



WEDNESDAY, MAY 18, 2022

WELCOME

Larimer County North Landfill Project
Neighborhood Meeting

AGENDA

01 Summary of Solid Waste Infrastructure

02 Larimer County North Landfill Site

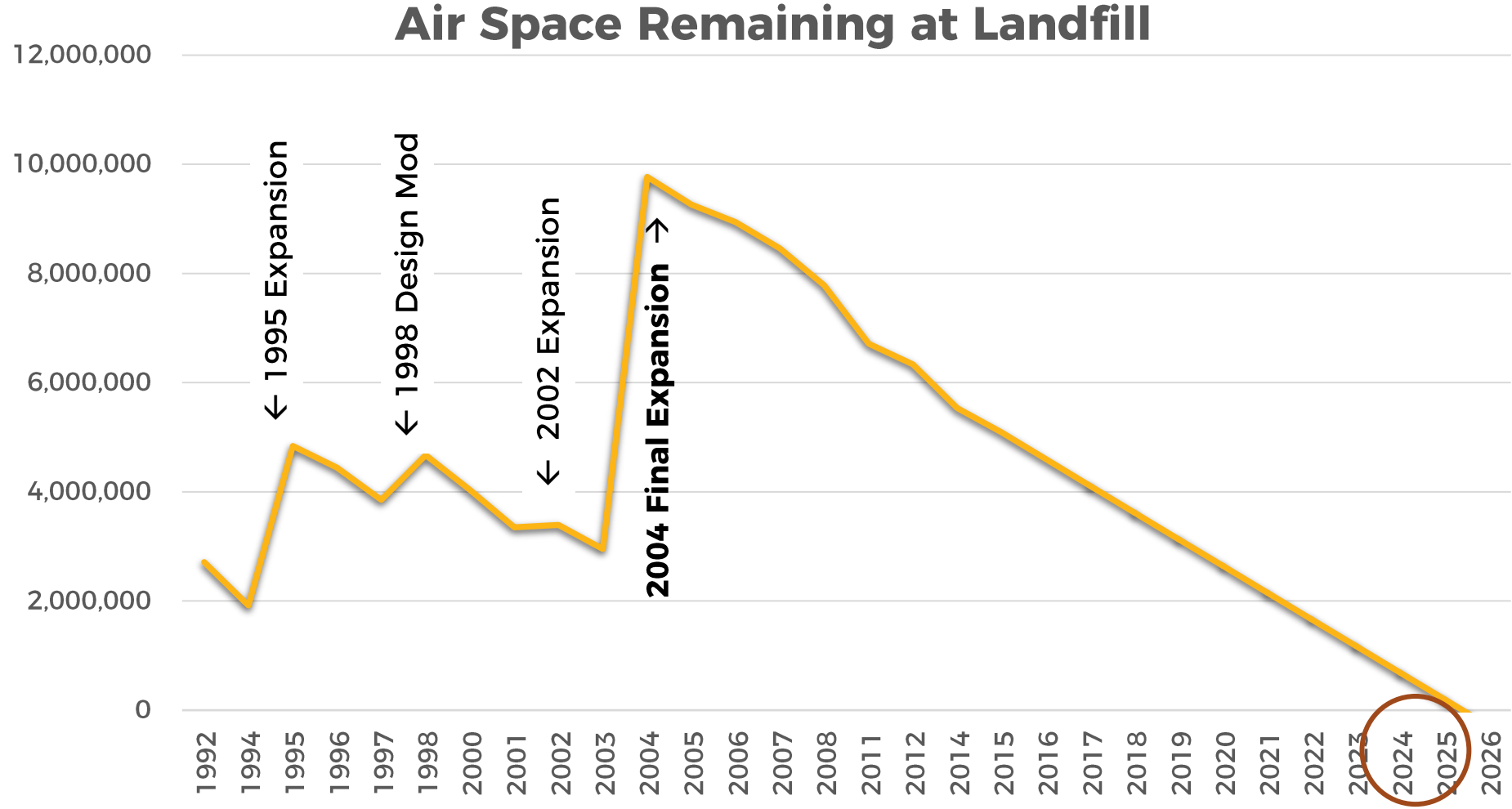
03 Permitting and Design

04 Timeline

01

**SUMMARY OF
SOLID WASTE
INFRASTRUCTURE**

AIRSPACE REMAINING AT LANDFILL





ELEVEN INFRASTRUCTURE OPTIONS EVALUATED

- Status Quo
- **Central Transfer Station**
- **New County Landfill**
- Material Recovery Facility (Clean)
- **Yard Waste Organics Processing Facility**
- **C&D Processing Facility**
- Energy from Waste Facility (Direct Combustion)
- Mixed Waste Processing (Dirty MRF)
- **Aerobic Composting Including Food Waste**
- Anaerobic Digestion
- Refuse Derived Fuel (RDF) Processing

RECOMMENDED INFRASTRUCTURE OPTIONS



Yard Waste Organics Processing Facility



New County Landfill



Construction & Demolition (C&D) Processing Facility



Central Transfer Station



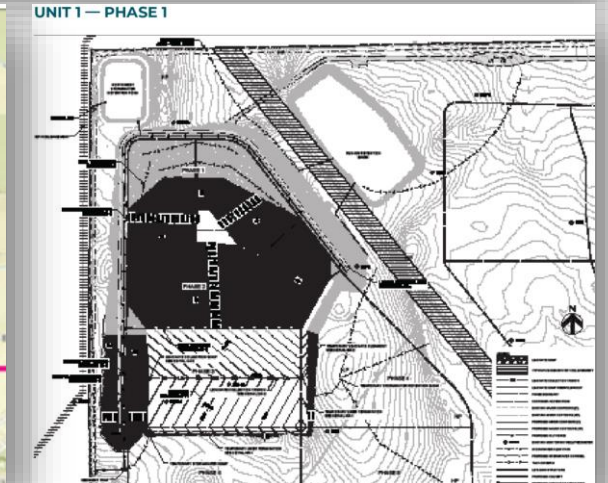
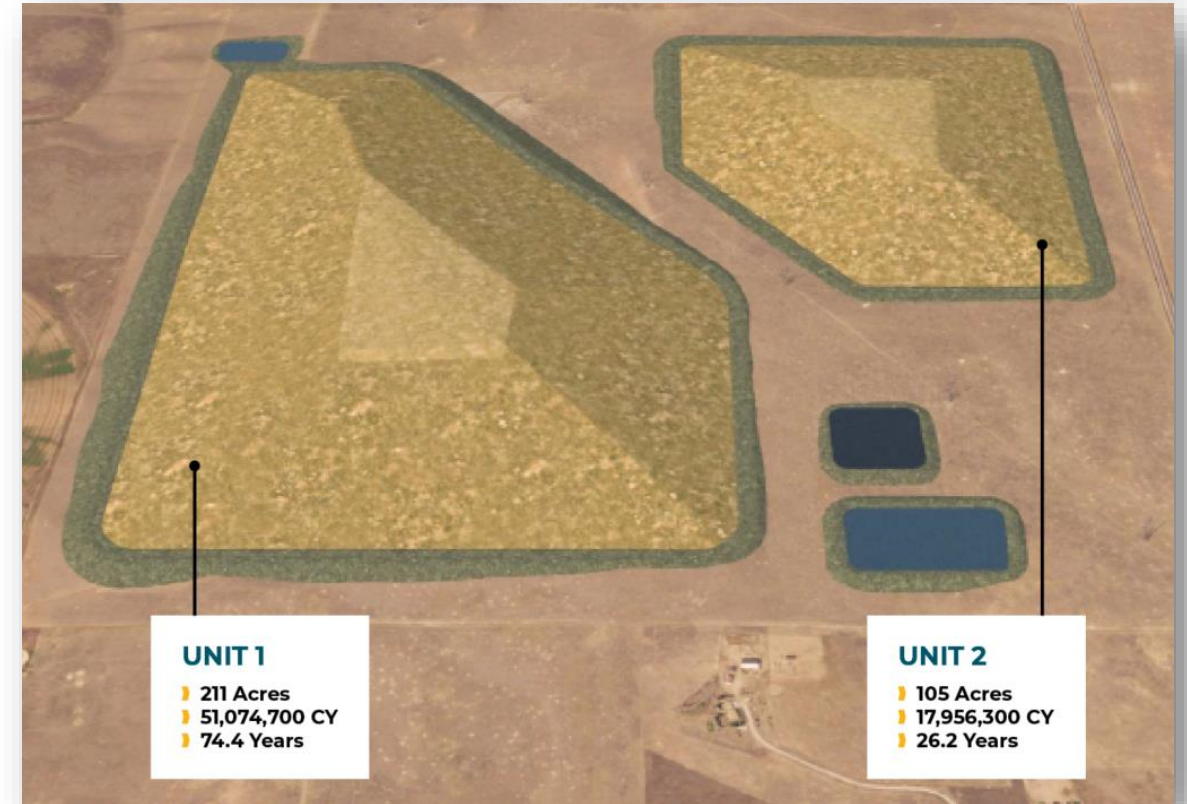
Aerobic Composting Including Food Waste



Existing MRF Transfer

SUMMARY OF FACILITY PROGRESS

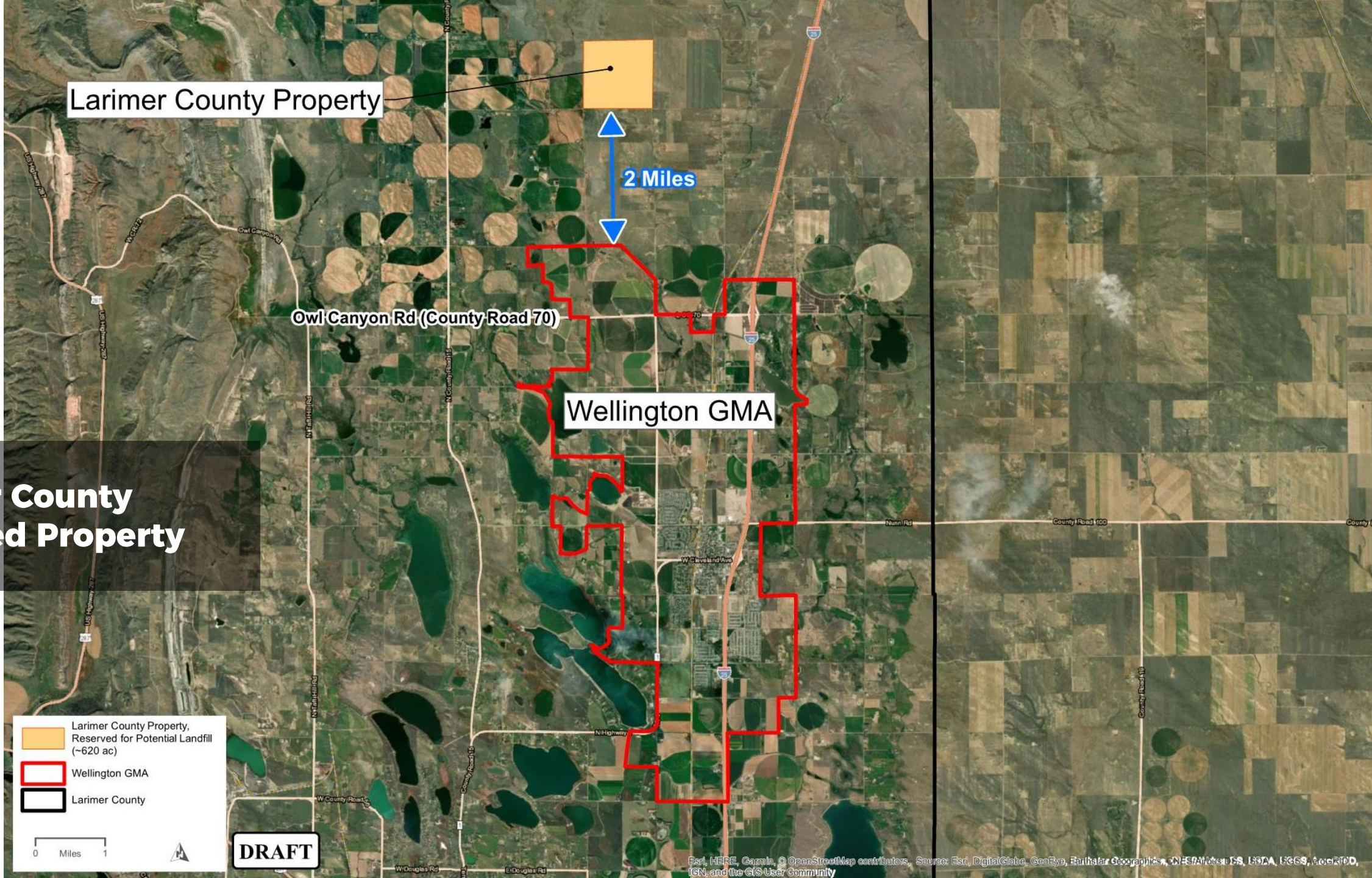
- Central Transfer Station Planning and Development
 - Ongoing
- Central Transfer Station Location and Extent Approval
- Landfill Planning and Infrastructure Layout Completed
- Landfill Permitting
 - CDPHE Approval
- Landfill Location and Extent Approval
- Groundwater Background Sampling and Analysis
 - Ongoing
- Landfill Infrastructure Design Initiated Access Roads and Utilities
 - Ongoing



02

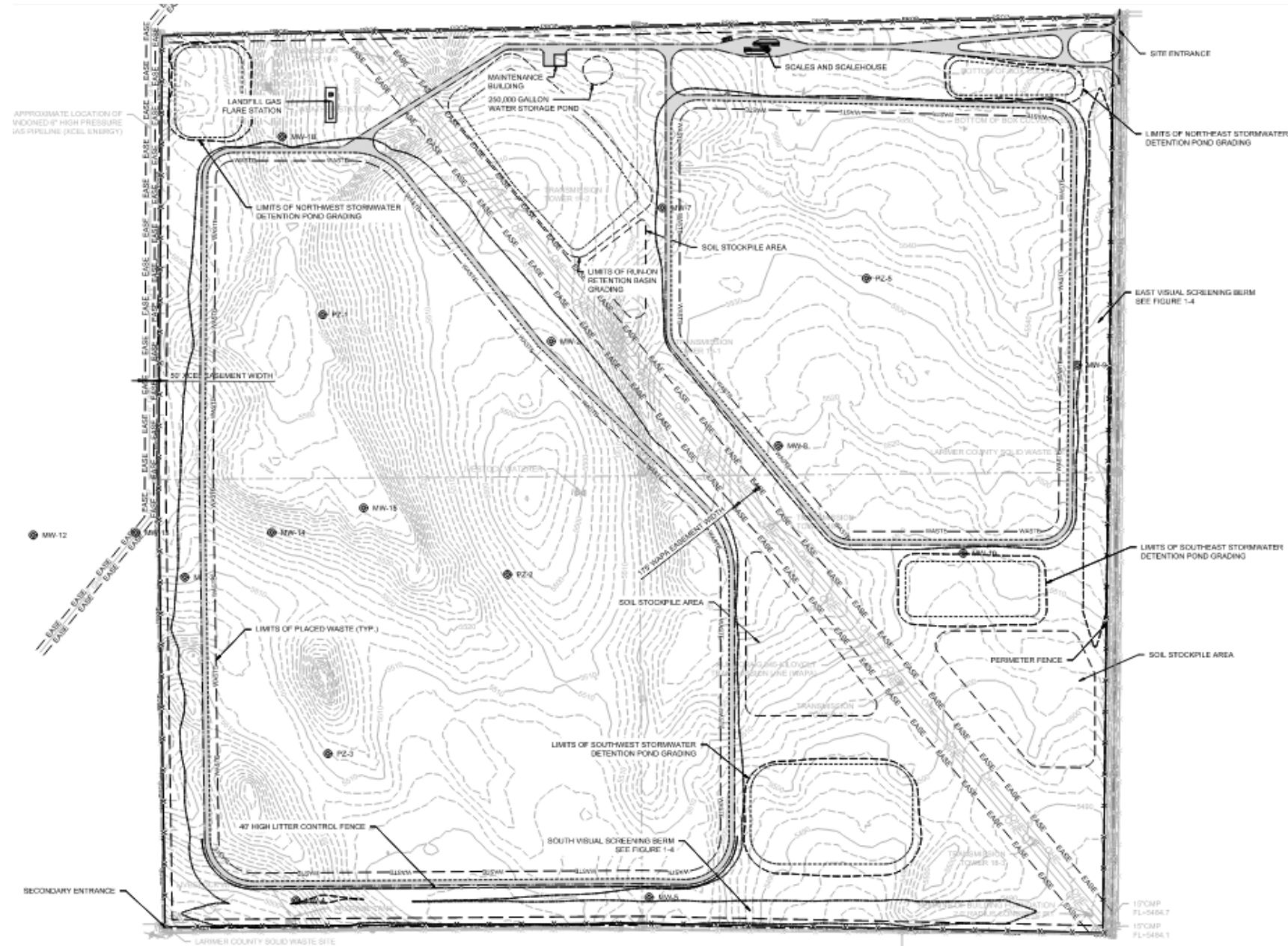
**LARIMER COUNTY
NORTH LANDFILL
SITE**

Larimer County Reserved Property



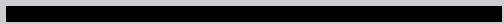
OVERALL SITE PLAN

- Access Roads
- Maintenance Building
- Scale House
- Stormwater Controls
- Two Landfill Units
- Approximately 300 Acres of Engineered Liner Systems



03

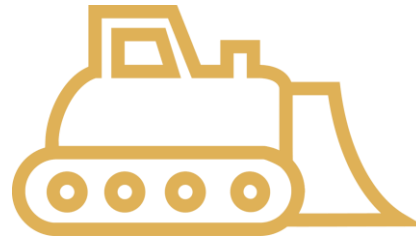
**PERMITTING AND
DESIGN**



LANDFILL PERMIT APPLICATION ENGINEERING DESIGN & OPERATIONS PLAN (EDOP)



**Locational
Criteria**



**Landfill Design and
Construction**



Site Design



Operating Criteria



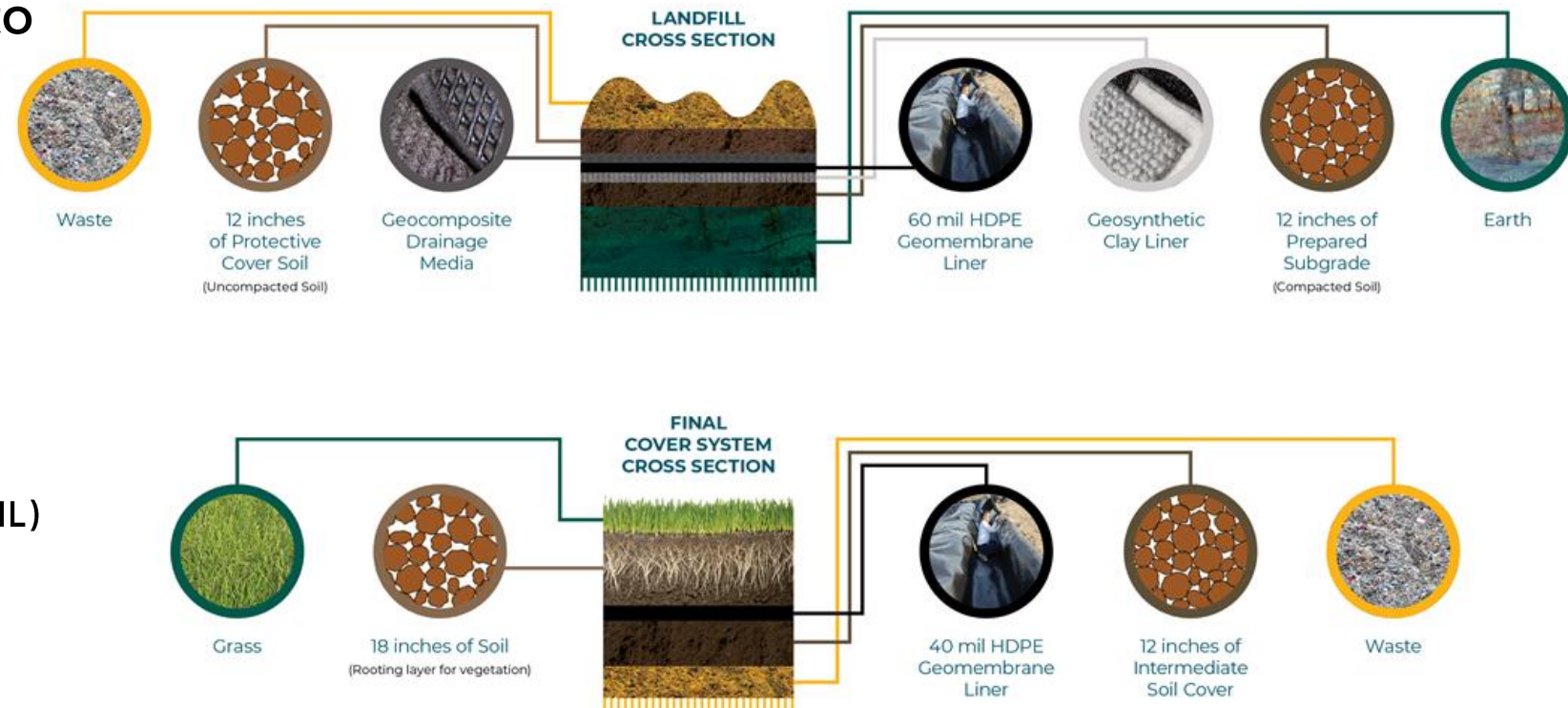
**Closure/
Post-Closure Plan**



Financial Assurance

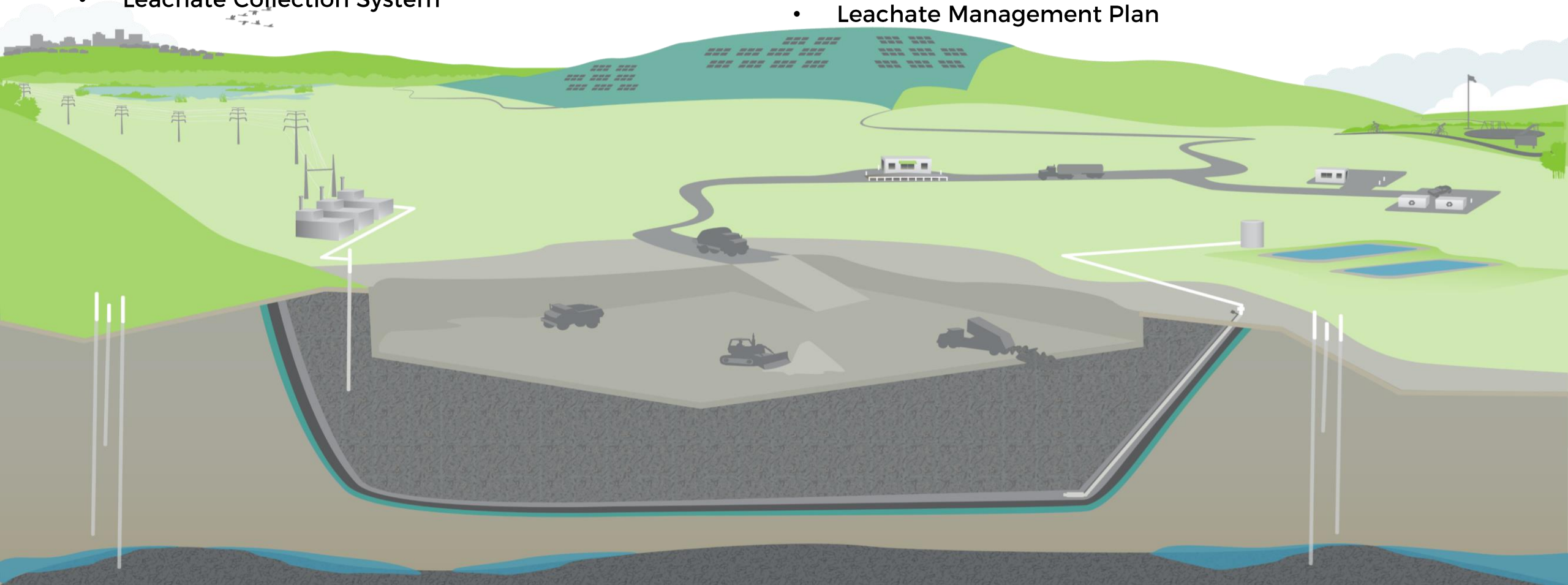
FEDERAL LANDFILL DESIGN

- State or Federal Approval
 - Protective of Uppermost Aquifer
- Alternative demonstrations must address numerous factors to protect Human Health & Environment
- Minimum Technical Guidance (Requirements)
 - Composite Liner System and Leachate Collection
 - 2 FT of Compacted Soil and Flexible Membrane Liner (FML)
 - Must Maintain <30 cm (12 inches) of Liquid Head
- Final Cover System
 - Vegetation, 18 Inches of Soil, Flexible Membrane Liner (FML), and Intermediate Cover Soil



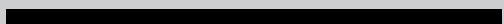
LANDFILL DESIGN & CONSTRUCTION

- Groundwater Monitoring System
- Liner System
- Site Drainage
- Leachate Collection System
- HELP Modeling (Slopes, Drainage Lengths, Material Permeability, 100% Recirculation)
- Look at Alternate Drainage Media (i.e. Tire Chips)
- Leachate System Capacity
- Leachate Management Plan

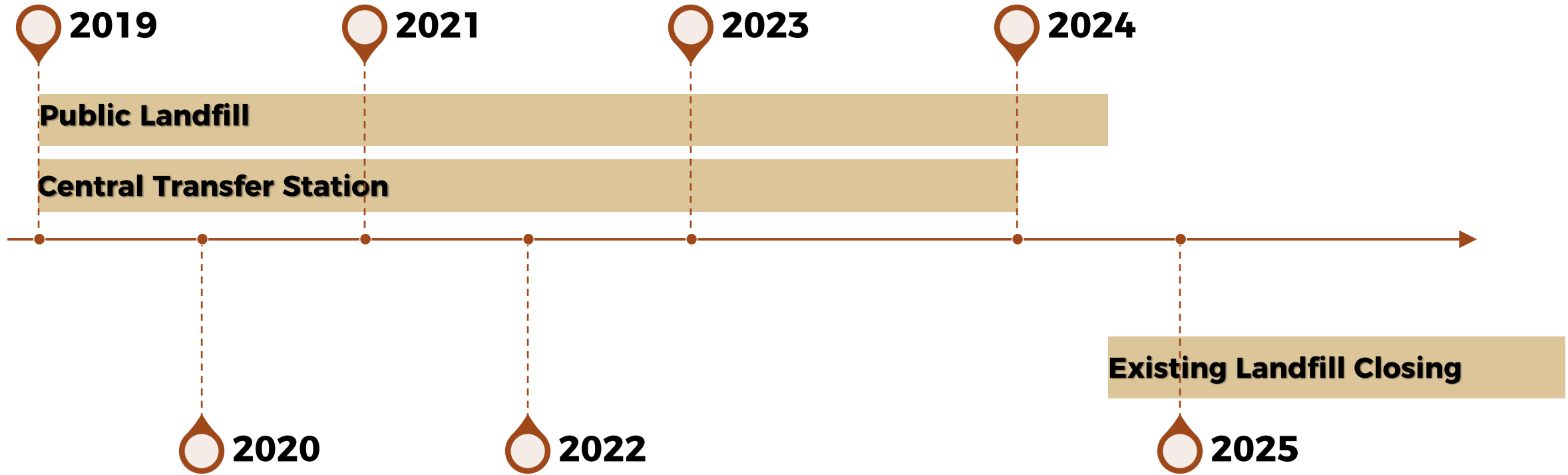


04

TIMELINE



FACILITY DEVELOPMENT TIMELINE



BREAKOUT GROUPS

New County Landfill – Duane Penney | Solid Waste Department Director

Central Transfer Station – Duane Penney | Solid Waste Department Director

Daily Landfill Operations – Jeremy Groves | Solid Waste Operations Manager & Chris Jones | Landfill Manager

Environmental Compliance – Steve Harem | Environmental Manager

Landfill Engineering – Brent Learch | Solid Waste Engineer

Proposed Haul Routes – Mark Peterson | Engineering Director/ County Engineer

CR 70 / CR 9 Improvements – Jake Wilson | Larimer County Civil Engineer III

Landfill Phasing – Alex Studee | Solid Waste Manager
