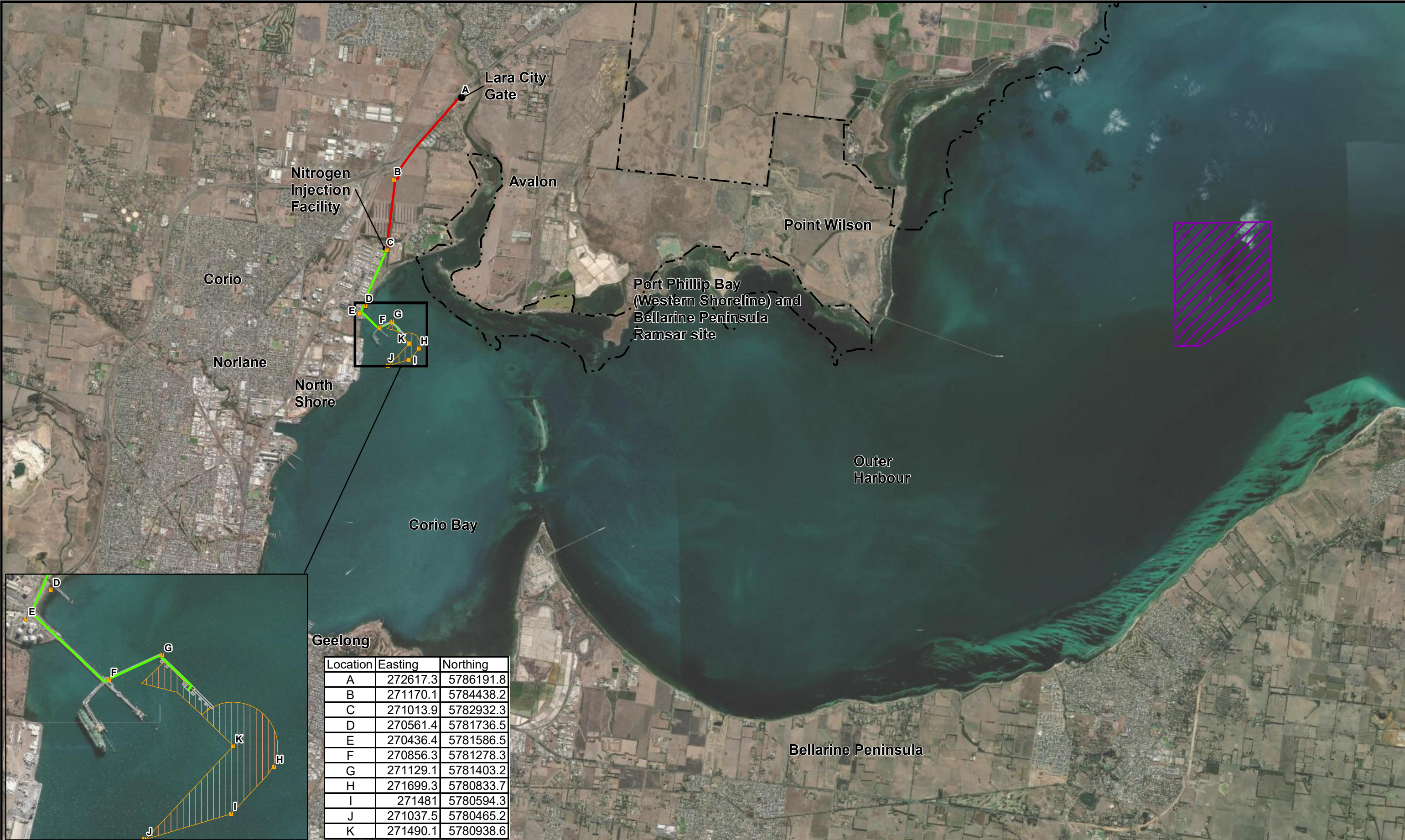


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Location	Easting	Northing
A	272617.3	5786191.8
B	271170.1	5784438.2
C	271013.9	5782932.3
D	270561.4	5781736.5
E	270436.4	5781586.5
F	270856.3	5781278.3
G	271129.1	5781403.2
H	271699.3	5780833.7
I	271481	5780594.3
J	271037.5	5780465.2
K	271490.1	5780938.6

PROJECT ID 60338515
 CREATED BY AB
 LAST MODIFIED PK 02 NOV 2020

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Coordinate System: GDA 1994 MGA Zone 55

0 850 1,700 3,400 metres
 1:73,576 (when printed at A3)

LEGEND

- Indicative Underground Pipeline Route
- Aboveground Pipeline
- Refinery Pier Extension
- Nitrogen Injection Facility
- Dredged Material Ground
- Dredged Area
- Ramsar Site

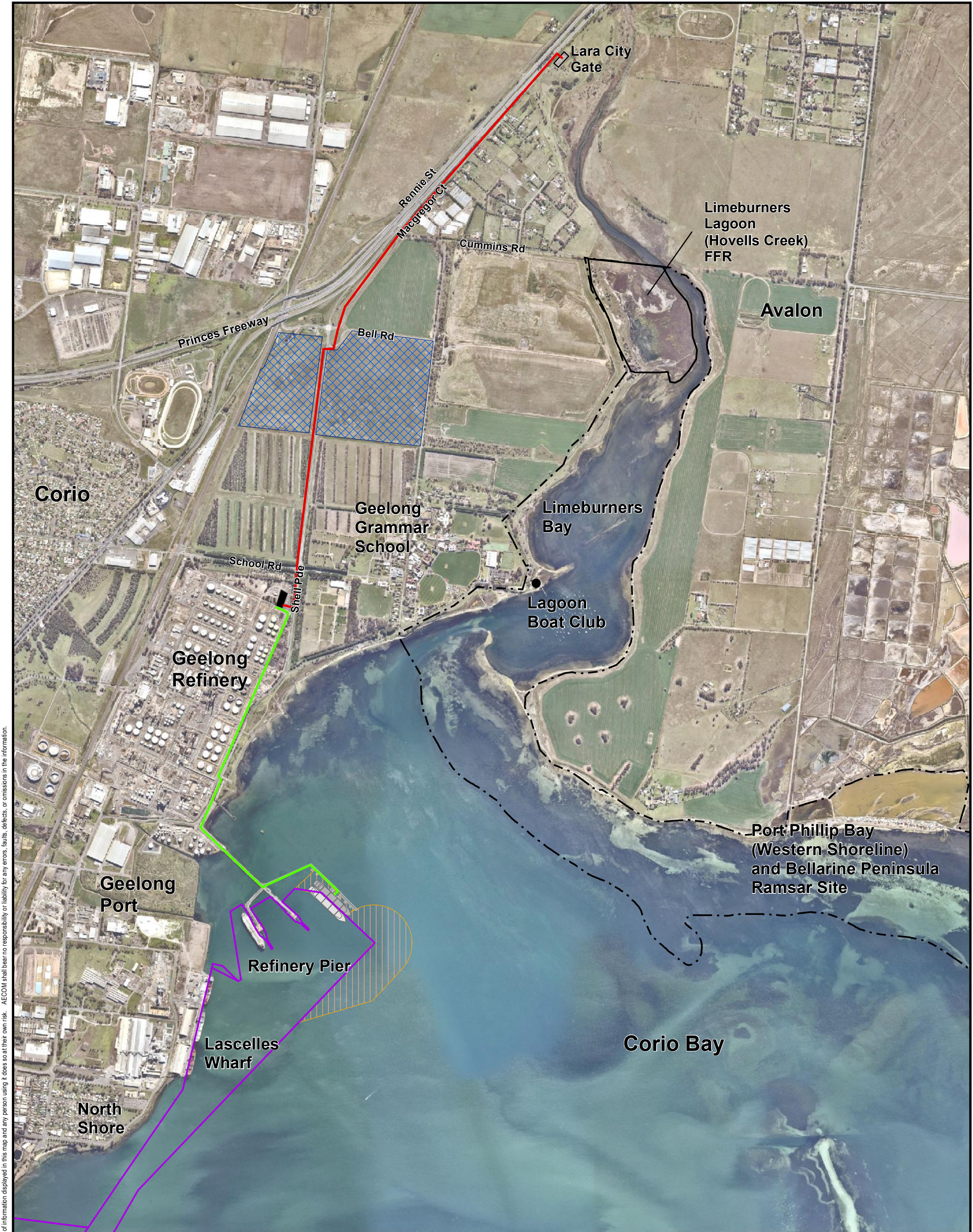


LOCATION OVERVIEW

Viva Energy

Corio Bay, Port Phillip, VIC

Figure
1



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 CREATED BY A.User
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AECOM
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Coordinate System: GDA 1994 MGA Zone 55
 0 237.5 475 950
 metres
 1:20,000 (when printed at A3)

LEGEND

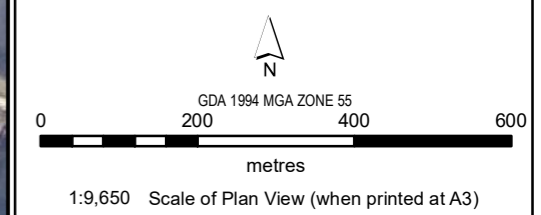
- Aboveground Pipeline
- Indicative Underground Pipeline Route
- Refinery Pier Extension
- Shipping Channel
- Dredged Area
- Nitrogen Injection Facility
- Corio Native Grassland Reserve
- FSRU
- LNG Carrier
- Ramsar Site

PROJECT SITE AND SURROUNDING AREA

Viva Energy

Corio Bay, Port Phillip, VIC

Figure 2



- Legend**
- Aboveground Pipeline
 - Underground Pipeline Corridor
 - Refinery Pier Extension
 - ⊗ Existing Discharge Point Location
 - FSRU Seawater Discharge Pipe
 - FSRU
 - LNG Carrier
 - Nitrogen Injection Facility
 - Viva Energy Geelong Refinery
 - Ramsar Site

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REFINERY SEAWATER INTAKE AND DISCHARGE LOCATIONS

Viva Energy	Figure
Corio Bay, Port Phillip, VIC	3



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Coordinate System: GDA 1994 MGA Zone 55
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 1:15,779 (when printed at A3)

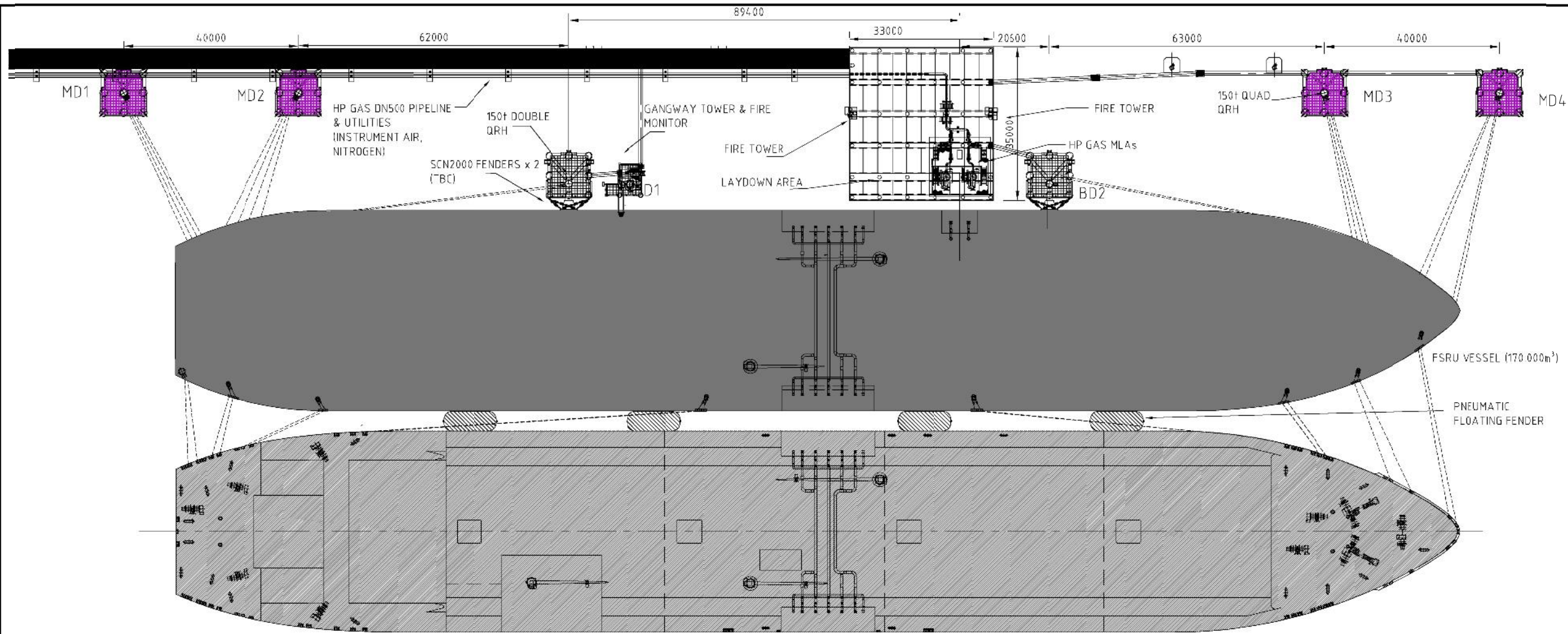
LEGEND

- Aboveground Pipeline
- Underground Pipeline Corridor
- Nitrogen Injection Facility
- Refinery Pier Extension
- Viva Energy Owned Land

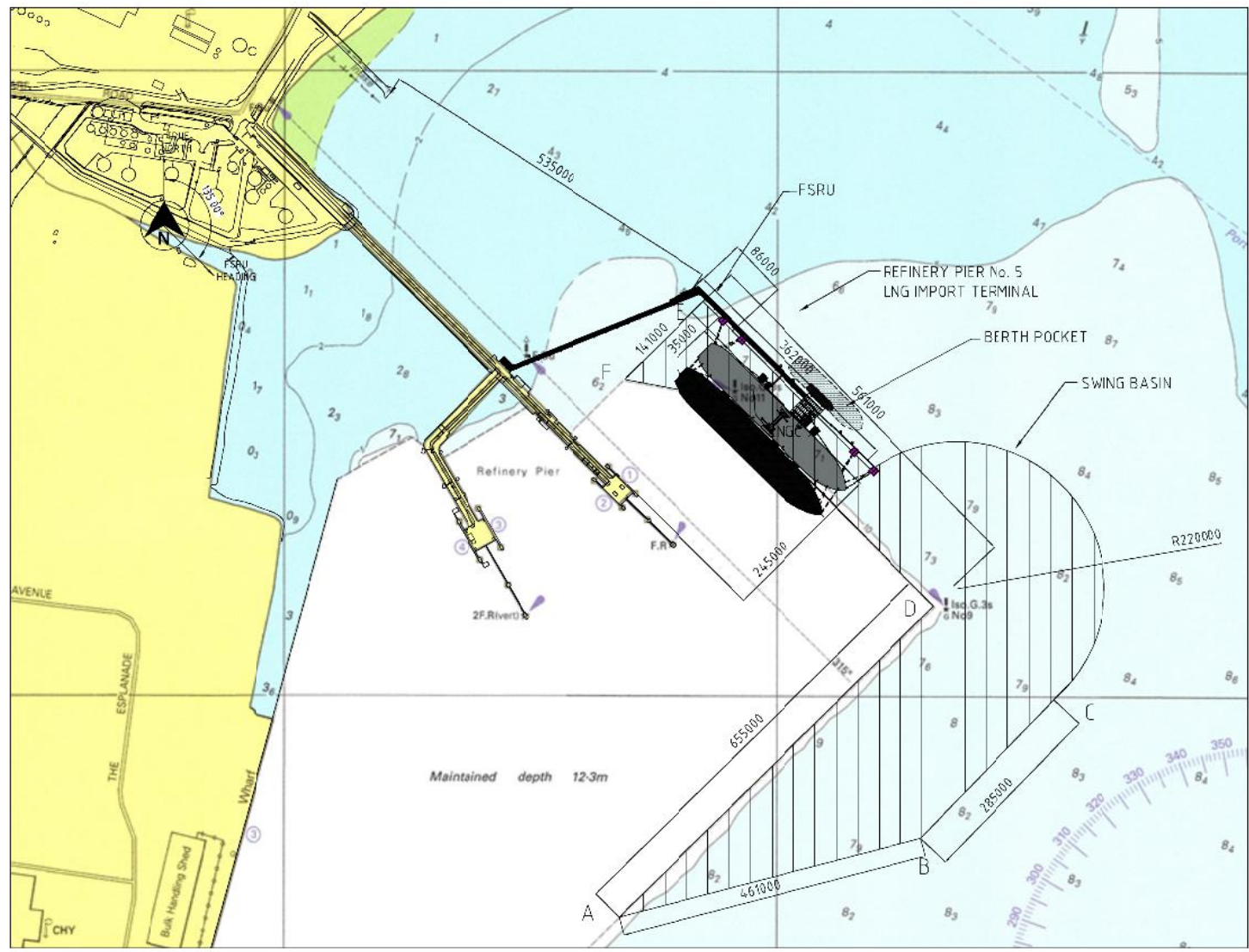
PROPOSED PIPELINE CORRIDOR

Viva Energy
 Corio Bay, Port Phillip, VIC

Figure 4



- NOTES:**
- VIVA REFINERY PIER No.5 AND FSRU HEADING IS 135DEG.
 - WATER DEPTH AT LAT = 12.30m. SWING BASIN AND BERTH POCKET TO BE DREDGED TO 12.3m.
 - FIXED FENDER TYPE:
- SUPER CONE TYPE FENDER SCN2000
- 2 PER BERTHING DOLPHIN.
 - FLOATING FENDER TYPE:
- PNEUMATIC FLOATING FENDERS
- DIA 4.5m, LENGTH 9m.
 - FSRU/LNGC QUICK RELEASE HOOKS:
- 150 TONNE SWL QUAD HOOK QRH UNIT WITH INTEGRAL CAPSTAN
- 4 QRHs (MD1, MD2, MD3 AND MD4)
- 150 TONNE SWL DOUBLE HOOK QRH UNIT WITH INTEGRAL CAPSTAN
- 2 QRHs (BD1 AND BD2).
 - DISTANCE BETWEEN REFINERY PIER 1 AND REFINERY PIER 5 BERTHING LINES IS 245M. SEPARATION BETWEEN VESSEL BERTHED AT REFINERY NO.1 AND LNGC BERTHED ALONGSIDE FSRU AT REFINERY NO.5 EXCEEDS 100m.
 - MOORING AND BERTHING DOLPHIN POSITION SUBJECT TO MOORING ANALYSIS RESULTS.
 - FIRE MONITOR LOCATION AND NOs SUBJECT TO FIRE & SAFETY REVIEW.
 - FUTURE EXPANSION - REFINERY PIER NO.6 LNG BARGE BERTH FOR LNG BUNKERING.



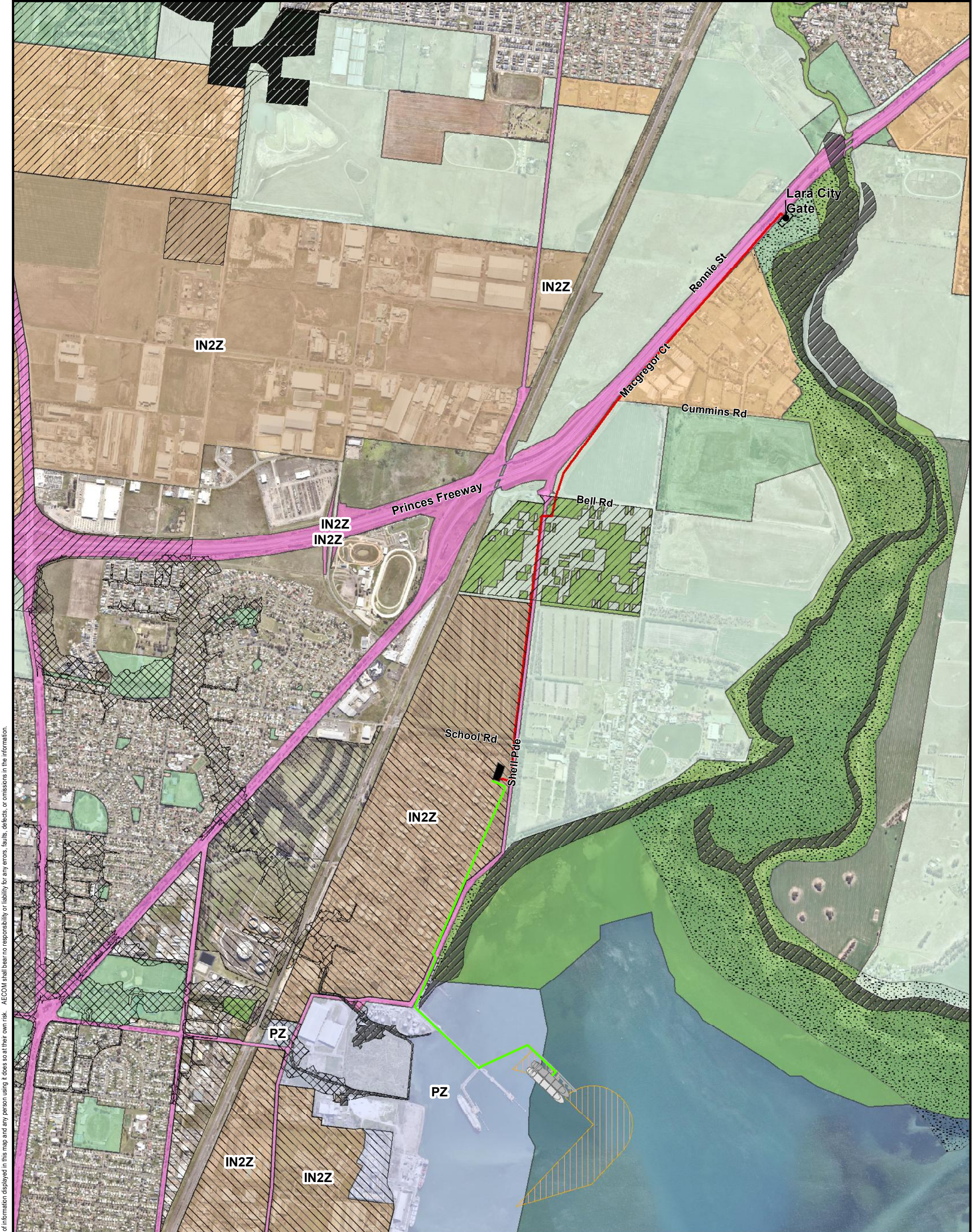
JETTY LAYOUT - FSRU (170,000m³)
NTS

REF POINT	LATITUDE	LONGITUDE
A	38° 5' 40.68"S	144° 23' 20.42"E
B	38° 5' 36.9"S	144° 23' 38.76"E
C	38° 5' 29.34"S	144° 23' 47.99"E
D	38° 5' 25.75"S	144° 23' 39.53"E
E	38° 5' 11.66"S	144° 23' 24.85"E
F	38° 5' 14.88"S	144° 23' 20.76"E

VIVA ENERGY REFINERY PIER LAYOUT WITH REFINERY PIER NO.5

DWG. NO.	DESCRIPTION					
REFERENCE DRAWINGS						
F 18SEP2020	RE-ISSUED FOR REVIEW CKB LLL FL -					
E 18AUG2020	RE-ISSUED FOR REVIEW CKB LLL FL -					
D 23JUN2020	RE-ISSUED FOR REVIEW CKB LLL FL -					
C 15MAY2020	RE-ISSUED FOR REVIEW CKB LLL FL -					
B 30APR2020	RE-ISSUED FOR REVIEW CKB LLL FL -					
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D	CUST
REVISIONS						
CUSTOMER						
CUSTOMER'S CONSULTANT						
PROJECT TITLE						
PROJECT VIVA						
PROOF OF CONCEPT STUDY						
DRAWING TITLE						
REFINERY PIER No.5						
PRELIMINARY LAYOUT						
PROJECT NO.	411010-00032	A3 SHEET	SCALE	NTS		
DRAWING NO.	411010-00032-MA-DSK-0001	SHEET	REV.	1	2	F

DATE: 17-Sep-20 5:19 PM



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Coordinate System: GDA 1994 MGA Zone 55

0 230 460 920
 metres
 1:19,496 (when printed at A3)

LEGEND

- Lara City Gate
- Aboveground Pipeline
- Indicative Underground Pipeline Route
- Refinery Pier Extension
- LNG Carrier
- FSRU
- Dredged Area
- Nitrogen Injection Facility

Planning Zones

- FZ - Farming
- IN2Z - Industrial 2
- PCRZ - Public Conservation & Resource
- PPRZ - Public Park & Recreation
- PZ - Port
- RDZ1 - Road - Category 1
- RLZ - Rural Living

Planning Overlays

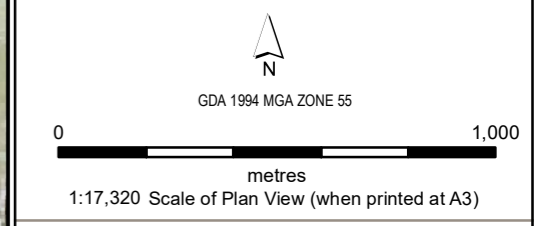
- ESO2
- ESO4
- DDO20
- SBO
- LSIO

LAND USE ZONING AND ASSOCIATED OVERLAYS

Viva Energy
 Corio Bay, Port Phillip, VIC

Figure 9

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- Legend**
- Aboveground Pipeline
 - Refinery Pier Extension
 - Underground Pipeline Corridor
 - Nitrogen Injection Facility
 - FSRU
 - LNG Carrier
 - Dredged Area
- Habitats Classification**
- Saltmarsh coastal vegetation
 - Biota Present
 - Coarse Sediment
 - Silty Sand
 - Rock (unclassified)
 - Seaweed
 - Mangroves
 - Mixed Soft Substrata
 - Mud
 - Muddy Sand
 - Saltmarsh
 - Sand
 - Seagrass

CORIO BAY HABITATS

Viva Energy
 Corio Bay, Port Phillip, VIC

Figure
10a

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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