



Colorado Springs Utilities  
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# **Star Ranch Pump Station (Previously Lower Skyway Pump Station)**

## **Informational Meeting**

Thursday, October 24, 2024

# Agenda

1. Team Introduction
2. Meeting Purpose and Format
3. Project Background and Overview
4. Site Plan
5. Noise Analysis
6. Landscape & Architecture
7. Construction and Traffic
8. Project Timeline
9. Q&A

# Project Team

## Colorado Springs Utilities

- Pattie Benger – Public Relations
- Tom McBroom – Construction Manager
- Trevor Hamilton – Operations
- Jerry Edwards, Renn Hankawa – Planning Engineers
- Christian Meinhardt – Project Technical Lead
- Larysa Voronova – Project Manager



## Dewberry Engineers

- Steven Jones – Project Manager
- Chad Weaver – Senior Project Manager
- Pat Brennan and Carrie Cardona – Architects
- Bill Barreire (Vivid Engineering) – Geotechnical Study (Land Slide Study)



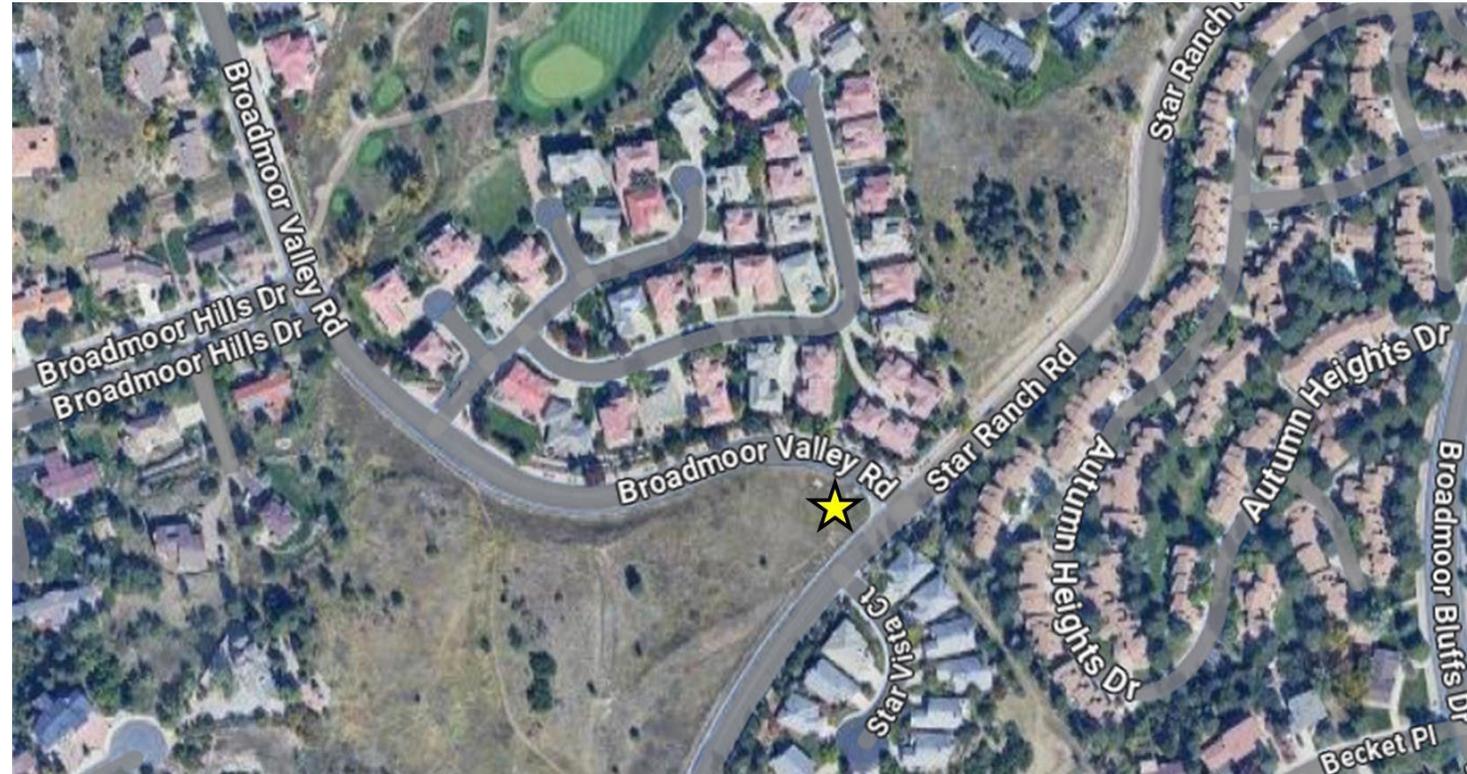
## Archer Western

- Sean Timmins – Area Manager
- Mike Thibeau – Project Manager
- Jon Edwards – Construction Superintendent



# Meeting Purpose

- Inform our neighbors and project beneficiaries
  - Conduct voluntary public information meeting, i.e., not a City requirement
- Project status update: 90% design
  - Permitting: City review
  - Current activity at the site
- Provide a platform to answer your questions
  - Q&A at the end of the presentation



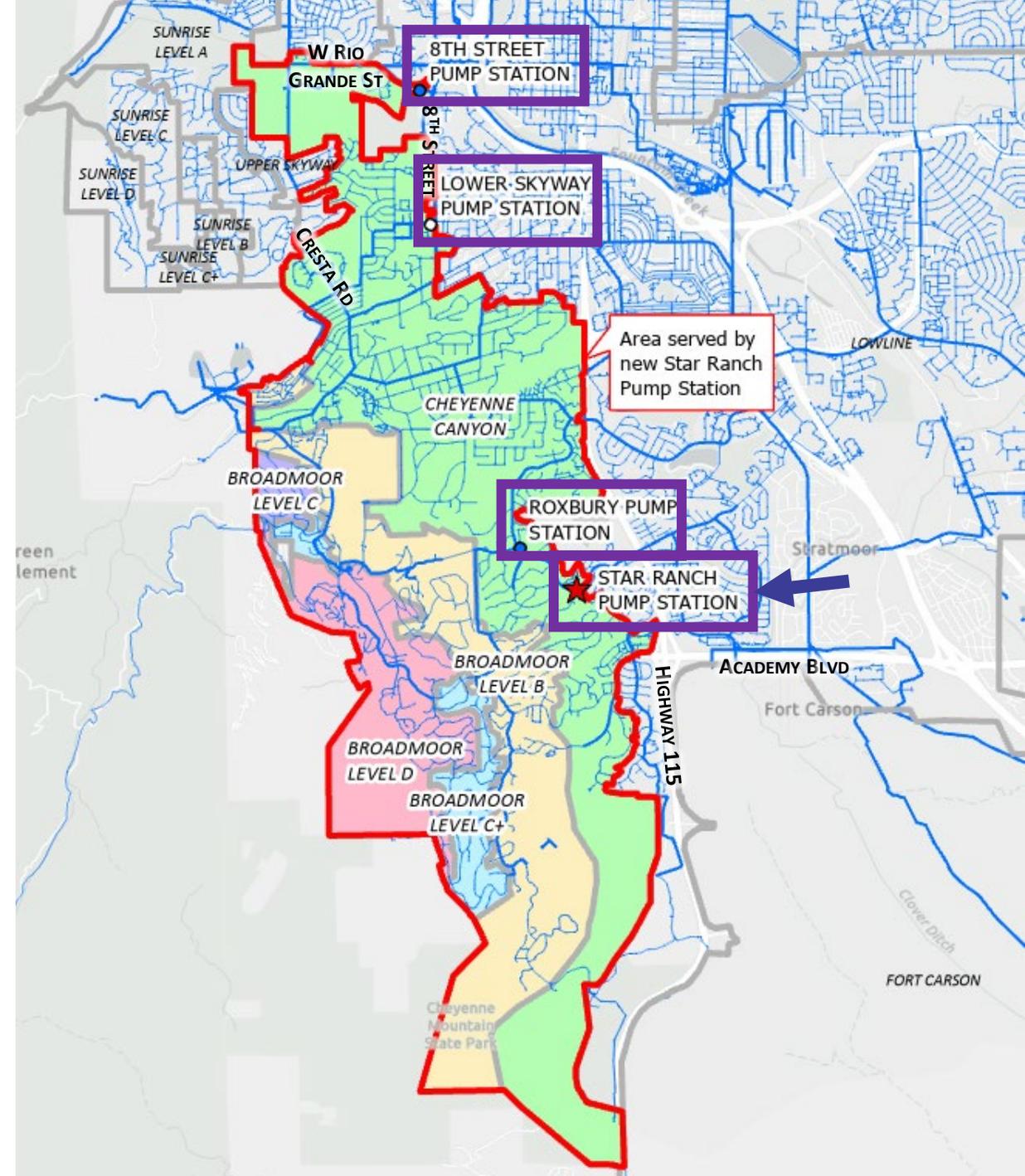
# Project Background



- To continue serving water reliably, safely, and consistently, we perform overall condition assessment:
  - Every five years on systems (water distribution)
  - Every 10 years on facilities (pump station or treatment plant)
  - Identify repair, upgrade or replacement
- Most recent condition assessments: 2016 and 2021
  - Inform, organize, plan and budget for capital improvement
- 24 pump stations in the system
  - Completed three new pump stations in the last five years
  - Four more in the next five years

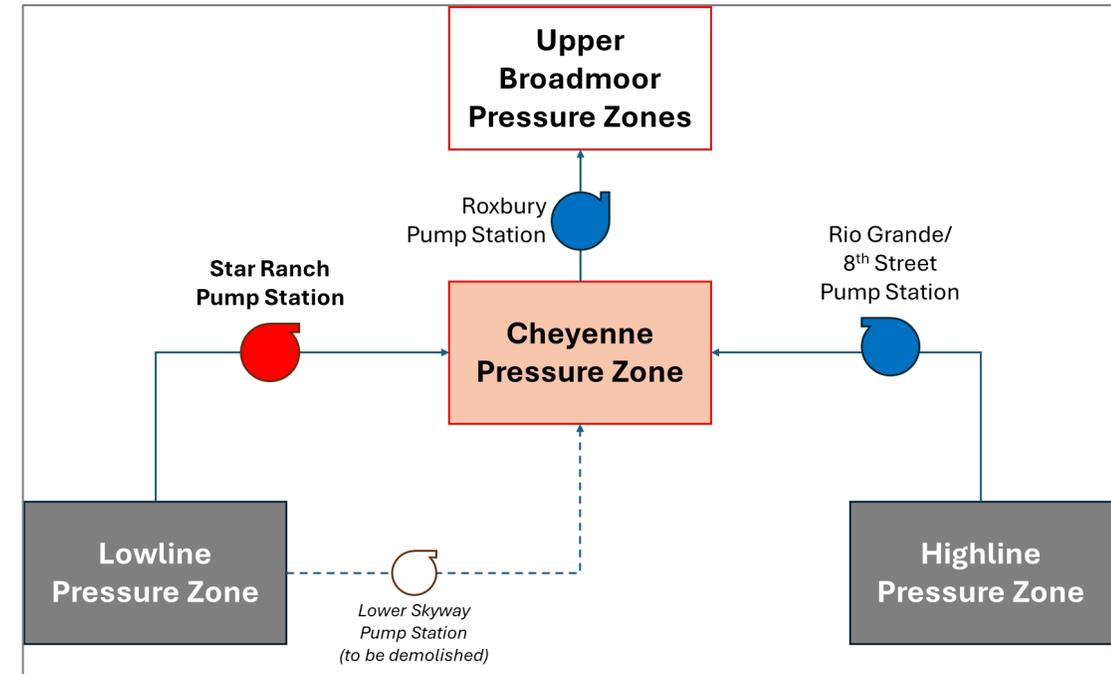
# Project Overview

- Deficiencies of existing Lower Skyway Pump Station:
  - Completed in 1948, it is the oldest pump station in our distribution system – end of useful life
  - Insufficiently supplying water: Does not provide adequate fire flow and redundancy
  - Location: building and property are too small to install larger equipment
- Purposes of new Star Ranch Pump Station:
  - Replaces existing Lower Skyway Pump Station, providing flow to Cheyenne pressure zone, including during fire events
  - Redundancy to the Rio Grande/8<sup>th</sup> Street Pump Station



# Project Overview (continued)

- Advantages of two pump stations supplying Cheyenne pressure zone:
  - Increase reliability of water supply during fires
  - Redundancy to reduce risks of outages to 6,000+ services (over 12,000 customers including military customers)
  - Improve water quality by providing better control of flows
- What about Roxbury pump station?
  - Different function: it receives water from Rio Grande/8<sup>th</sup> and eventually Star Ranch pump stations to supply higher elevations
- Project Cost
  - How it is budgeted



# Project Overview (continued)

- **Why here?** It meets these criteria:
  - Technical, i.e., system hydraulics:
    - Boundary between Cheyenne and Lowline pressure zones
    - Optimal location to provide redundancy to Cheyenne pressure zone from the south
  - Cost:
    - Utilities owns this land since 1979: Existing land and connecting to existing transmission mains minimize cost to ratepayers



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# Existing Lower Skyway Pump Station

- Oldest pump station in the system – built 1940s
- Water quality concerns
- Unable to continue maintenance due to unavailability of parts
- Insufficient in size of the building and the parcel to expand and refurbish



# Existing Lower Skyway Pump Station



# Rio Grande / 8th Street Pump Station

- Built 1980
- Refurbished in 2002
- Smaller capacity pumps
- Cannot support fire flow
- Does not have backup – the only pump station currently supplying water to the pressure zone
- Next in line for complete replacement
- Start planning 2025
- Construction to be completed 2029



# Rio Grande/8th Street Pump Station

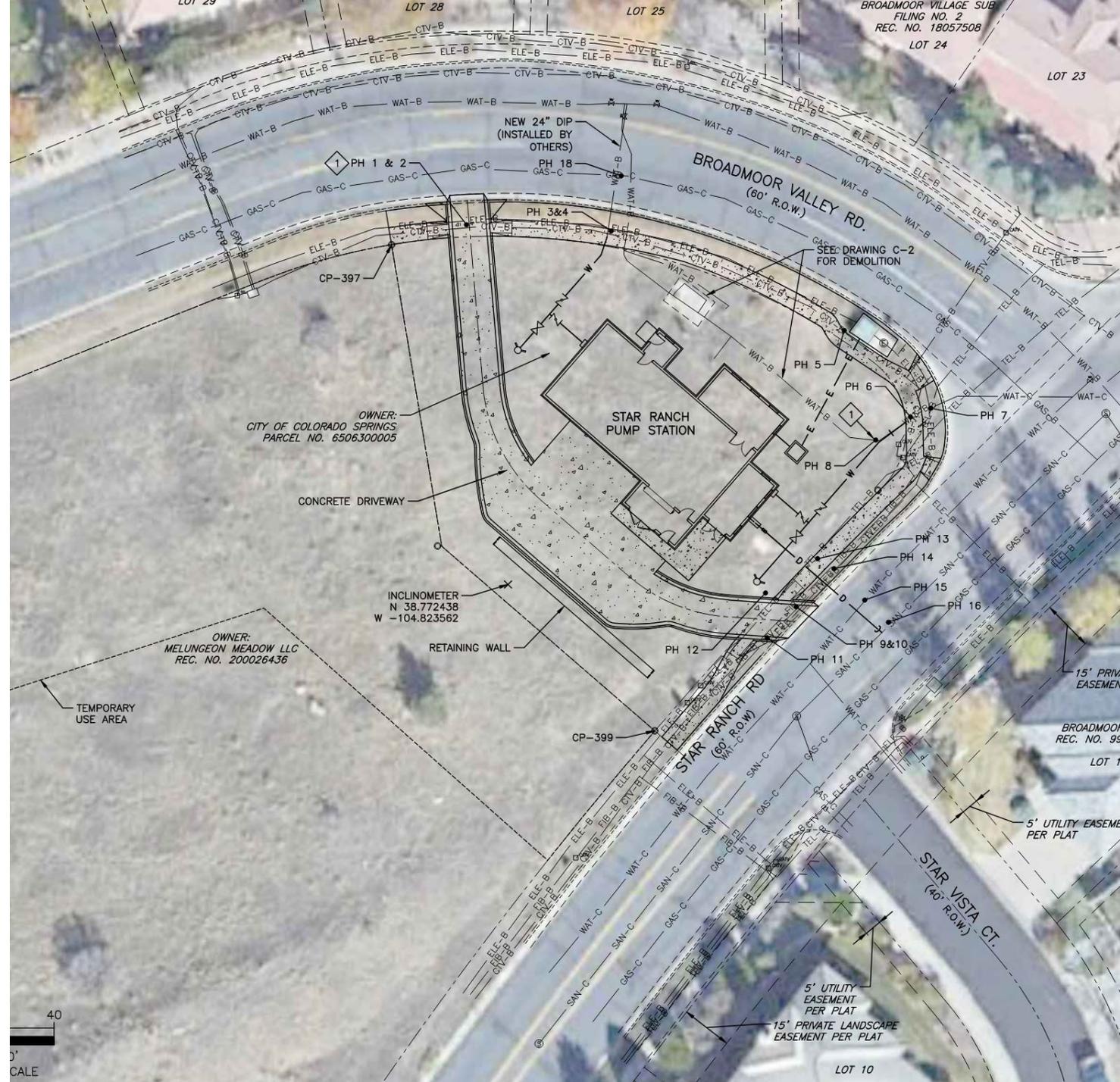


# Ute Pass (aka Green Mountain Falls) Pump Station - 2024



# Site Plan

- Why this location?
  - System hydraulics and connections – best location in the system
  - Real estate availability and cost
  - Parcel ownership
- Landslide study and report
  - Geotechnical study and construction recommendations
- Building appearance: architectural renderings
- Potential for flooding: none
- Wildlife impact: none
- Environmental impact: none



# Noise Analysis

## Noise Levels:

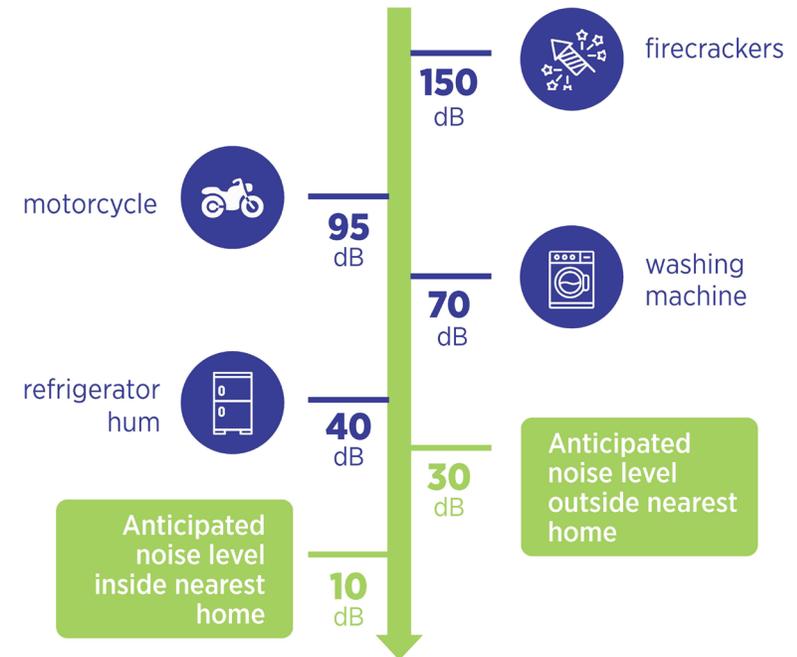
- Existing background noise levels:
  - 40-55 dB during daytime
  - 30-45 dB during nighttime
- Residential noise limits:
  - 55 dBA during daytime
  - 50 dBA during nighttime

## Noise Mitigation Design Components:

- Masonry building with fully grouted walls
- Vestibules
- Gypsum board under roof

## Audible noise

Typical noise levels encountered in common settings measured in decibels (dB).



# Landscape & Architecture



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# Landscape & Architecture



# Landscape & Architecture



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# Construction and Traffic

- Safety
- Construction days/times
- Access
- Construction traffic and traffic management
- Noise
- Dust control
- Daily cleanups



# Construction Timeline

**2025**

**1<sup>st</sup> Quarter** – Site Work & Foundation

**2<sup>nd</sup> Quarter** – Building Construction

**3<sup>rd</sup> Quarter** – Building Finishes/Equipment

**4<sup>th</sup> Quarter** – Commissioning/Startup

**Spring 2026** - Landscaping/seeding

Timeline is subject to change





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