

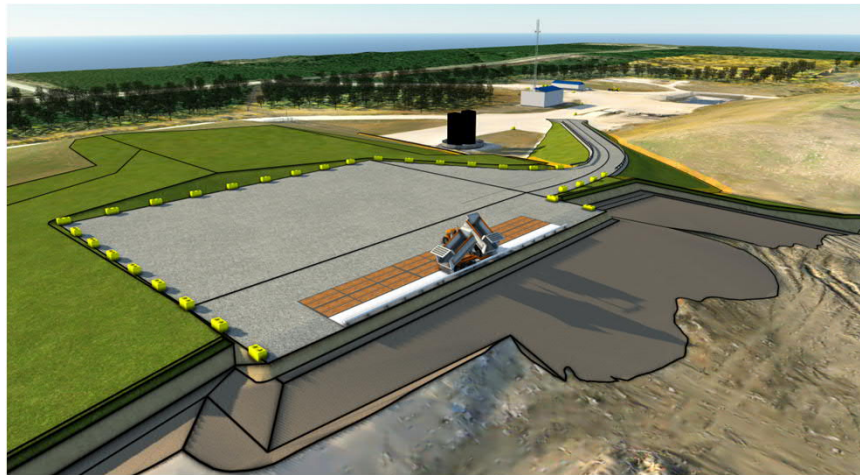


Associated
Engineering

75 YEARS

CANADA BEST
MANAGED
COMPANIES

Platinum
member



Planning in 3rd Dimension

Optimizing Your Landfill's Future Development
Using 3D Modelling Software.

Bob Jardine, P.L. (Eng.), C.E.T.

April 5, 2022

Project Overview



Client's Vision

- Landfill Development Plan - Long Term Thinking
- Landfill Access Plan
- Landfill Fill Plan - Short Term (Current Landfill Cell)



Generate the Plan

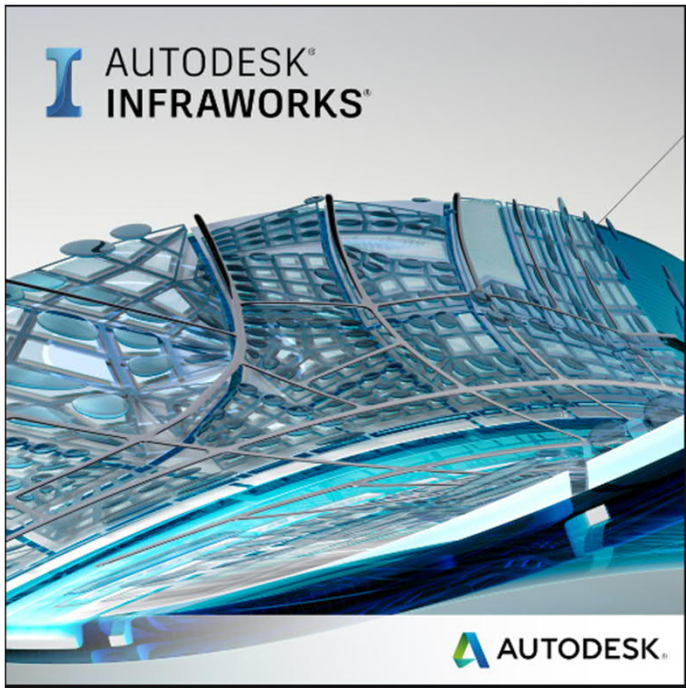
- How to display the design, what would help the Client?



Provide the Deliverable

- Infraworks screenshots

How to Display the Design



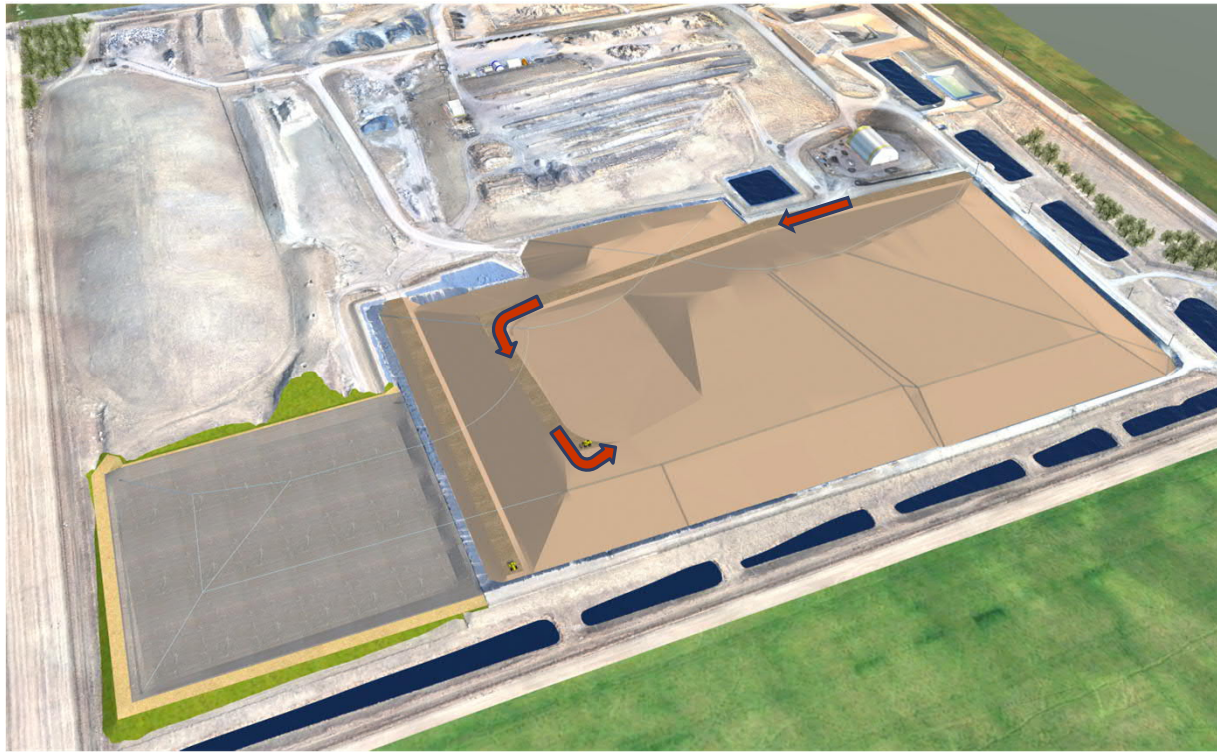
Built in 3D Modelling, Import CAD Modelling,
Import Drone Surface and Image Data



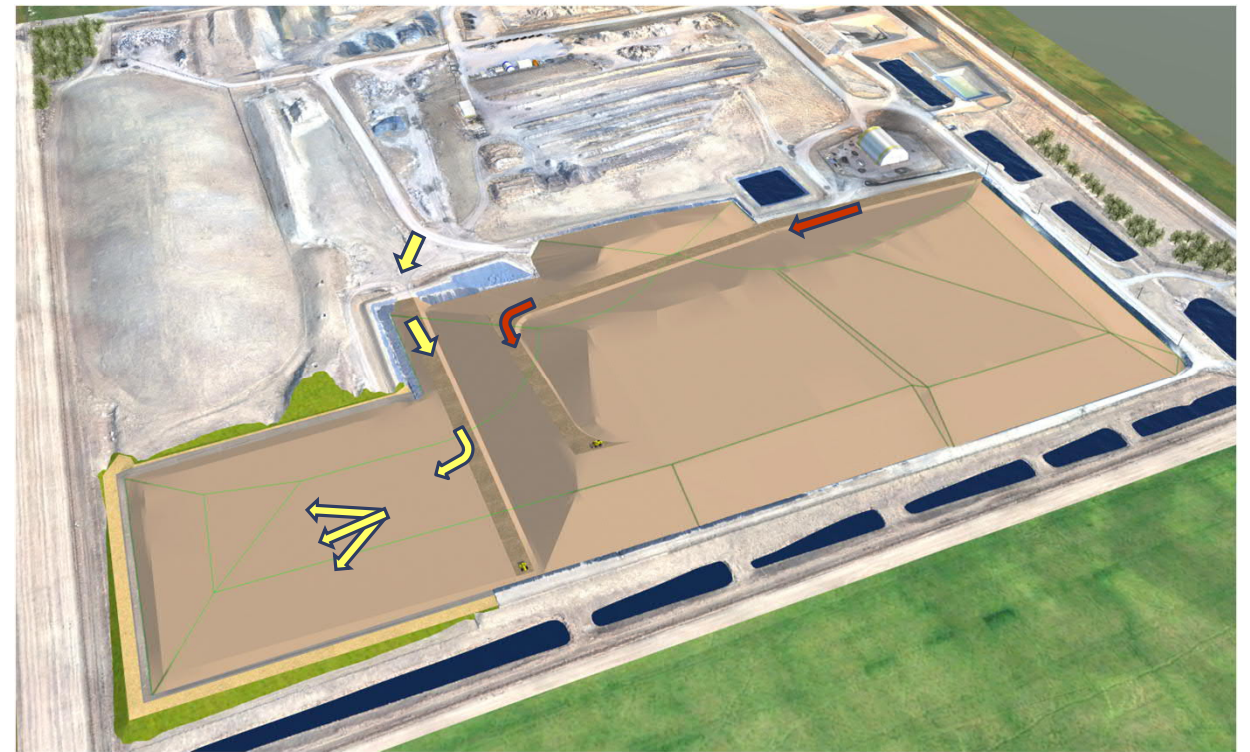
Landfill Development Plan - Long Term Thinking

Landfill Development Plan

Operations Planning – Waste Staging and Cell Expansion



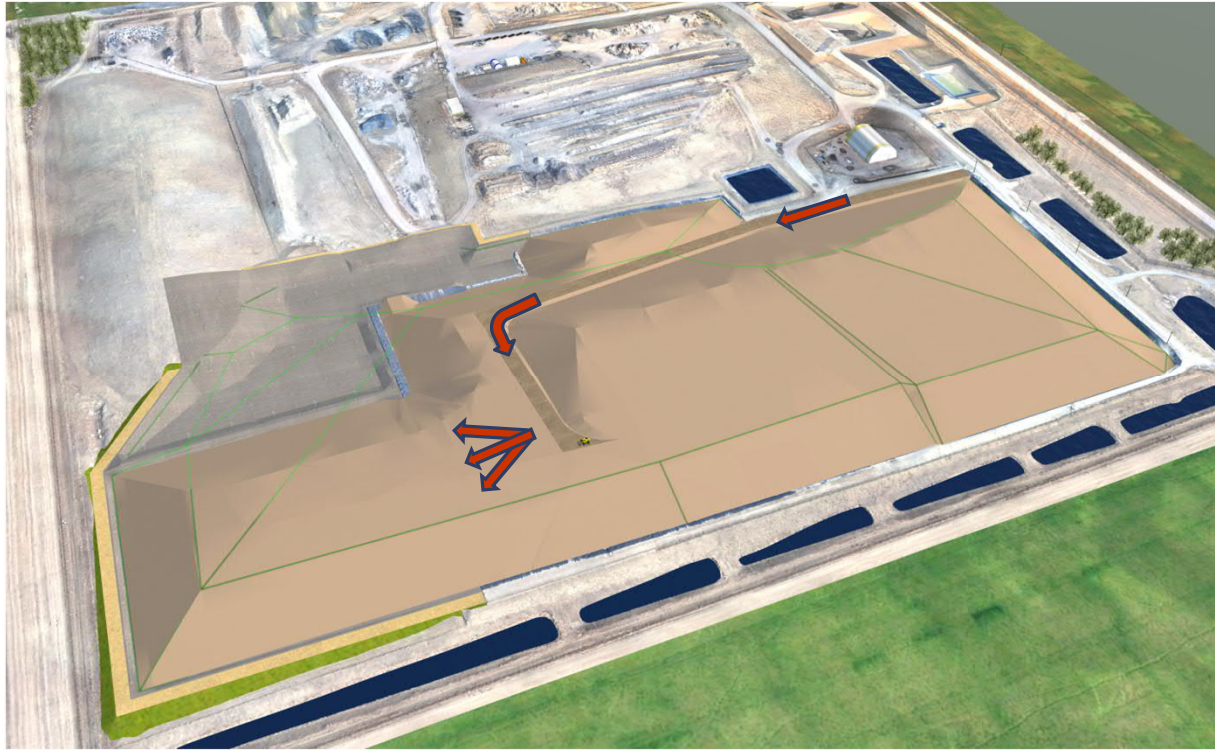
Cell 6 (75%), Cell 7 (0%)



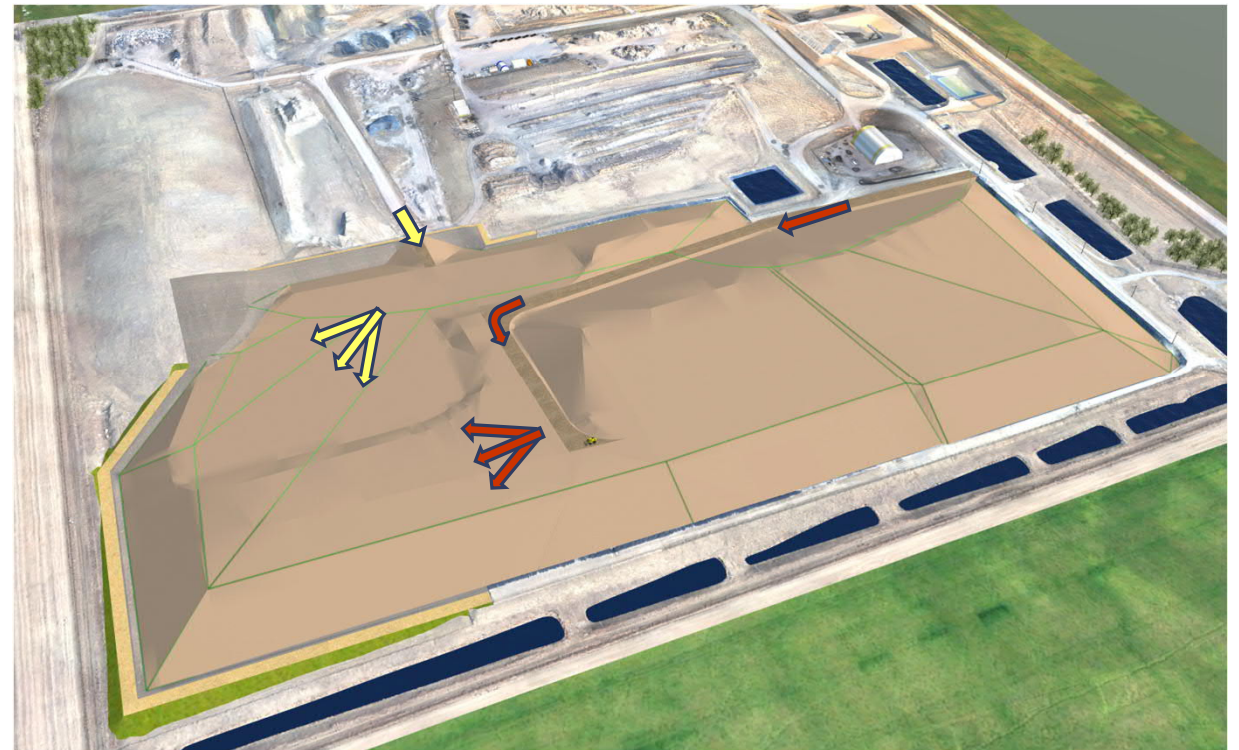
Cell 6 (100%), Cell 7 (25%)

Landfill Development Plan

Operations Planning – Waste Staging and Cell Expansion



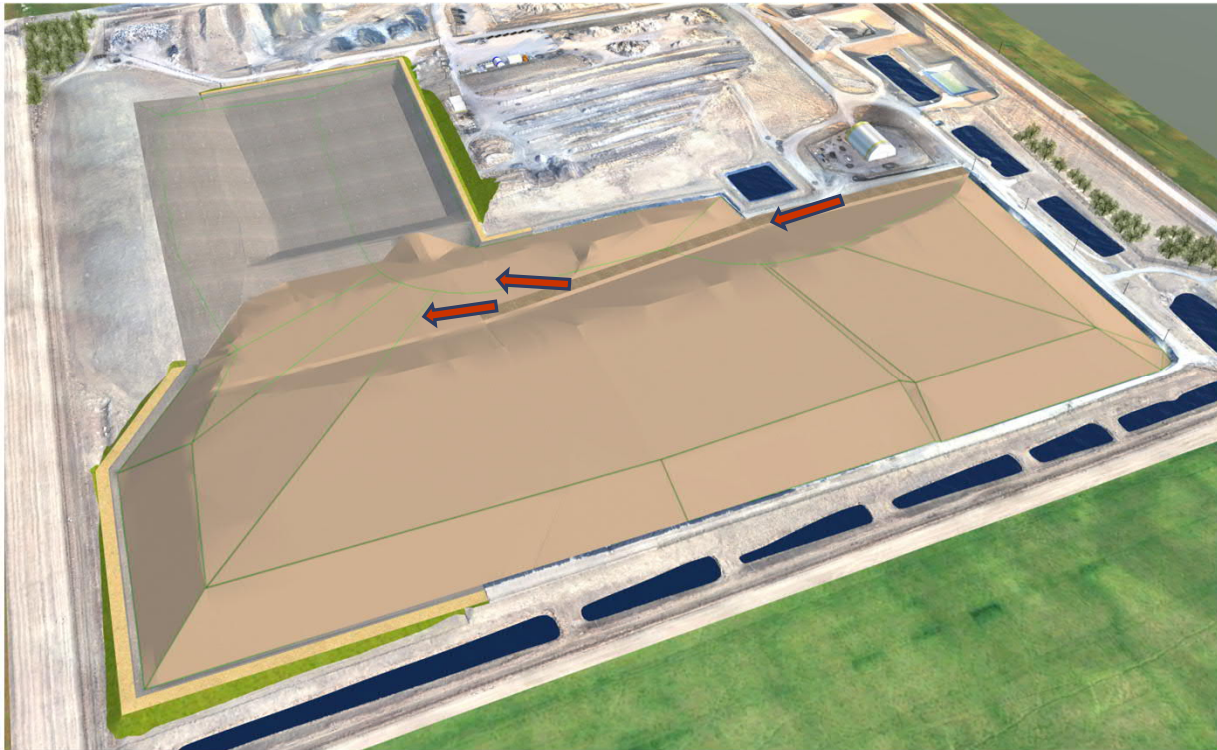
Cell 7 (75%), Cell 8 (0%)



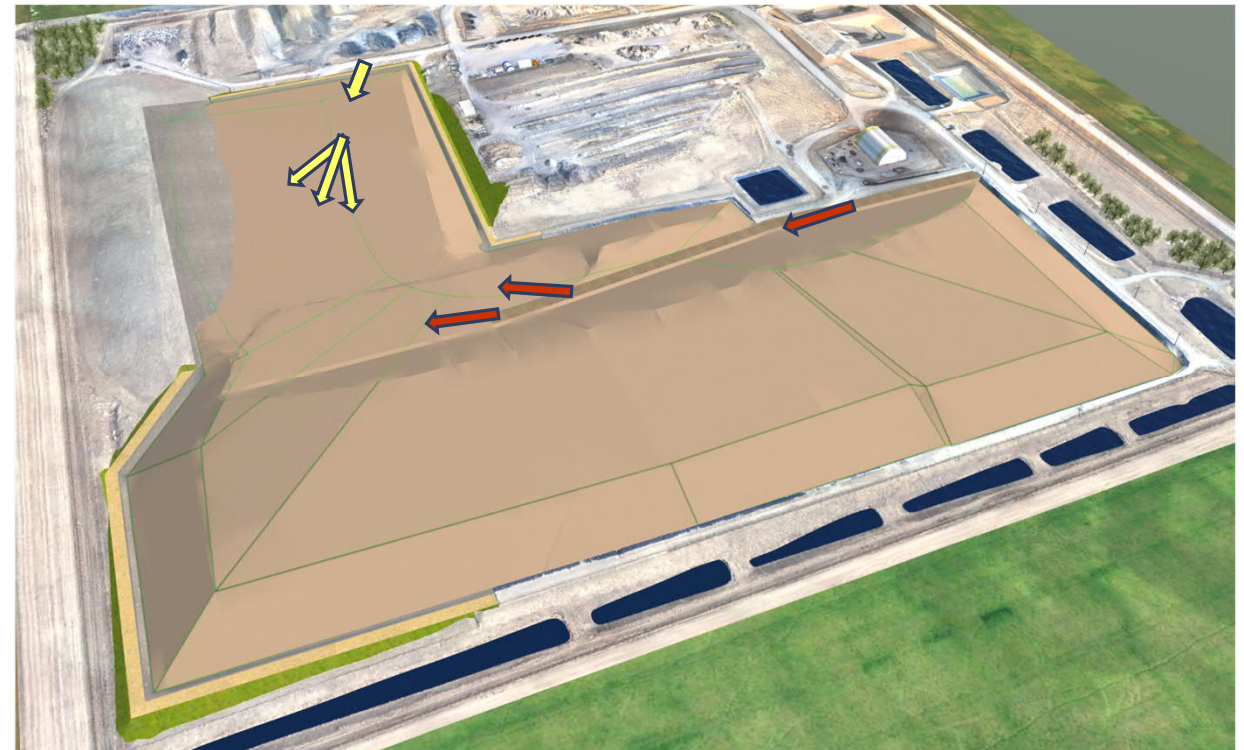
Cell 7 (100%), Cell 8 (25%)

Landfill Development Plan

Operations Planning – Waste Staging and Cell Expansion



Cell 8 (75%), Cell 9 (0%)



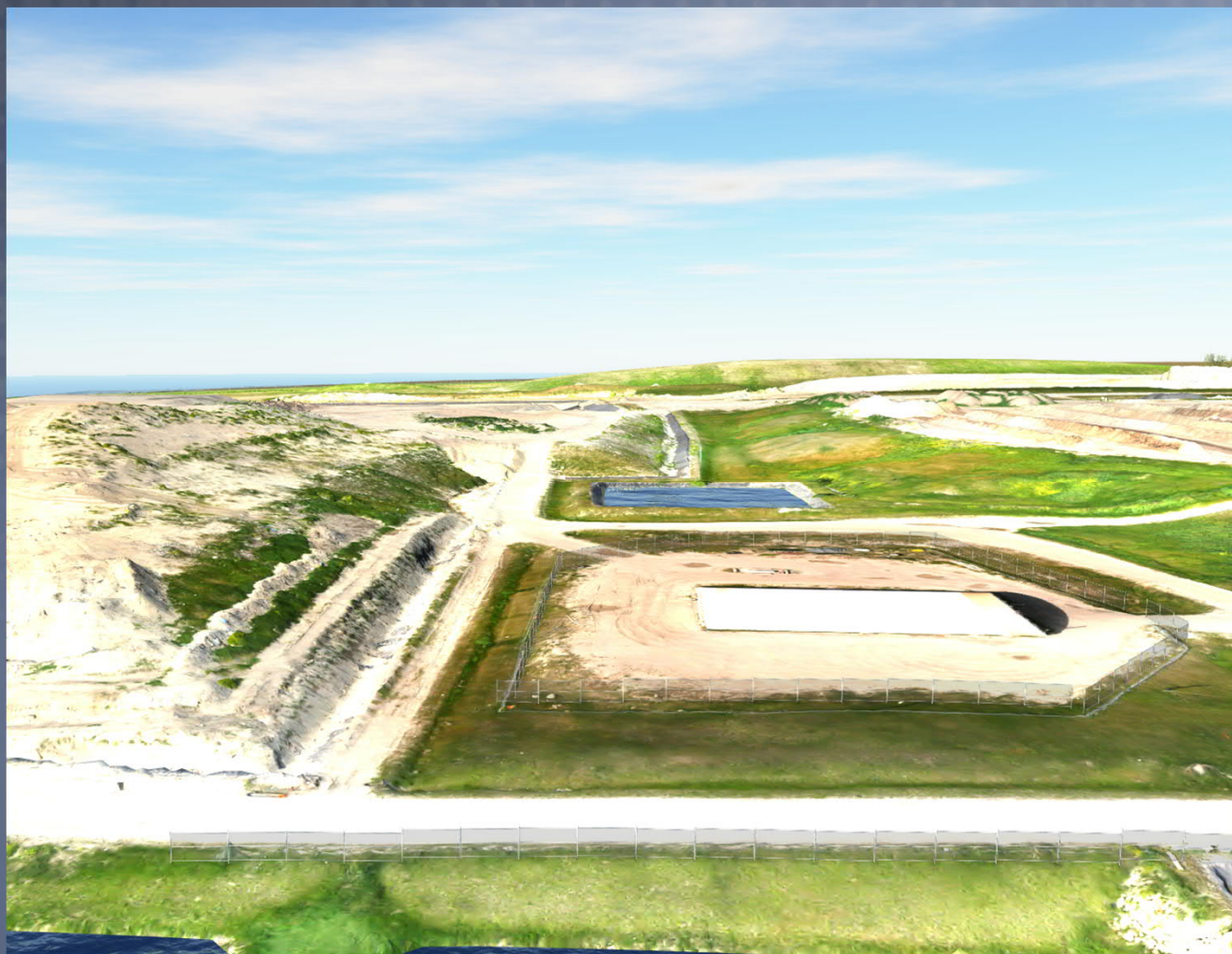
Cell 8 (100%), Cell 9 (25%)

Landfill Access Plan

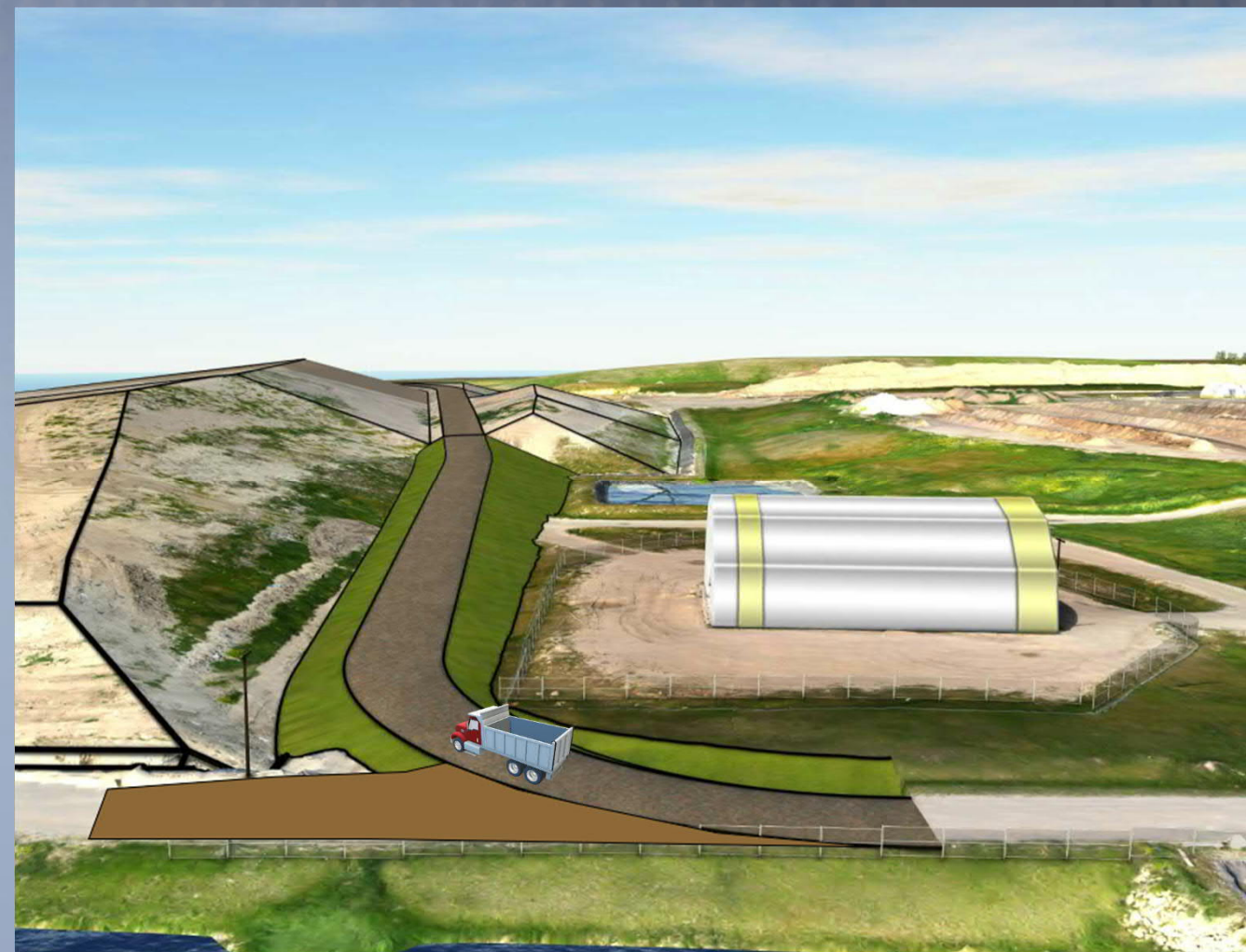


Existing Access →

← Proposed Access



Existing Conditions



Proposed Development

Design Conflicts



Infraworks Review

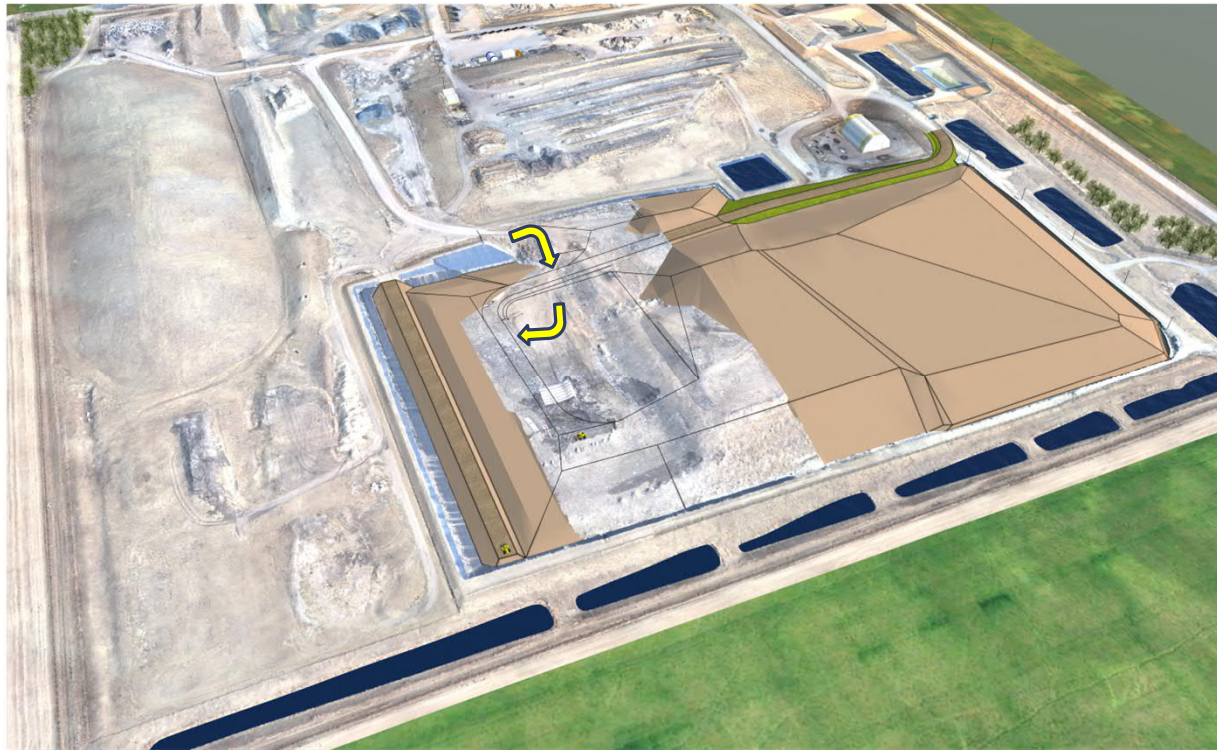


Site Confirmation

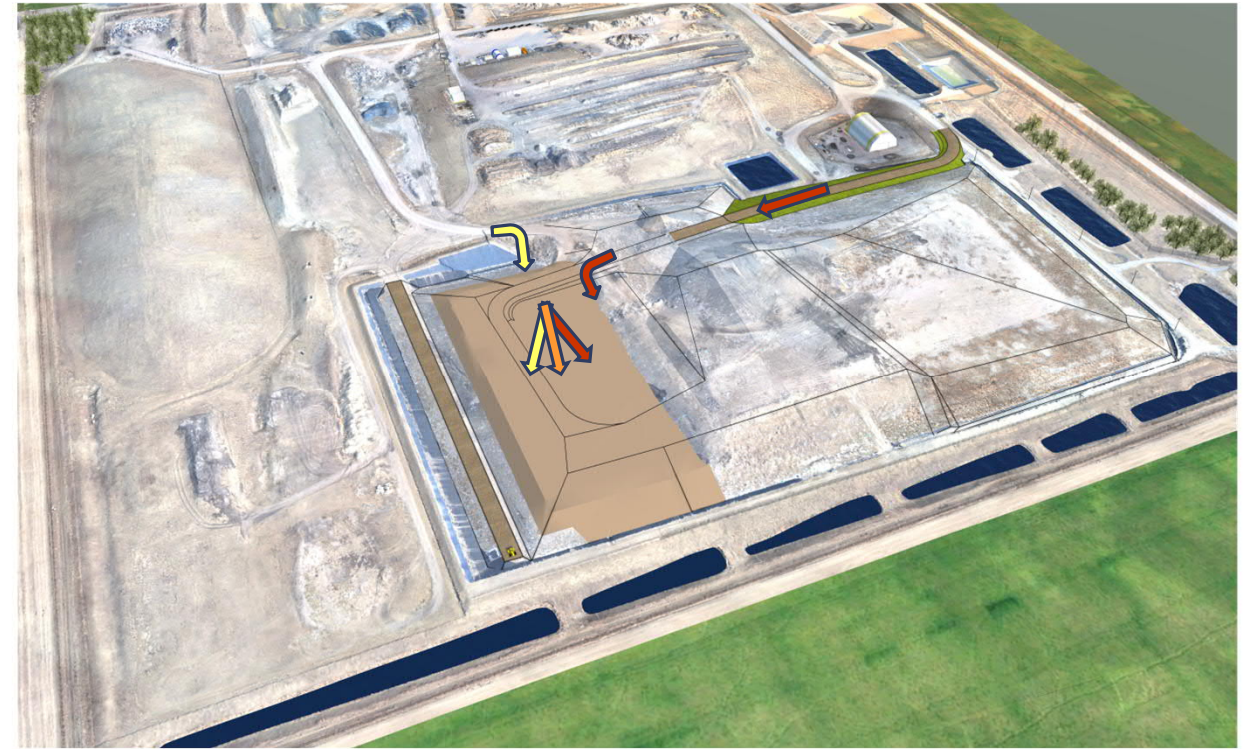
Landfill Fill Plan - Short Term

Short Term Fill Plan

Operations Planning – Waste Staging and Cell Expansion



STAGE 1 (6 Months)



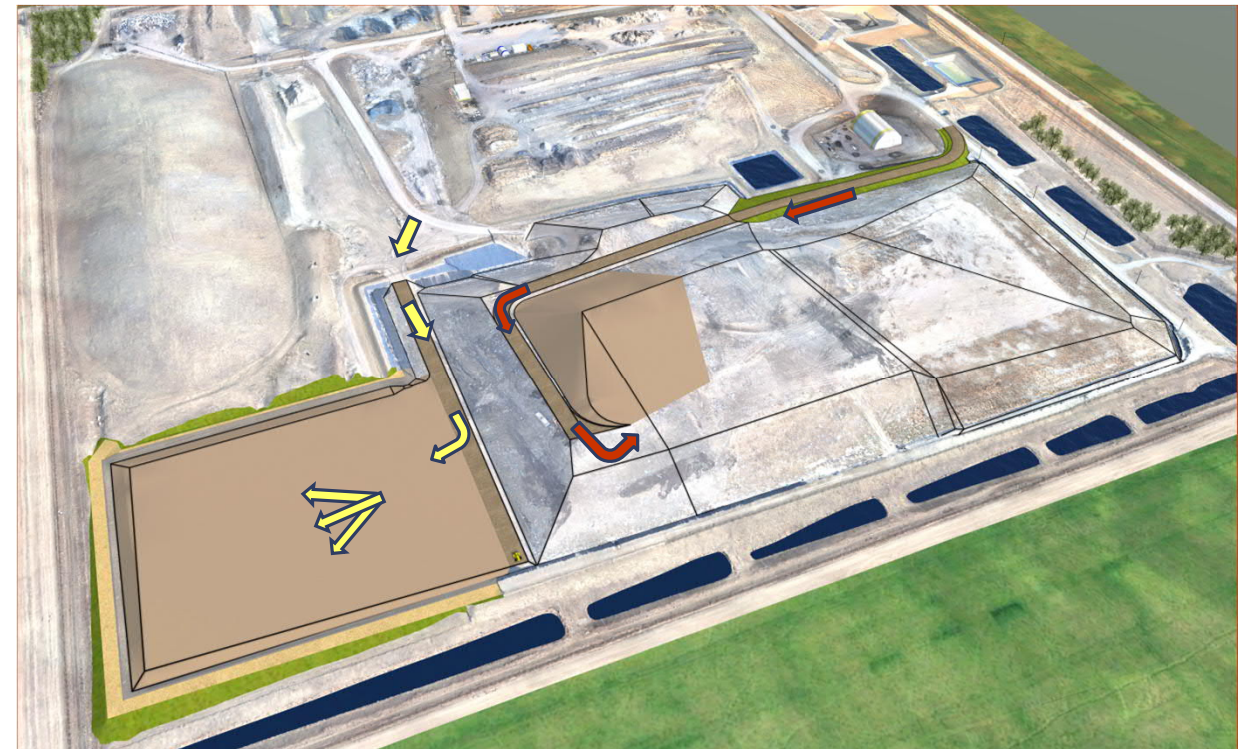
STAGE 2 (6 Months – 1 Year)

Short Term Fill Plan

Operations Planning – Waste Staging and Cell Expansion



STAGE 3 (75% Full)



STAGE 4 (Full, with Expansion 25%)

ACKNOWLEDGEMENTS





Contact Bob Jardine, jardineb@ae.ca

Special thanks to

