



Moorebank Precinct East (MPE) – Moorebank Logistics Park



IMEX Rail Terminal at MPE



Existing warehouses and Target Australia's new NSW distribution centre at MPE

QUBE HOLDINGS LIMITED

Moorebank Logistics Park site tour September 2019

QUBE GEOGRAPHICAL PRESENCE

QUBE TODAY

- Workforce of over 6,500 employees
- Working across over 130 locations in Australia, New Zealand and South East Asia
- Leading position in its core markets

KEY LOCATIONS



QUBE TODAY

OPERATING DIVISIONS AND STRATEGIC INVESTMENTS

QUBE

Operating Division

Qube Logistics

- Provides broad range of services for import and export of containerised cargo
- Offers integrated solution suite covering multiple aspects of the supply chain
- Operates nationally across Australia including in all capital city ports and has an expanding footprint in inland metropolitan and country regional areas with connections to Australian ports
- Holds an investment in Intermodal Group (49%), provider of rail transport services and operator of rail terminals in the Perth area



Qube Ports & Bulk

- Provides broad range of logistics services for the import and export of mainly non-containerised freight
- Focus on automotive, bulk and break bulk products including vehicles, forestry products, bulk commodities, oil and gas projects and general cargo
- National operator, with port facility locations in Australia, New Zealand and South East Asia
- Holds investments in NSS (50%) and Prixcar (25%) for logistics services to the mining and automotive industries



FY 19

Revenue \$1,624.6m

EBITDA \$263.3m

Infrastructure & Property

- Holds interests in strategically located properties suitable for development into logistics infrastructure and operations
- Developing Moorebank, expected to become the largest intermodal logistics precinct in Australia, and another property at Minto
- Owns AAT, a multi-user facility provider to stevedores and focused on vehicle imports
- Holds investments in Quattro (47.2%) and TQ (50%) for development and operation of grain and fuel storage and handling terminals



FY 19

Revenue \$103.8m

EBITDA \$45.1m

Patrick Stevedores (50%)

- Qube owns a 50% interest in Patrick, one of two major established national operators providing container stevedoring services in the Australian market
- Holds long term lease concessions for and operates shipping container terminals in the four largest container ports in Australia
- Complements Qube's other logistics activities
- Other 50% owned by Brookfield and its managed funds



FY 19

Revenue \$312.2m (50%)

EBITDA \$105.1m (50%)

Note: All revenue and EBITDA figures above are underlying for the 12 months to 30 June 2019. Patrick revenue is shown on a proportionate basis (ie reflecting Qube's 50% ownership interest).

The underlying information excludes certain non-cash and non-recurring items in order to more accurately reflect the underlying financial performance of Qube. References to 'underlying' information are to non-IFRS financial information prepared in accordance with ASIC Regulatory Guide 230 (Disclosing non-IFRS financial information) issued in December 2011. Non-IFRS financial information has not been subject to audit or review.

MOOREBANK LOGISTICS PARK

THE OPPORTUNITY

Moorebank Logistics Park (MLP) is the largest intermodal logistics precinct in Australia

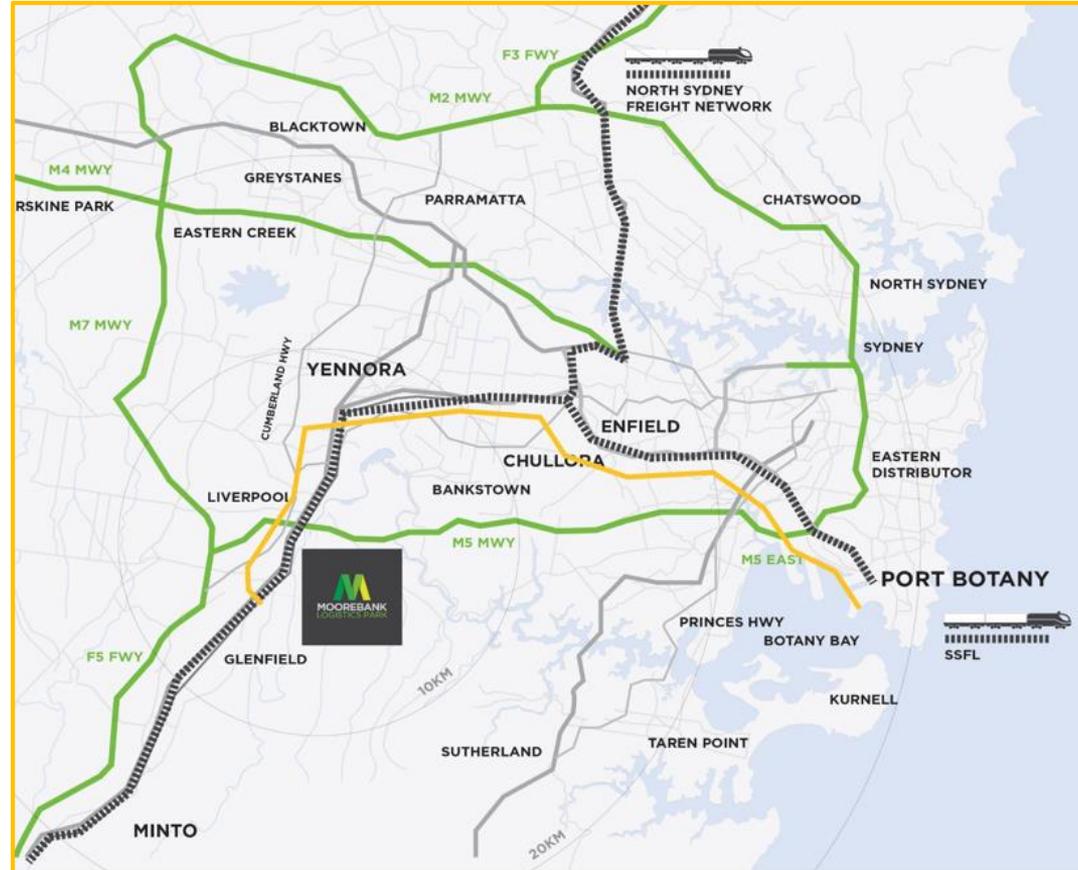
- Qube is excited to present the Moorebank Logistics Park. It is an ideal location for a distribution centre with its strategic location, direct connection to major motorways lining all of Sydney and its distance from Port Botany, where all imported containerised goods to Sydney are received.
- The ability for multi-modes of transport for inbound and outbound logistics makes Moorebank Logistics Park a unique opportunity to improve the supply chain for any organisation running a Sydney or a National distribution operation via road or rail.
- The precinct comprises an area of over **243 hectares** located in South Western Sydney.
- When completed, the precinct will comprise:
 - Two rail terminals including Terminal 1 (IMEX) and Terminal 2 (Interstate) expected to handle **up to 1.5 million TEUs per annum**
 - The IMEX terminal comprises **four 650m rail sidings**.
 - The interstate rail terminal is expected to comprise **five 900m rail sidings and four 1,800m marshalling yards**.
 - Up to **850,000m²** of integrated warehousing.

This is expected to attract importers and national distributors due to the logistics efficiencies of being co-located with IMEX and interstate rail terminals, resulting in lower transport costs.

- The precinct comprises two parcels of land that will be sub-leased to Qube for up to **99 years**.
- Qube has **100%** of the development, operating, property and asset management rights for the project.
- The project is expected to bring significant benefits to Qube, its customers and the broader logistics chain through more efficient movement of freight on rail relative to current trucking operations.

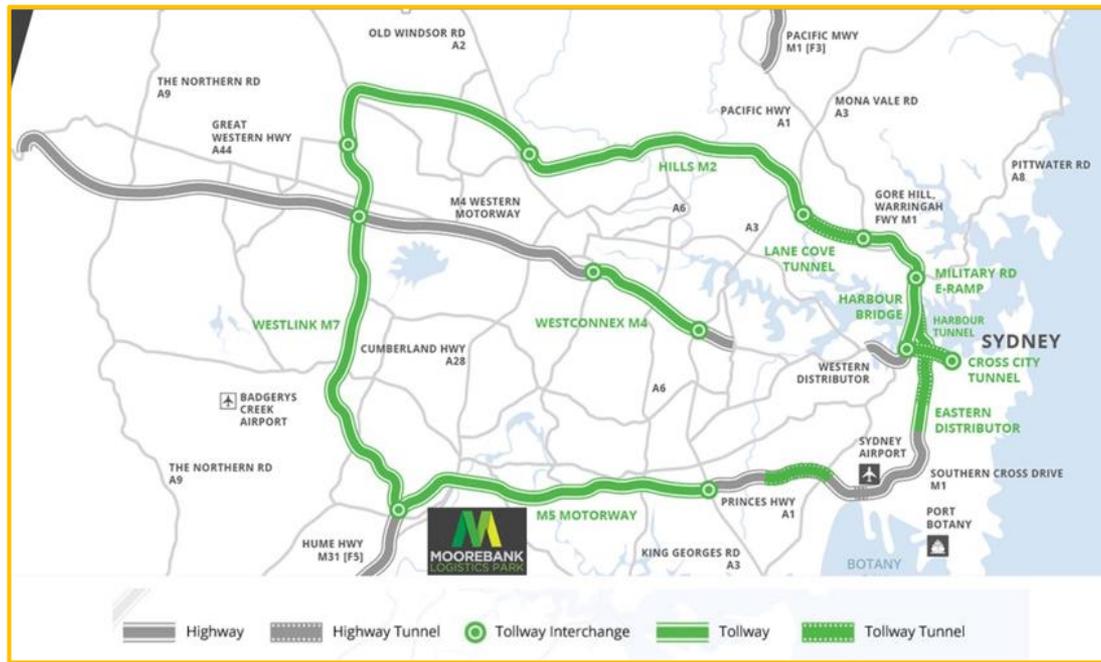
UNIQUE STRATEGIC RAIL BENEFIT

- Dedicated freight rail link from Port Botany to Moorebank and national rail network
- NSW Ports investment of \$120 million in “on dock” rail infrastructure
- Federal Government's investment of \$400 million to build greater rail capacity including duplication of the Port Botany Rail Link



ROAD COSTS ONLY INCREASING IN THE MEDIUM TO LONG TERM

- Round Trip toll costs for trucks ex Port Botany:
 - Marsden Park \$77.72
 - Eastern Creek \$73.94
 - Prestons Return \$36.32
 - Moorebank Return \$28.58
- Significant long term savings in moving from rail to road



QUBE

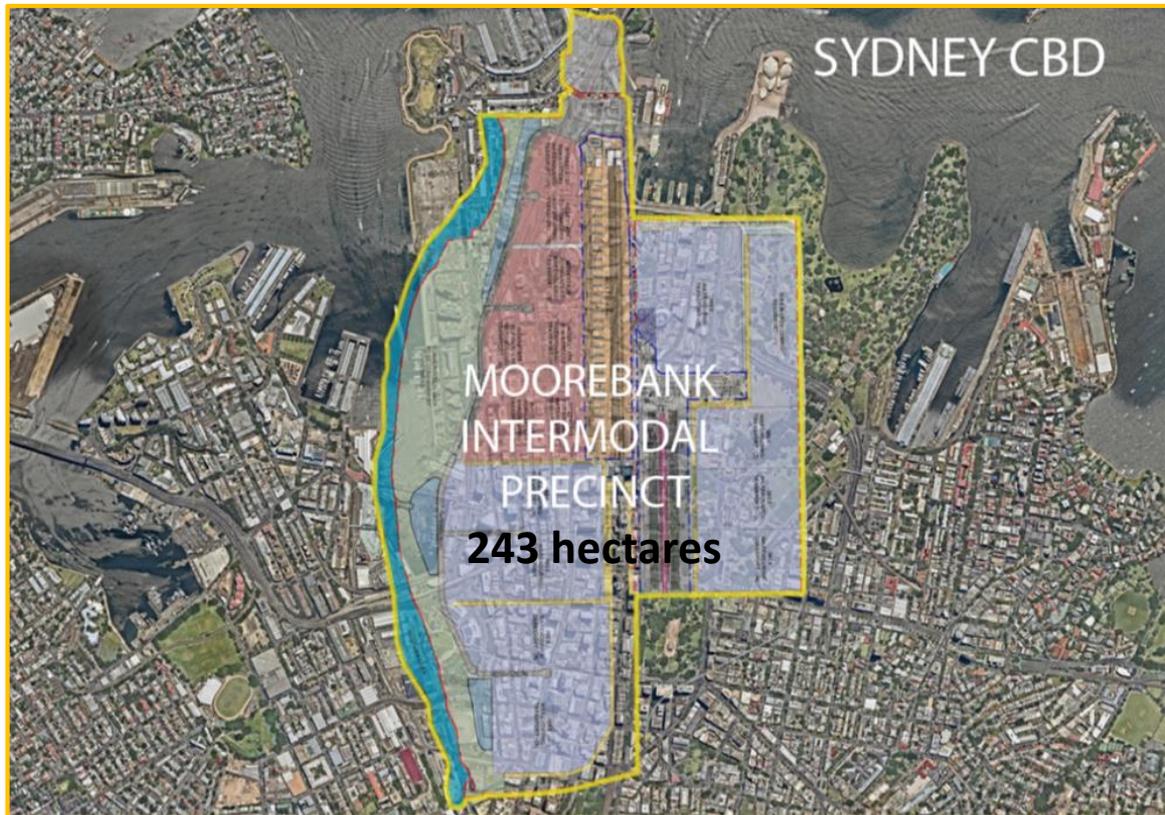
Road tolls on each container movement from Port Botany



Nearly all containers transported in the Sydney metro area are moved by road



UNIQUE SIZE AND OPPORTUNITY



STRATEGIC LOCATION

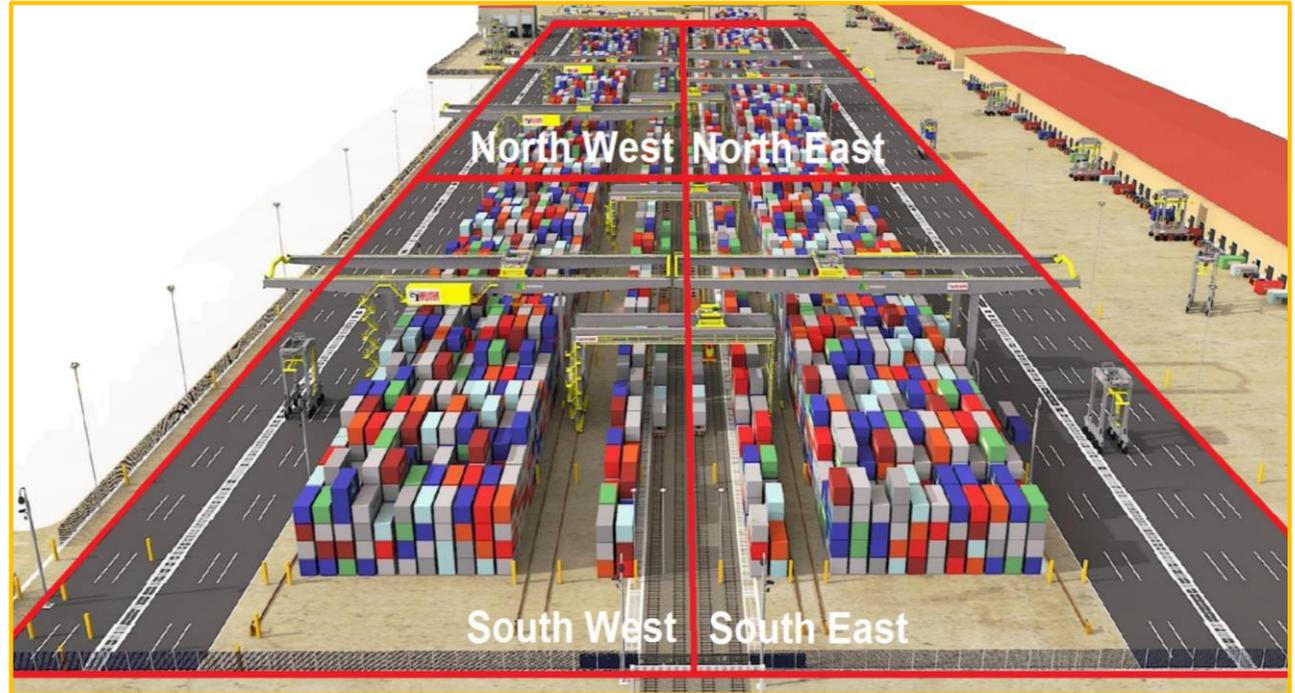
- Direct access to the M5 Motorway, and access to the M7 Motorway and Hume Highway servicing key freight corridors



SEMI AUTOMATED AND AUTOMATED EQUIPMENT

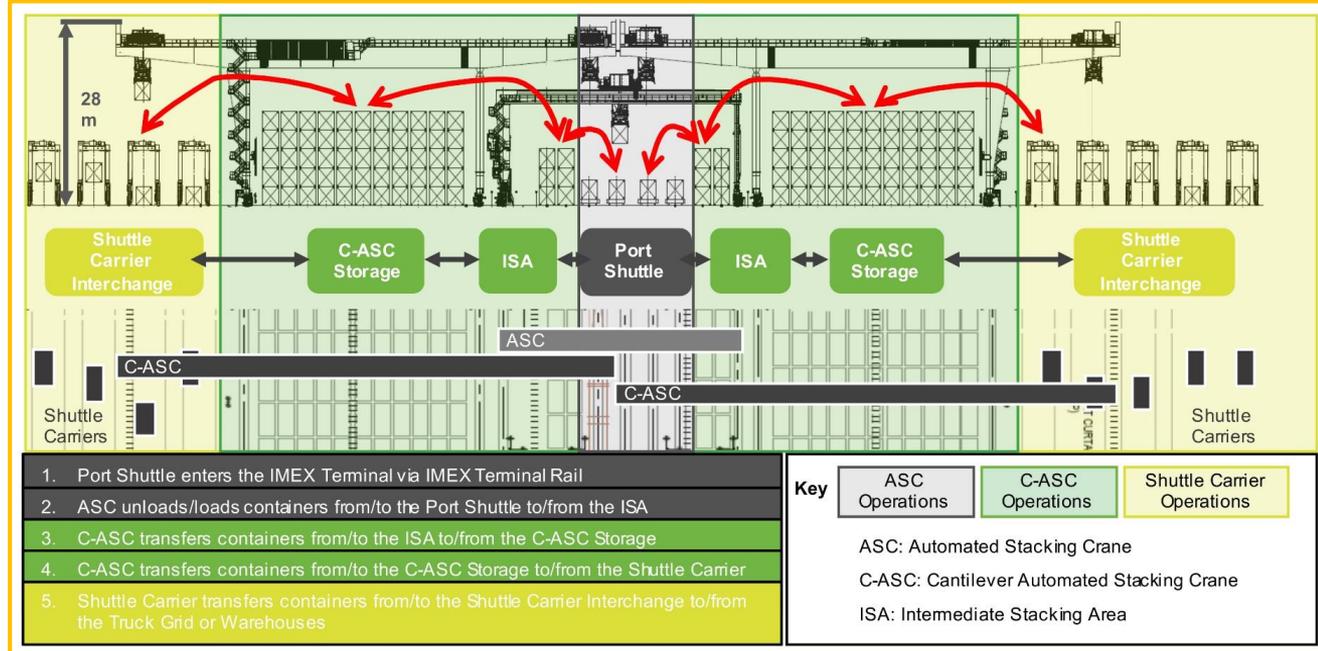
Kalmar has been engaged by Qube to supply and install the following equipment to facilitate the Semi-Automated and Fully-Automated Operations of the IMEX Terminal:

- 8 x Cantilever Automated Stacking Cranes
- 4 x Automated Stacking Cranes
- 8 x Shuttle Carriers (Hybrid Fast-Charge)
- Software (Terminal Operating System and Terminal Logistics System)
- Ancillary equipment:
 - Access control panels
 - Light curtains
 - Auto-gates and sensors
 - Navigation infrastructure (transponders)
 - Shuttle Carrier charging stations



IMEX TERMINAL OPERATIONS

- The IMEX Terminal will operate in fully-automated mode
- Moorebank Logistics Park customers will receive productivity and safety benefits that come with this technology





CURRENT: 4 DAYS

PORT BOTANY



DAY 1
9.00am
Ship arrives



DAY 2
Container available, book VBS slot for truck pick up



DAY 3
10.00am
Truck pick up from Port



DAY 3
10.00am
Accident on M5
Truck stuck in delay



DAY 3
3.00pm
Container arrives at Warehouse. Warehouse workers unpack



DAY 3
5.00pm
Container park closed, hold container until it can be returned which will incur fees



DAY 4
Sort and transport to store

MOOREBANK: 1 DAY



PORT
BOTANY



DAY 1

9.00am
Ship
arrives



DAY 1

10.00am
Container
discharged



DAY 1

12.00pm
Container on rail to
Moorebank



DAY 1

2.00pm
Container arrives at
IMEX Terminal



DAY 1

3.00pm
Container to go through
Moorebank Cross-dock/
Sortation



DAY 1

4.00pm
Goods available for direct to
store or warehouse



KEY BENEFITS

Precinct benefits

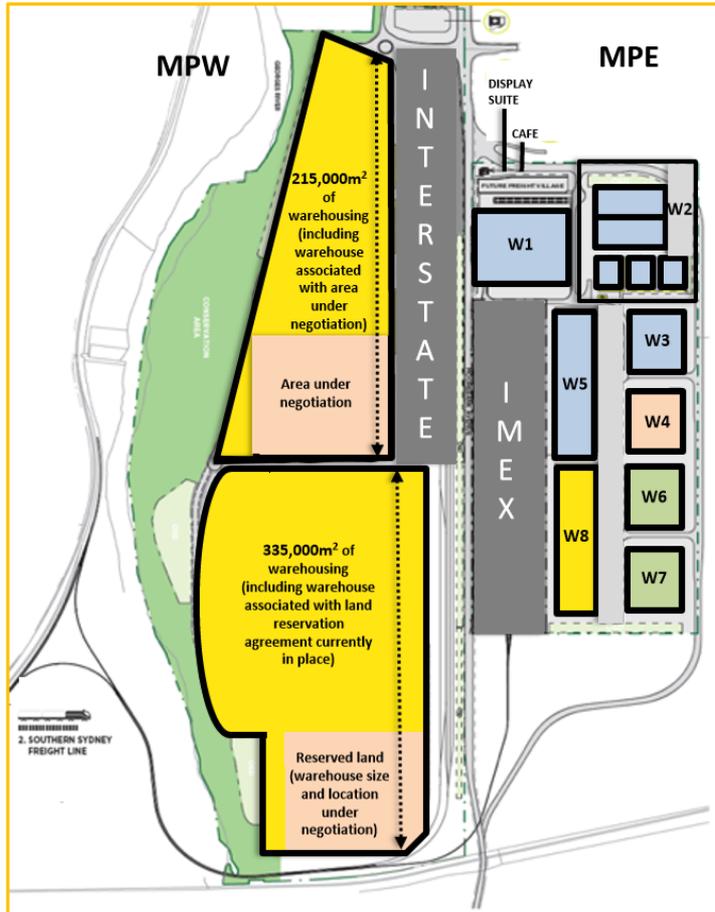
- The only logistics park that provides an end to end solution in the supply chain (more than just a warehouse)
- Unequalled scale and expansion for warehouse operations and co-located warehouse logistics
- Interstate terminal connection
 - Ability for National Distribution Centre operations
 - Triangulation opportunities
 - Competition for traditional road freight tasks
- Closed loop for Empty Container Management
- Most efficient and cost effective mode of container delivery
- Rail transfer eliminates escalating Sydney road network toll charges
- Minimise risk of exposure to significant forecast road toll increases
- Logistics transformation driving savings in time and costs
- Open access for rail terminals

Supply chain benefits

- Reduction in warehouse footprint as a direct result of automation
- Ability to manage inventory and rostering
- Lower requirement for staffing. Decrease in labour costs and greater workforce utilisation
- Typical proposals for Moorebank have identified savings on average 15-25% dependant on customer profile and ability to take up infrastructure being built
- Ability to use containers as virtual warehouse due to confidence in predictability on meeting timelines.



LEASING UPDATE OVERVIEW



MPE (300,000 m² of warehousing)

- W1 (37,830m²) – Target Australia
- W2 (40,723m²) – Existing buildings (leased)
- W3 (19,020m²) – BRW Logistics & Caesarstone
- W4 (23,262m²) – Commercial terms agreed for part of this warehouse. Ongoing negotiations for the remaining uncommitted portion
- W5 (51,250m²) – Qube Logistics
- W6 – Warehouse (including size) under discussion
- W7 – Warehouse (including size) under discussion
- W8 (54,200m²) – Available

MPW (550,000 m² of warehousing)

- Land reservation over 150,000 m² of land currently in place (warehouse size under negotiation)
- Another area of around 150,000 m² currently under negotiation
- Remaining portion of the site is available

- Leased* (148,823m²)
- Under negotiation
- Under discussion
- Available

*Note: Includes Agreements for Leases

LEASING UPDATE

BY TENANT

Site	Warehouse	Size	Actual or potential tenant	Expected construction completion	Services provided by Qube	Additional information
MPE	1	37,830 m ²	Target Australia*	Completed	<ul style="list-style-type: none"> Transport of freight to/from MLP Warehouse leasing 	<ul style="list-style-type: none"> Operations started shortly after the end of the financial year
	2	40,723 m ²	Various	n/a	<ul style="list-style-type: none"> Warehouse leasing 	<ul style="list-style-type: none"> Existing warehouses which will ultimately be replaced by new warehouses
	3	19,020 m ²	BRW Logistics & Caesarstone*	March quarter 2020	<ul style="list-style-type: none"> Warehouse leasing 	<ul style="list-style-type: none"> During the period, Qube finalised agreements for lease with both tenants
	4	12,000 m ²	Confidential*	June quarter 2020	<ul style="list-style-type: none"> Warehouse leasing 	<ul style="list-style-type: none"> Qube has agreed commercial terms with this party and is progressing with the negotiations for an agreement for lease
	4	11,262 m ²	Confidential	June quarter 2020	<ul style="list-style-type: none"> Warehouse leasing 	<ul style="list-style-type: none"> Parties engaged in negotiations for an agreement for lease
	5	51,250 m ²	Qube Logistics*	June quarter 2020	<ul style="list-style-type: none"> Transport of freight to/from MLP Warehouse operations 	<ul style="list-style-type: none"> Warehouse to be operated on a multi-tenant basis Discussions with prospective users well advanced
	6 & 7	Under discussion	Confidential	Beyond FY 20	<ul style="list-style-type: none"> Under discussion 	<ul style="list-style-type: none"> n/a
	8	54,200 m ²	Unidentified	Beyond FY 20	<ul style="list-style-type: none"> To be determined 	<ul style="list-style-type: none"> Increased interest received by Qube
MPW	n/a	Under negotiation	Confidential	Beyond FY 20	<ul style="list-style-type: none"> Under negotiation 	<ul style="list-style-type: none"> Land reservation over 150,000 m² of land Parties are continuing to progress negotiations to agree a formal agreement for lease
	n/a	Under negotiation	Confidential	Beyond FY 20	<ul style="list-style-type: none"> Under negotiation 	<ul style="list-style-type: none"> Parties engaged in negotiations for an agreement for lease Area under negotiations of around 150,000 m²
	n/a	Variable	Unidentified	Beyond FY 20	<ul style="list-style-type: none"> To be determined 	<ul style="list-style-type: none"> Increased interest received by Qube

*Note: These tenants that either have been secured or are expected to be secured in the near term are expected to utilise 120,100 m² of new warehouses (14% of total warehousing capacity once fully built) and generate annual volumes through the IMEX rail terminal of around 100,000-150,000 TEUs (10-15% of the automated IMEX capacity) on an annualised basis once the warehouses are all fully operational.

Key milestones achieved during FY 19 and FY 20 year to date

Target Australia's new NSW distribution centre

- Warehouse completed and operations started shortly after the end of the financial year and in line with Qube's timeline

Rail and IMEX terminal

- IMEX terminal (manual operation mode) complete
- Qube Logistics received the Office of the National Rail Safety Regulator (ONRSR) accreditation for the IMEX terminal and rail connection
- Commissioning trains have commenced in September 2019. Operations will commence 1 November 2019
- Fully automated operations to be established by 2022 taking capacity to more than 1 million TEUs

Land preparation and Moorebank Avenue realignment

- MPE land preparation works well progressed
- Expect to commence MPW land preparation works (to be funded by MIC) once Moorebank Precinct West Stage 2 planning approval is received

Planning approvals

Moorebank Precinct East (MPE)

- All significant approvals are in place for MPE for the IMEX terminal (250,000 TEU capacity in manual operation and automated operations to 500,000 TEU) and 300,000m² of warehousing
- Future application to expand the capacity of the IMEX terminal to 1.0 million TEU

Moorebank Precinct West Stage 2 (MPW2)

- Application progressed from the Department of Planning & Environment (DPE) to the Independent Planning Commission (IPC) towards the end of the financial year
- Determination by the IPC with associated consent conditions expected by the end of September 2019
- Will enable Qube to construct an additional of 215,000m² of warehousing and the Interstate Rail terminal which will have the capacity to handle 500,000 TEU

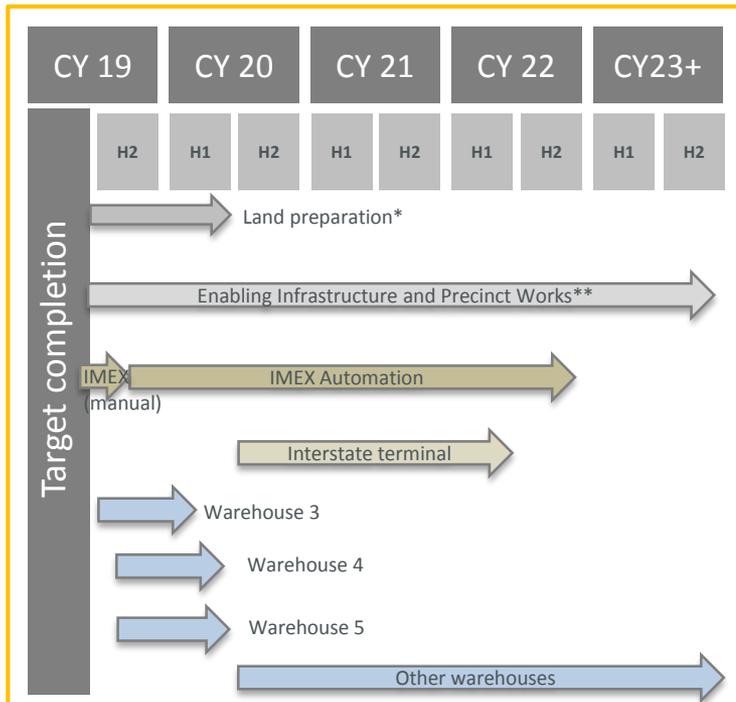
Moorebank Precinct West Stage 3 (MPW3)

- Further planning approvals which will be required for the construction of an additional 335,000m² of warehousing to achieve the total planned capacity of 850,000m² of warehousing
- Expected to be submitted during calendar year 2020

Moorebank Avenue realignment

- Will form part of a separate planning approval process
- Expected to be submitted during calendar year 2020

Development timeline



*Note: MIC funded works.

**Note: Qube funded works. Ongoing based on timing of warehouse development.

Qube's indicative total minimum development capex

- At 30 June 2019, a total of approximately \$461 million has been spent since financial close on development capex including on precinct infrastructure, rail terminals and warehousing
- The minimum remaining capex spend from FY 20 onwards is estimated to be approximately \$636 million*
- The total minimum project capex is higher than previously forecast:
 - The largest component of the increase is due to accelerated and higher spend on the enabling infrastructure and precinct works including some preparatory works that were previously forecast to be included as part of warehouse development. Accordingly, this higher capex is expected to reduce future warehouse construction expenditure and/or result in higher rental income
 - Other increased capex included unexpected costs relating to on-site storage detention and asbestos contamination removal
- At this stage, the higher capex is not expected to materially impact the overall expected project returns

*Note: In respect of warehouse related capex, the total minimum project capex only includes warehouses for which tenants have been secured to date or for which commercial terms have been agreed on (i.e. Warehouse 3, 4 and 5). Capex for the additional warehouses will be driven by tenant demand and whether or not new warehouses are funded by Qube.

CONSTRUCTION PROGRESS

MPE – Three new warehouses expected to be built during FY 20 (W3,W4,W5)



MPE – First locomotive test at the IMEX



MPE – IMEX Rail Terminal



MPW – Land preparation



MPW – Moorebank Avenue Overpass



Glenfield Waste Services site – Connection to the SSFL



- Moorebank Logistics Park will be a benchmark in environmentally sustainable design (ESD) practices across every facet of the development, including precinct wide initiatives as well as tenant led activity.
- We are working with industry leading bodies including the Green Building Council of Australia (GBCA) and the Infrastructure Sustainability Council of Australia (ISCA) to implement performance based rating tools for the project.
- Qube has also received a \$150 million term debt facility from the Clean Energy Finance Corporation (CEFC) in the statutory authority's first major investment in low emission transport infrastructure for Moorebank Logistics Park.



PROJECT BENEFITS

At full capacity, the Moorebank Logistics Park will:

- Cut more than **3,000 heavy truck movements** from Sydney's roads each day
- Reduce truck emissions by a total of more than **110,000 tCO₂e** (tonnes of carbon dioxide equivalent) per year
- Reduce the distance travelled by container trucks on Sydney's road network by **150,000 kilometres every day**, and the distance travelled by long distance interstate freight trucks by **93,000 kilometres every day**
- Deliver substantial carbon emission reductions compared to a business as usual scenario
- Generate a minimum of **50,000 MWh/year** from renewable energy sources installed on site
- Create **6,800 jobs**
- Create around **\$11 billion** in economic benefits over 30 years, including **\$120 million a year** for the economy of south-western Sydney, through the improvements to productivity as well as reduced business costs, reduced road congestion and better environmental outcomes.



PROJECT BENEFITS

Energy and carbon

- Use of passive design techniques such as building orientation, layout design, thermal massing and facade design
- High performance double glazing to all facades
- Efficient HVAC equipment with economy cycle
- High efficiency and intelligent lighting and control systems
- Commissioning and tuning of building services
- Extensive energy sub-metering and monitoring system
- Use of electric machinery where possible (instead of diesel or LPG)
- Installation of onsite renewable energy sources.

Water

- Installation of rain water tanks for the purpose of landscape irrigation and toilet flushing
- Installation of onsite detention basins
- Flush kerb garden beds are proposed, to ensure total stormwater runoff is reduced and any runoff is treated to a high standard prior to leaving the site
- High efficiency water fixtures and fittings with minimum 4 star WELS rating
- Air cooled air conditioning equipment
- Water sub-metering and monitoring system

Other

- Improved user comfort through HVAC, building fabric performance and fixed shading design
- HVAC system with economy cycle
- Low toxicity materials and finishes
- Flicker free, efficient lighting design
- Comprehensive environmental and waste management practices during construction
- A dedicated central waste recycling area to facilitate recycling during building operation
- Material selection focussed on reducing environmental impact and providing a healthy interior environment
- Cyclist facilities and fuel efficient vehicle parking spaces to reduce transport related impacts
- Extensive and diverse landscaping to enhance ecological value and improve stormwater quality
- Sustainability criteria as part of the fitout guide

SUSTAINABILITY ACHIEVEMENTS TO DATE

Energy

- Installation of **3MW** solar system on Warehouse 1 is now complete representing one of the largest single roof solar installations in Australia
- Greenhouse Gas modelling indicates a 78% reduction in GHGs across a 40 year period
 - Building energy savings
 - 12 MW solar system
 - Electric forklifts
 - Hybrid AGVs
 - Power regeneration in cranes

2.2M tCO₂-e saved through operational savings over 40 years

Materials

- Qube purchased on site crusher for MLP – October 2018
- Purchase price \$650K
- Amount of concrete from old buildings reused as road base = 130,000 tonnes
- Qube save an average of \$10 per tonne from recycling, equivalent to a saving of \$1.3 million (approx.)



- >39% reduction in materials embodied energy for Stage 1 of the MLP
- Pavement design (reduced concrete)
- Removal of viaduct in RALP (Rail Access Land Prep)
- Onsite concrete crushing
- Fill material sourced from WestConnex

18,387 tCO₂-e saved through material reduction in Stage 1

Ecology

- Use of soft landscape areas and establishment of native vegetation in dustbowl areas resulting in a weighted area of enhancement of 22.6% of the site
- Habitat connectivity will be maintained and (in some cases) enhanced

Q&A

