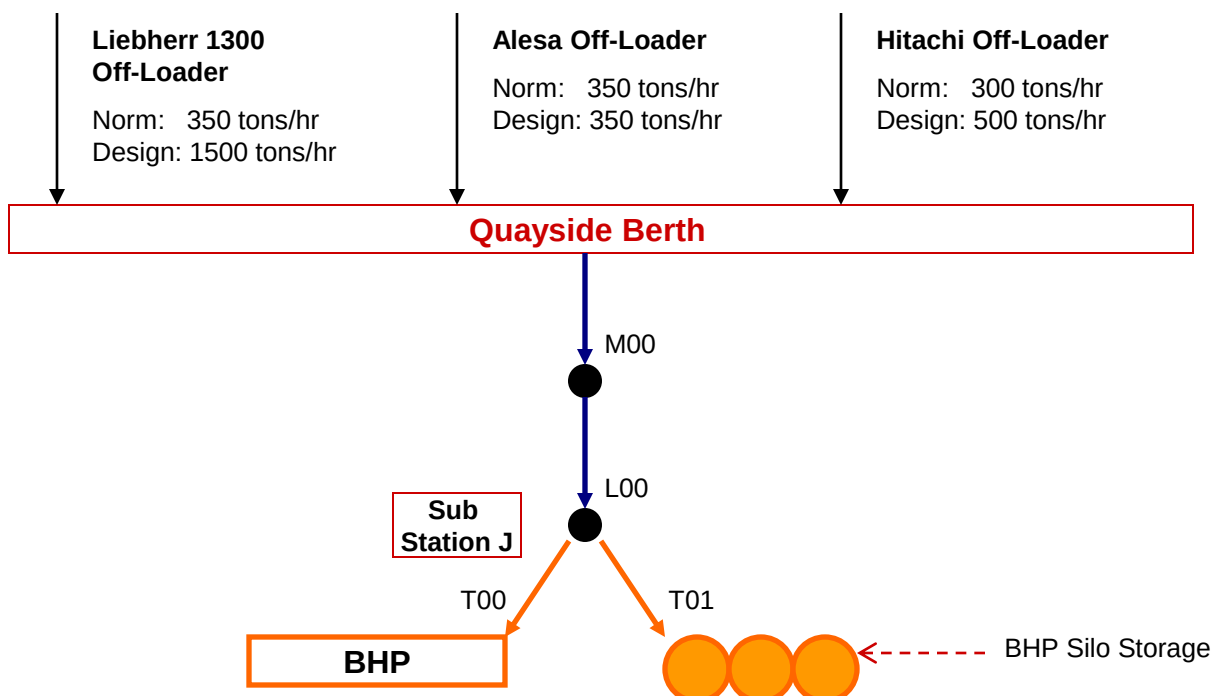
0.85 tons/m³

PETCOKE

609

Offloading Rates:

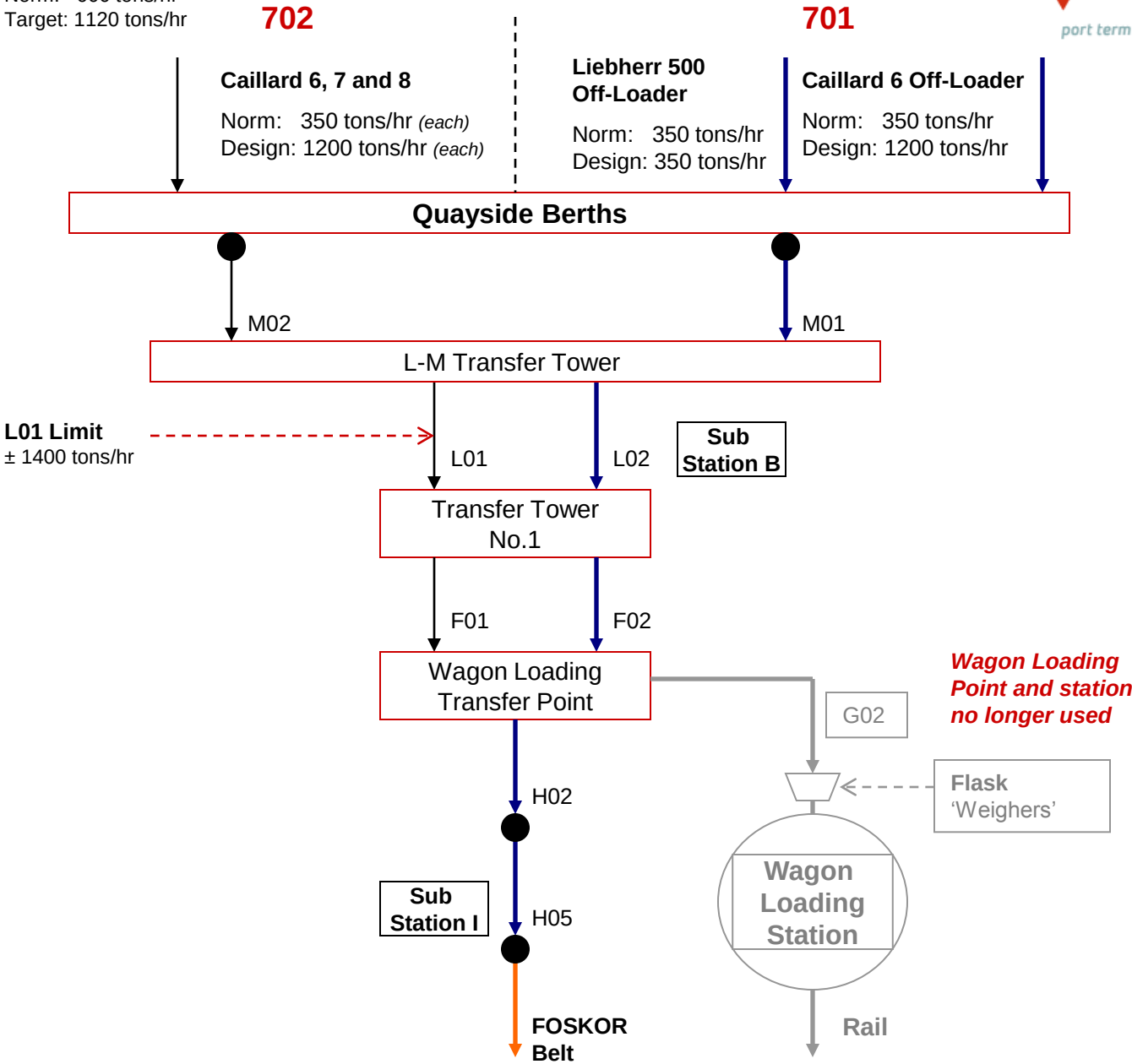
Norm: 350 tons/hr
Target: 540 tons/hr



Density:
1.2 tons/m³

Offloading Rates:
Norm: 600 tons/hr
Target: 1120 tons/hr

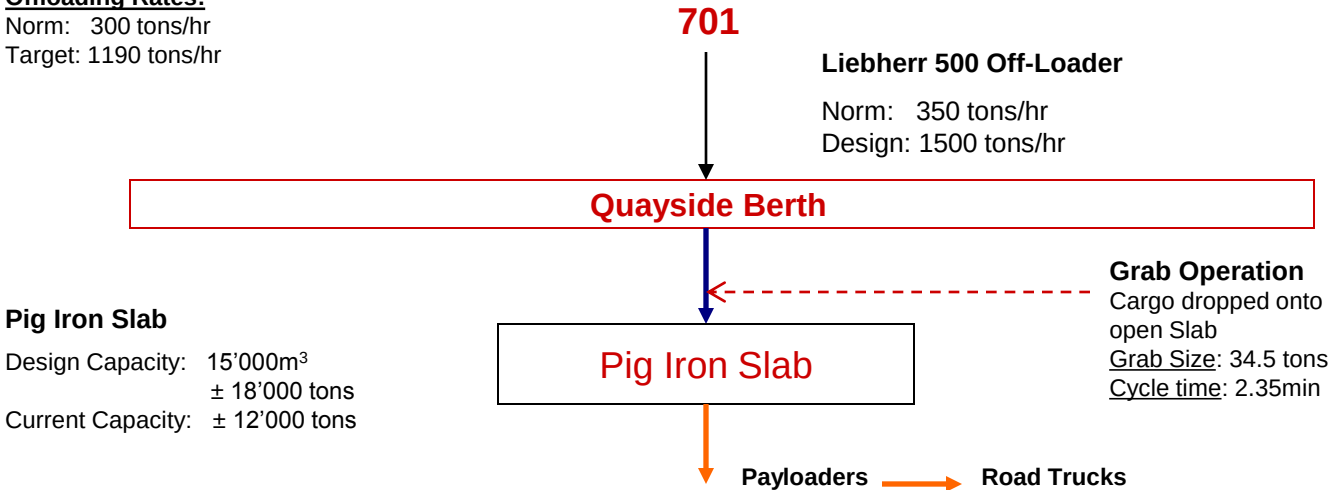
SULPHUR



Density:
1.2 tons/m³

Offloading Rates:
Norm: 300 tons/hr
Target: 1190 tons/hr

METCOKE



Offloading Rates:
Norm: 750 tons/hr
Target: 1100 tons/hr

Density:
0.74 tons/m³

COKING COAL

