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TIERRA DEL FUEGO

Puerto Armonía

G-H2

Tierra del Fuego - Región de Magallanes

Executive Resume.

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1.
Team

Ignacio Covacevich

Ind.Civ.Eng.-PUCV

Holding Ultramar; Empresa Portuaria Austral, Blumar, TEV

Jerónimo Covacevich

Civ.Eng OO.CC.-USM, Master of Engineering in Mining, UBC

Esval-Hatch-BHP

Jorge Ronda

Ind.Civ.Eng.-PUCV, MBA-UAI,

Dip. H2-PUC

Teacher of Port Infrastructure, H2 Diploma- PUC

Supply Chain Council of Chile’s Member

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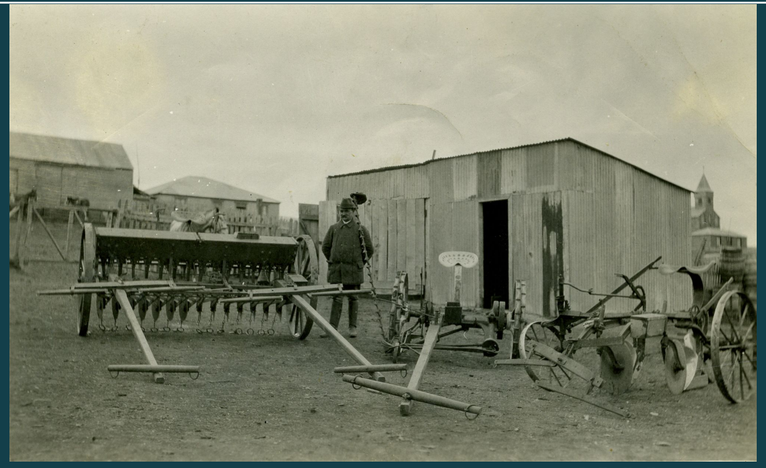
We are a local family with strong roots and we owned a solid network with the local community, authorities and regional and national companies. We have a genuine awareness to develop the land we own in a sustainable manner.

3. History

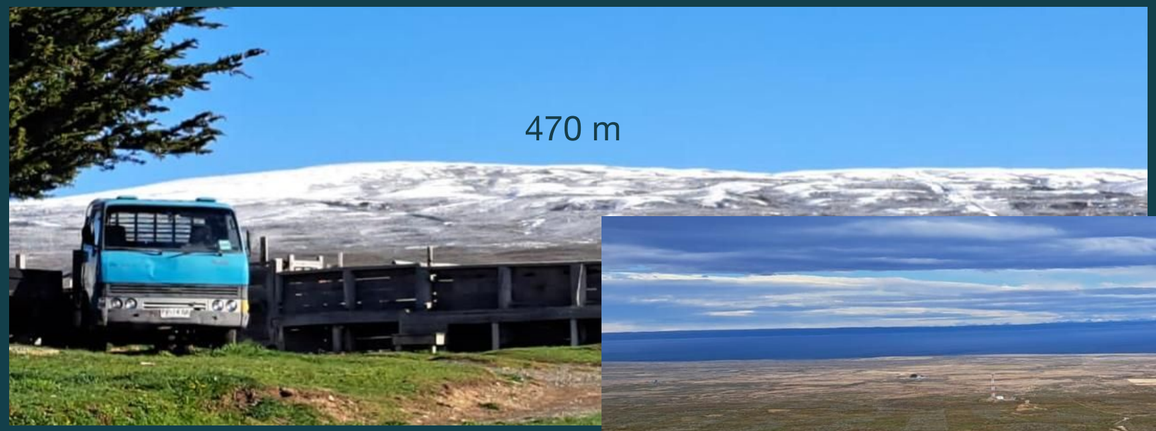
José Covacevich Costa

1906

José Covacevich commercial store, Porvenir 1920



La Fueguina farm, 1920



Armonía farm

2.

G-H2 Projects

- Wind Turbine Capacity 7 MW each
- 0,5 ktpa of LNH3 production per MW

What does the G-H2 Projects need?

1. Logistic infrastructure to import the cargo to be use to build the plants:
    - Eolic Fields
    - Electrolysis Plants
    - Haber Bosch Plants
    - Other supply materials

Minimum depth of 12 meters

2. Logistic Infrastructure to be use to export ammonia

Minimum depth of 15 metros

3. Desalt water

Project	Wind Turbines	Ammonia Vol. (ktpa)
La Frontera	125x2	300x2
C.Baquedano Norte	250	600
Llaquedona	230	600
Consorcio Eólico	250	750
Ignis	570	2,400
C.Baquedano HIF	350x3	NA
Teg	500	1,500
Total	**3,100**	**6,450**

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4.

Port Project Location

North coast of Inútil Bay, comuna de Porvenir, provincia de Tierra del Fuego, Región de Magallanes y Antártica Chilena.

Conections:

65 km from Porvenir route Y-71

80 km western from San Sebastián border pathway

173 km norwet from Rio Grande

Argentine territory of Tierra del Fuego Island is also developing industrial projects that needs port infrastructures to transfer their production and supplies.

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Inútil Bay, Tierra del Fuego

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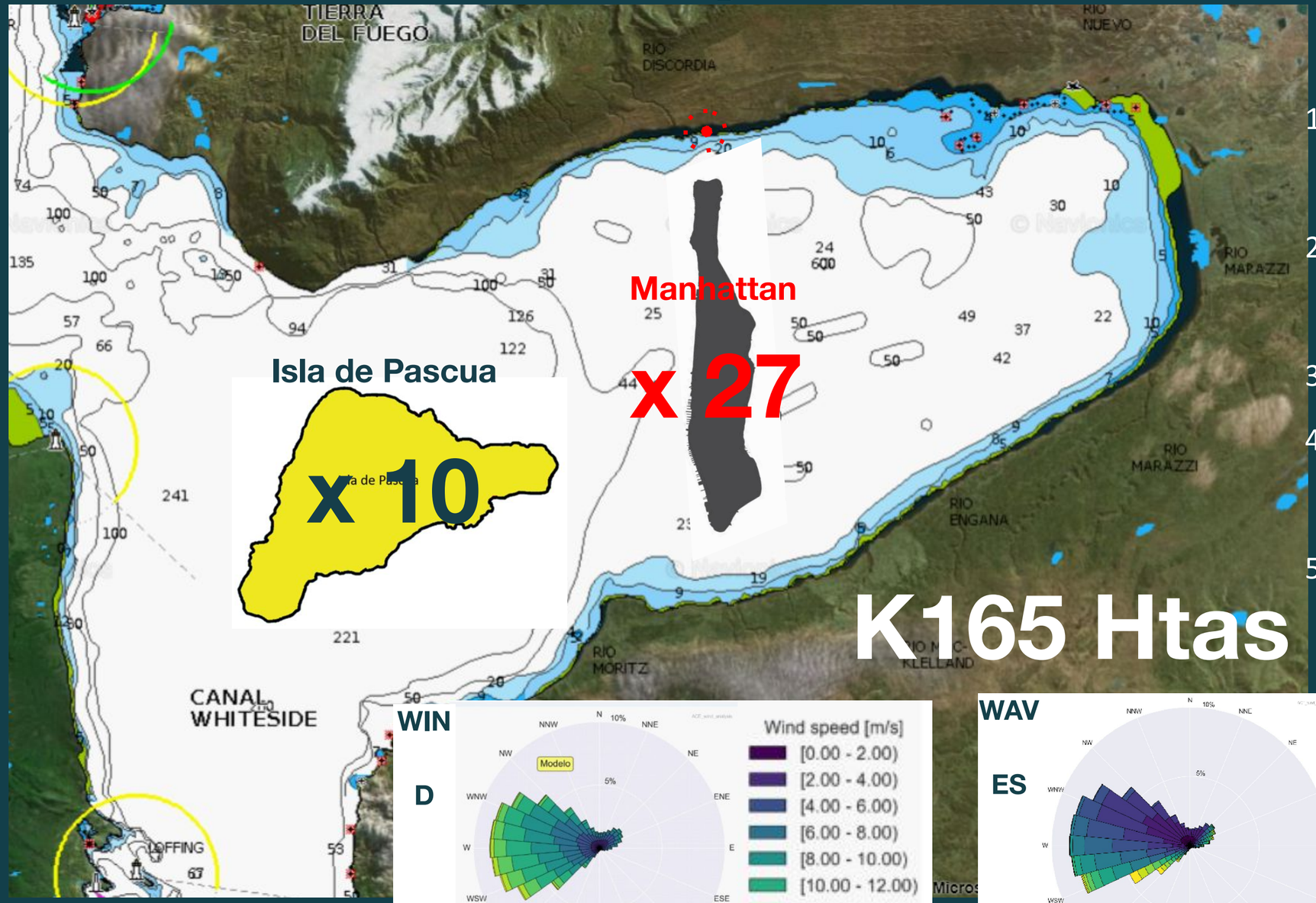
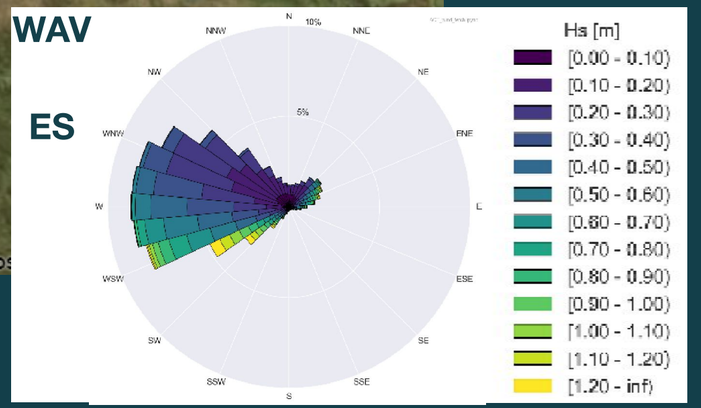


1. Depth over 20 meters through the approach cone to the port.
2. Tides variation don't generate operational restrictions.
3. The port does not need dredging.
4. Is it feasible to load a 90.000 m3 vessel, full capacity.
5. Water intake and Outfall with shares infrastructure.



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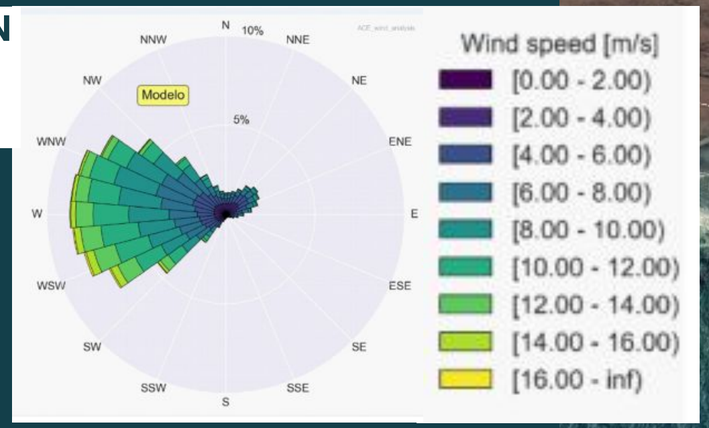
Inútil Bay, Tierra del Fuego

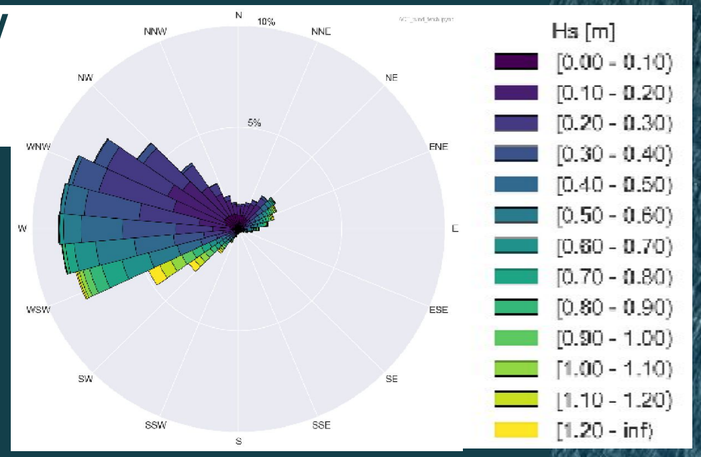
WIN

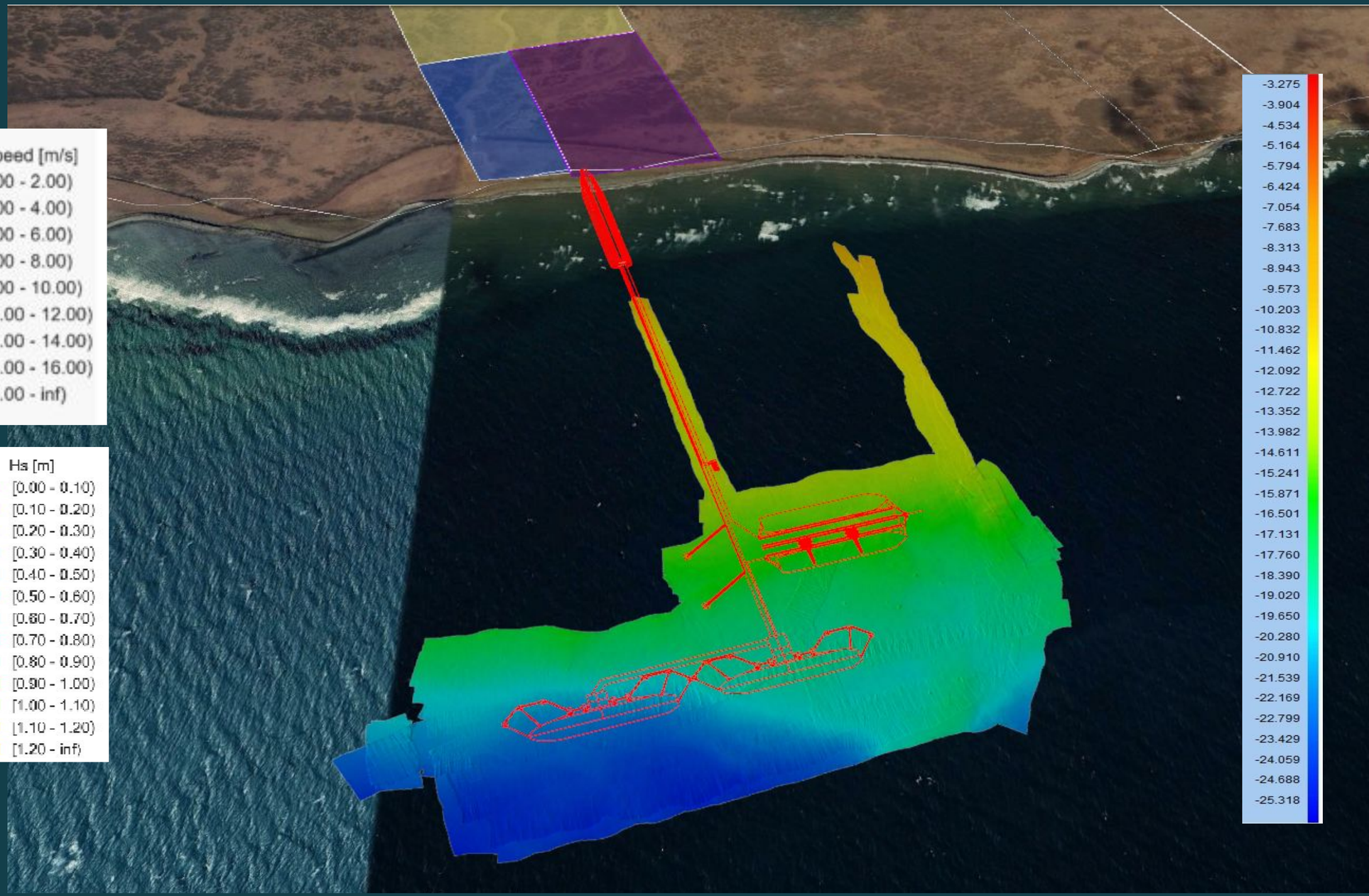
D



WAV

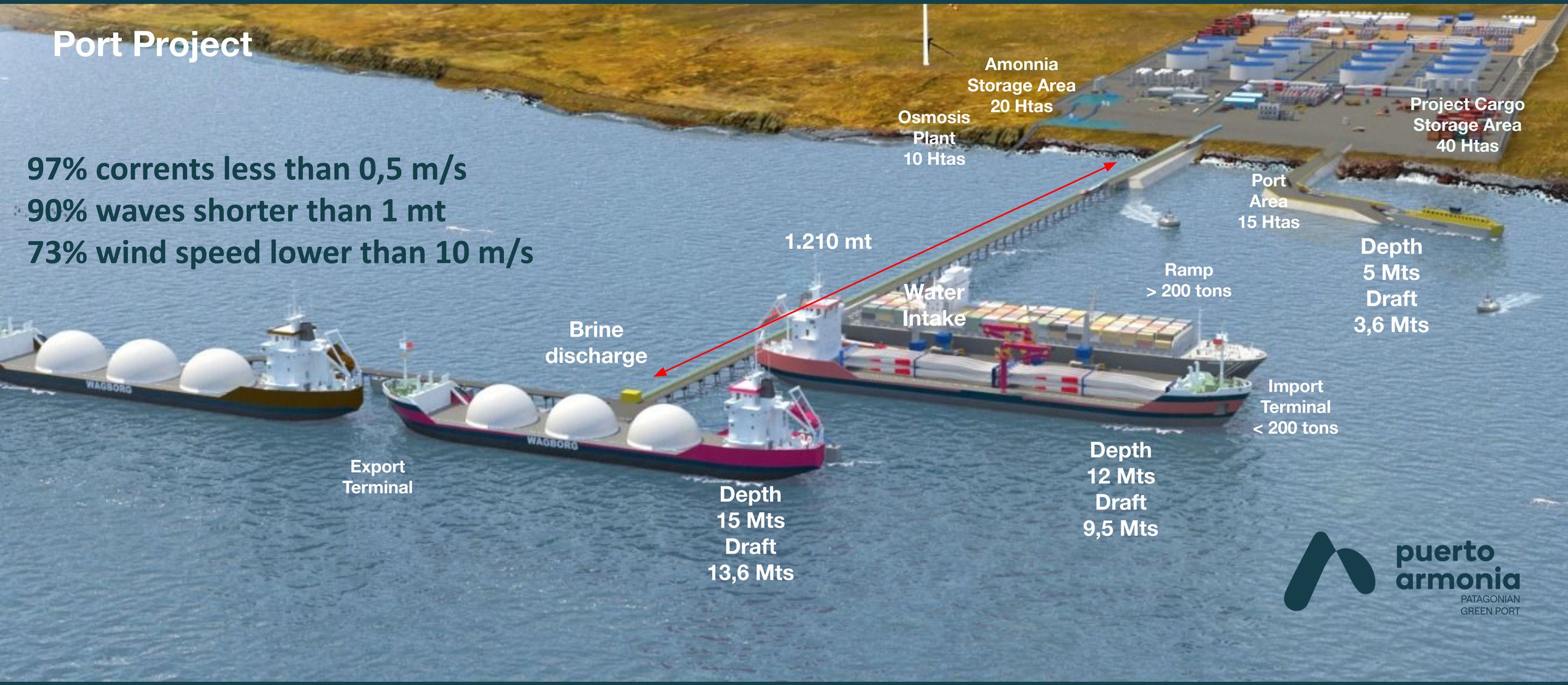
ES



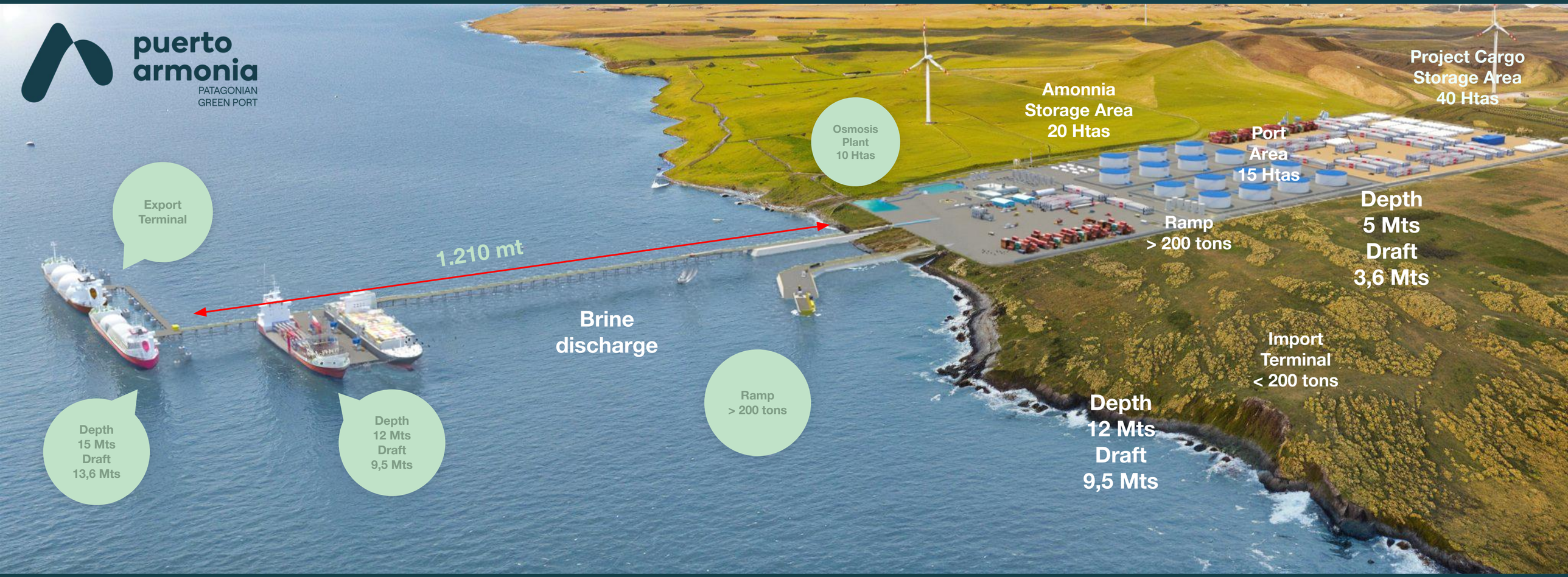


5.

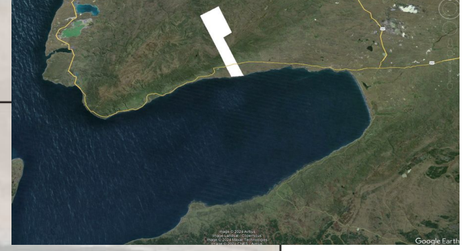
Port Project



5. Port Project



6. Port Project



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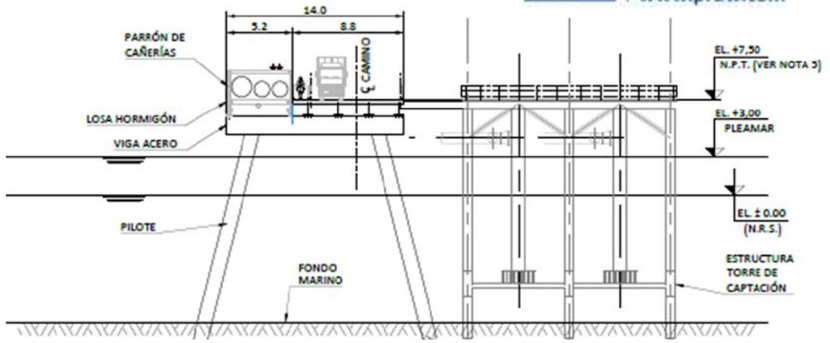
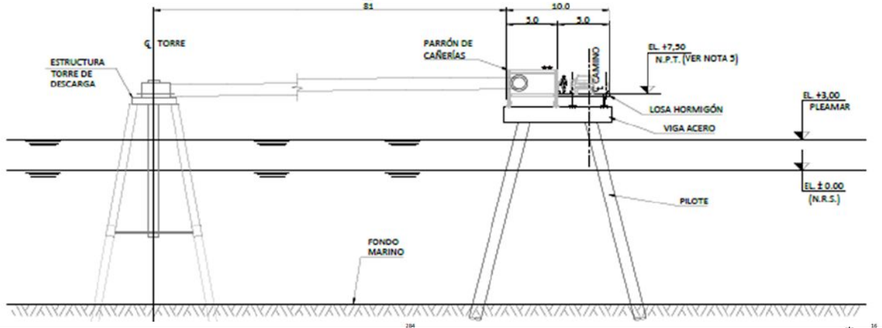
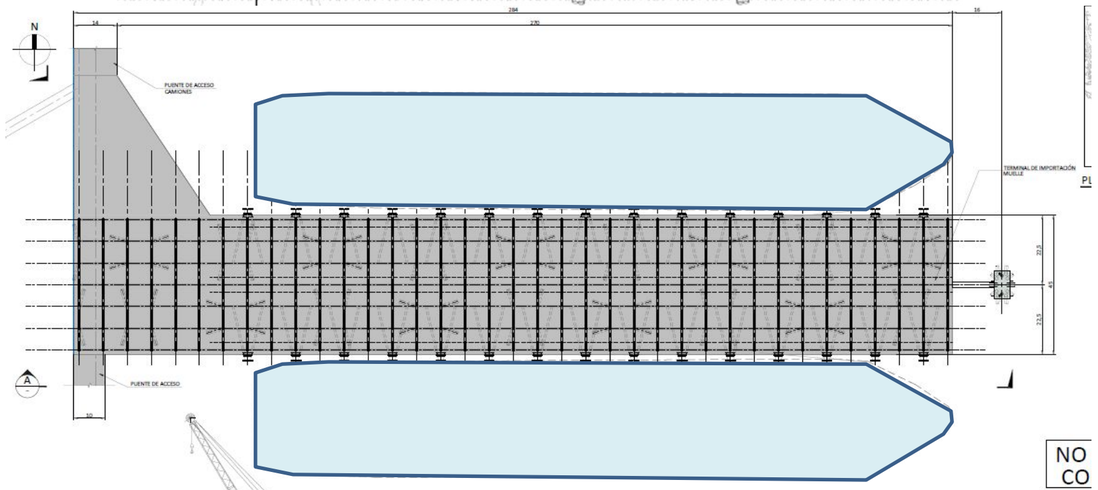
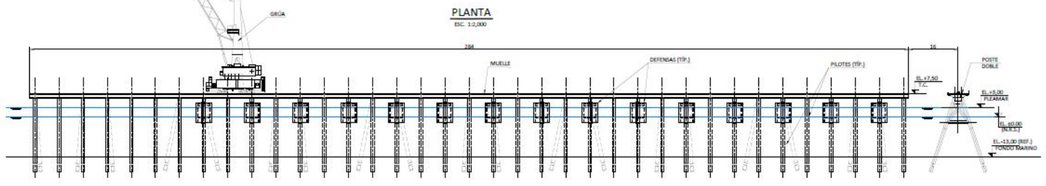
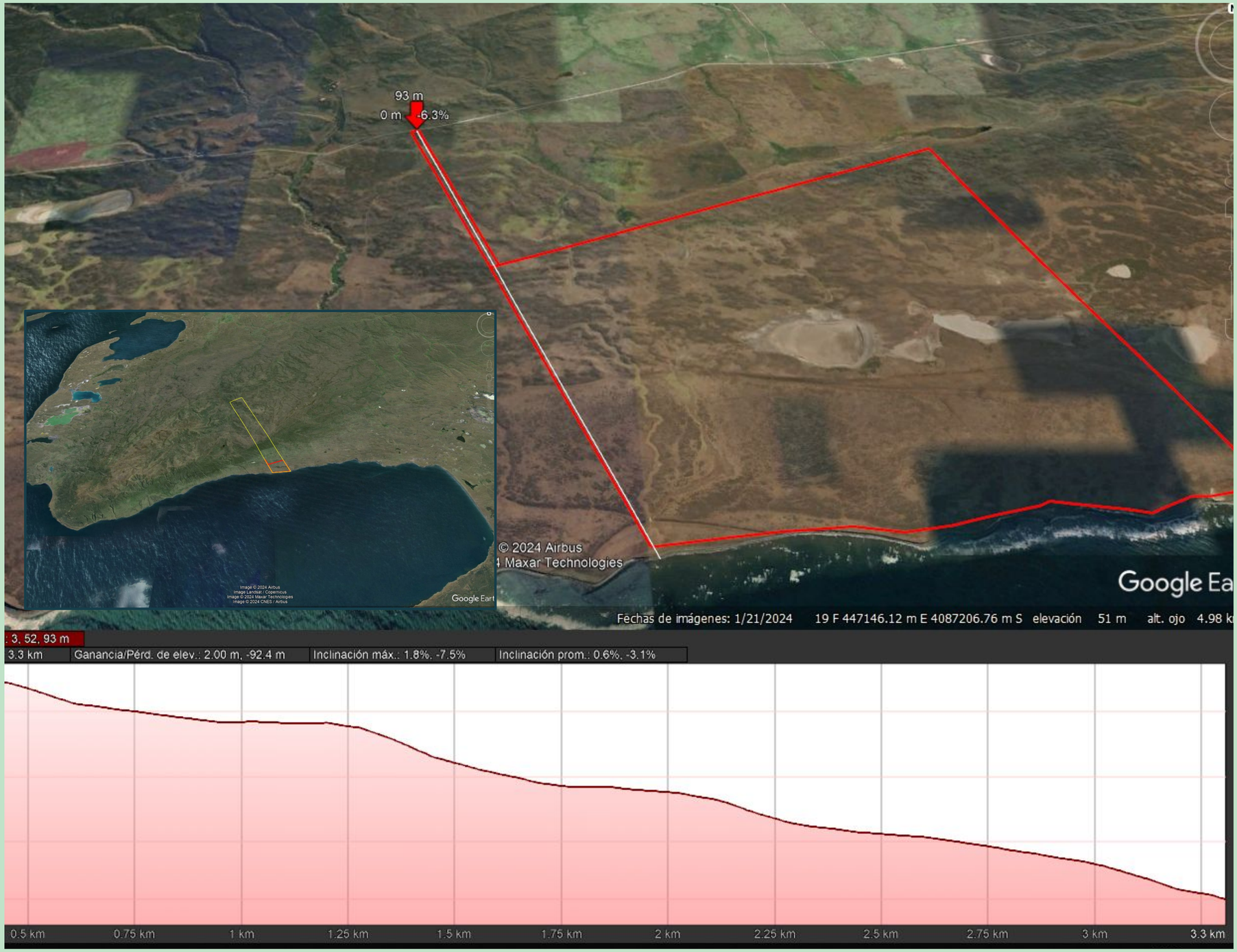
PRDW Consulting Port and Coastal Engineers
www.prdw.com











6. Land Area

- 90.000 tons capacity LNH3 tanks per client

3x30.000 ton

- LNH3 Production Plants (managed by a third party)
- Overload cargo storage area
- Osmosis Plant
- Water tanks

1. Route Y-71 is 3,3 km far for the shore, there are approximately 1.000 Htas to develop and industrial park where green ammonia's plant could be build.
2. The average slope from route to shore is 3% so the earthwork to build the backup area is pretty simple.
3. Route Y-71 is paving, so most of the G-H2 projects are going to be connected by good standard paving roads.

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7.

Timeline

2025

Environmental base line
(2 Campaings)

2025 & 2026

EIE processing & Maritime Concessions

2027

Sectorial Permits

2027

EPC selection, Detail Engineer & Purchases

2028 & 2029

Port Building

2030

Start Operations

2030 & 2060

Loading LNH3 operations and unloading of project´s cargo

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8. Project Advantages

- Owners of a 8.200 ha farm, with 3 kms of the north coast of Bahía Inútil
- Domain titles adjoin with the sea
- Road paving
- The road is 3,3 km onshore
- The Bay is 165.000 htas, average depths are 30-40 mts, this allowed safety vessels track, and a big amount of water for salt dissolution.
- Is a protected bay, it is not on open ocean.
- The predominant winds flows parallel to the shore line, this will not disturb the dockage operations nither the loading/unloading.
- There aren´t other maritime concession in the bay neither benthonic resources´s manage areas
- The Port Project is close to the city of Rio Grande in Tierra del Fuego, Argentina, with industrial development. Additionally, there are Eolic Projects in that area and the port conditions aren’t good.
- Magellan company with a solid regional contact network that could capitalizes locally the H2v industry´s development
- Local laws encourage investment and projects development (Ley Navarino, Ley Austral, Zona Franca)

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