

TSI Terminal Systems Inc.

Deltaport Berth 3 Expansion Terminal Lighting Presentation

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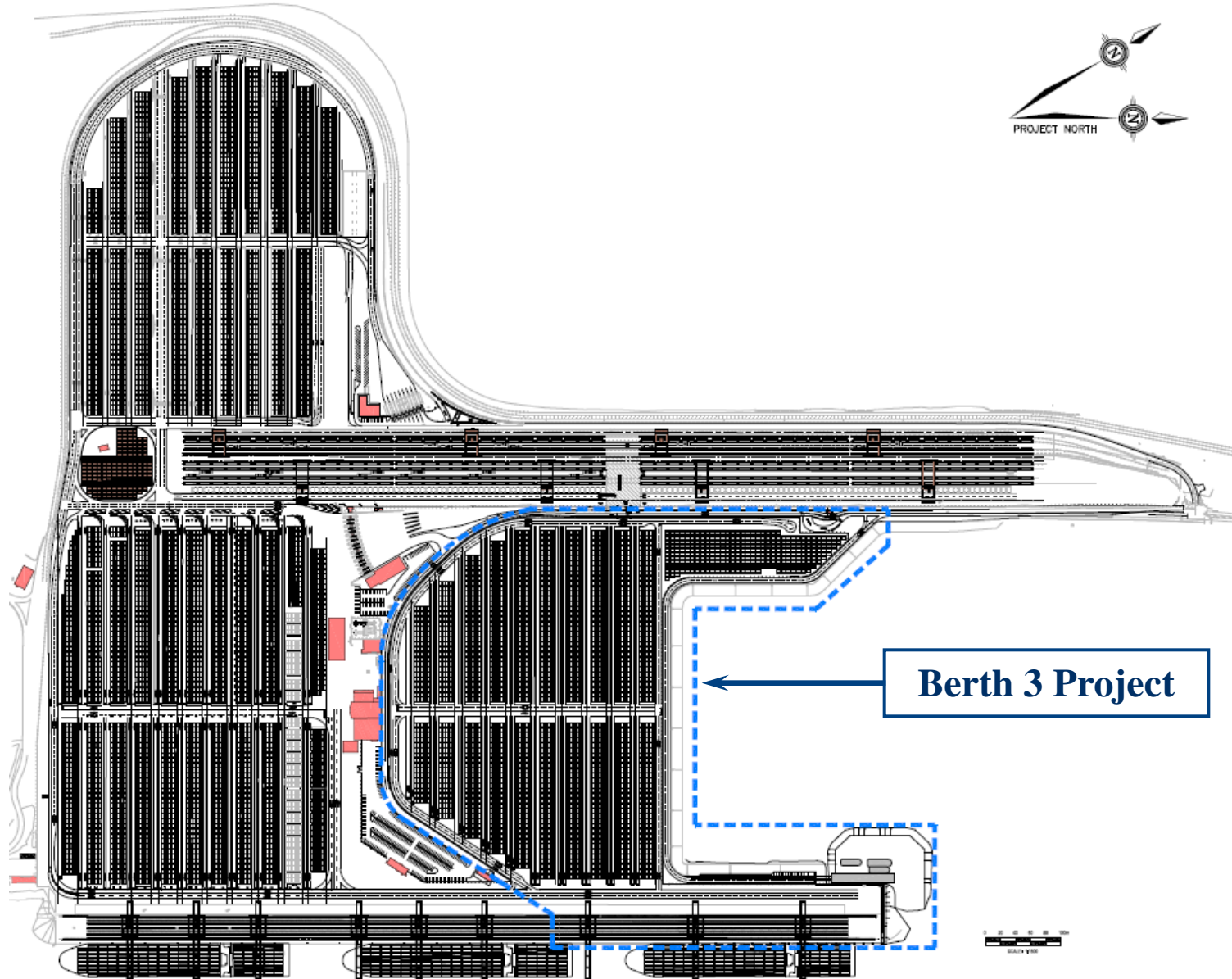
Purpose of Presentation

To present the Delta Community Liason Committee (DCLC) with the consultant's Terminal Lighting Report findings.

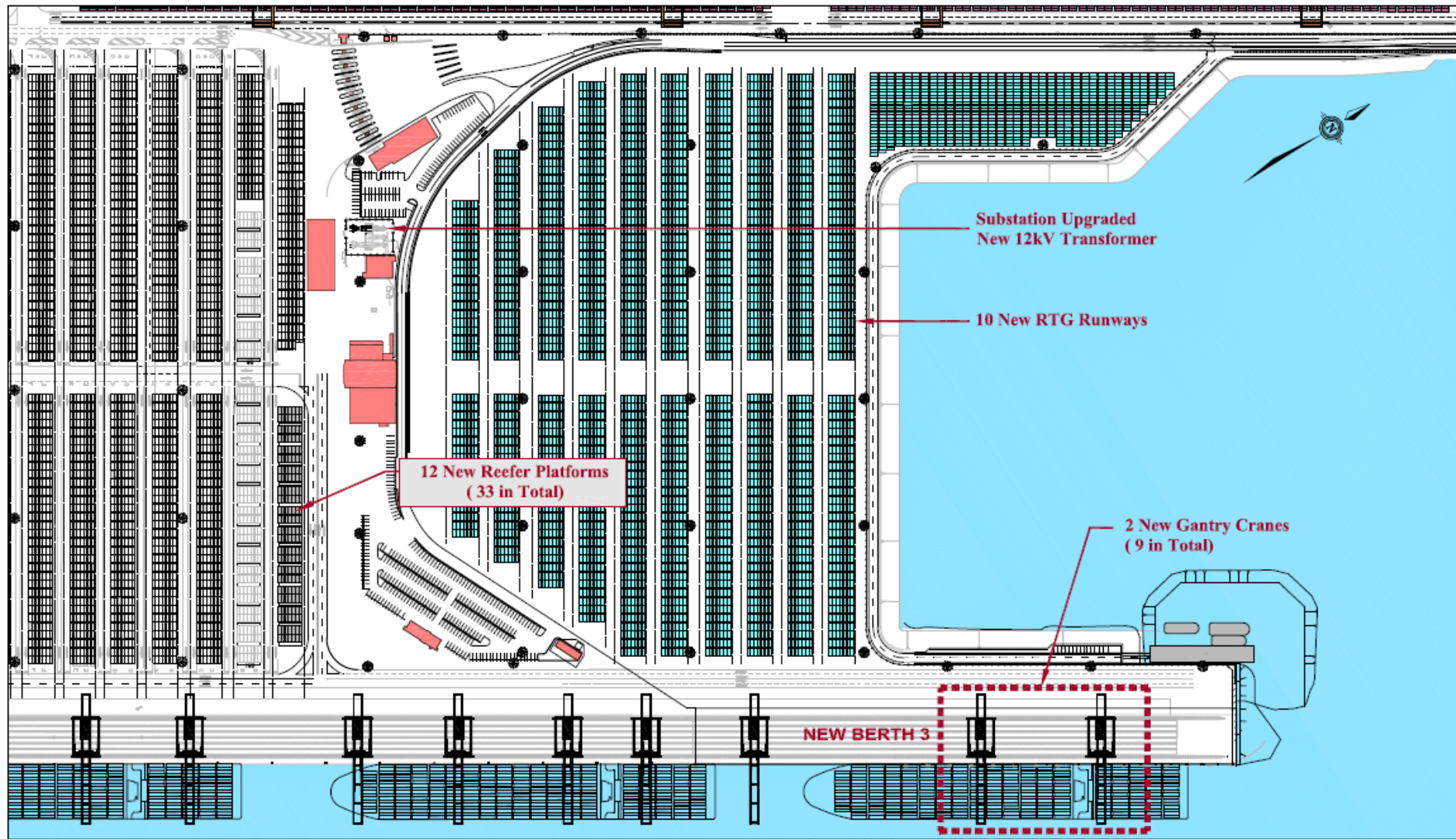
To answer questions from DCLC.

To receive feedback from DCLC regarding the findings.

Deltaport Container Terminal Existing Layout with Berth 3



The FUTURE – Overview of Berth 3 Container Yard



TERMINAL LIGHTING DESIGN CRITERIA

- Terminal operates site-wide, 362 days per year, 24 hours per day
- Terminal Lighting aims to provide 50 lux average and 30 lux minimum (10 lux = 1 foot-candle) consistent with Industry Standards
- Safety of Workforce is of primary concern (HRSDC ruling)
- Mitigate Offsite Impacts

PROPOSED TERMINAL LIGHT STANDARD DESIGN

- 125' Towers with 12 lights per tower (18 total)
- Ring-type Mast-Head for lights in centre of yard
- Multi-level tiered Mast-Head on perimeter focused into the Yard
- Proposed Layout is "Efficient" and "Power-Smart"

- High-Pressure Sodium (HPS) fixtures – Standard in Outdoor Lighting
- Fixtures to be Widelite AKTRA Cut-off Lights for Site Coverage and Flexibility
- “Aim” Lights into the Yard, “Cast” light across rows, and “Aim” away from Offsite Areas of Concern

OTHER TERMINAL LIGHTING OPTIONS

- Security Lighting (4 fixtures per Standard) available for 3 “Closed” days and Union Nights (no 4pm - 12am shift)
- Use of bi-level lighting considered but not currently proposed due to “Flicker” concerns
- Gantry Crane Boom Lighting concerns have been addressed

Summary of Terminal Lighting



- Keeping Workers Safe
- Use Best Practices
- Design to Industry-standards
- Meeting Intent of the EAD
- Be Environmentally-sound
- Be Power Smart

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Questions?

