
***Suncor Energy (U.S.A.) Pipeline Company
Rocky Mountain Crude System Pipeline Project***

Commerce City, CO

June 4, 2013



Agenda

- Introduction
- Project Overview
- Pipeline Safety
- Design & Testing
- Construction
- Operations, Maintenance, & Integrity Management
- Schedule
- Standards of Approval

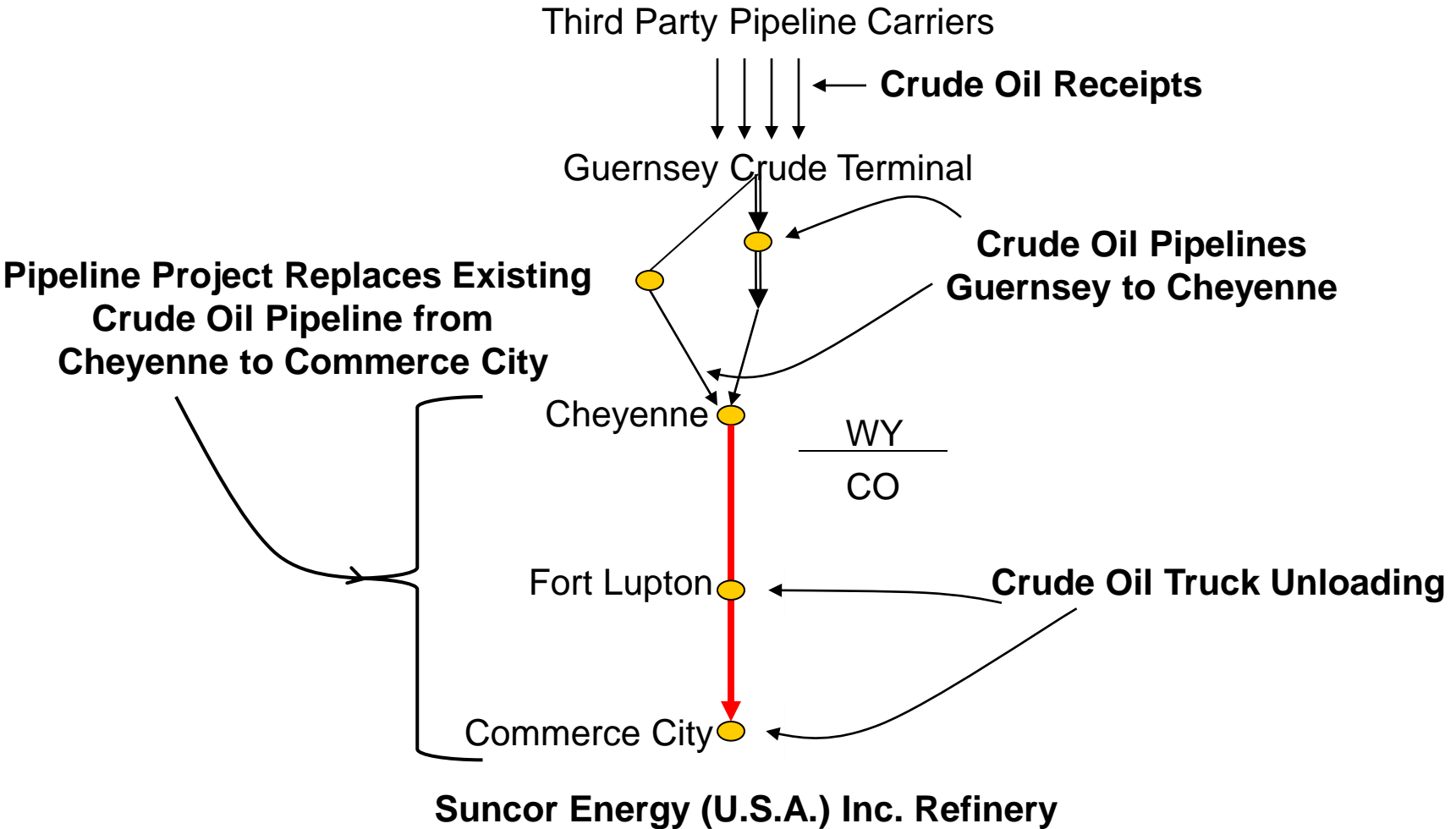
Welcome

- Safety Moment
- Meeting Objectives

Introduction – Project Personnel

- Lisha Burnett, Suncor Energy (U.S.A.) Inc., Manager – Communications and Stakeholder Relations, Commerce City CO
- John Gallagher, Suncor Energy (U.S.A.) Inc., Vice President – Refining, Commerce City CO
- Mike Korenblat, Suncor Energy (U.S.A.) Inc., Director – Legal Affairs R&M USA, Denver CO
- Randall Lowry, Suncor Energy (U.S.A.) Pipeline Company, Engineering Manager & Program Lead, Cheyenne WY
- Mark Olmsted, CH2M HILL, Project Manager, Englewood CO

Introduction – Existing Suncor Pipeline Systems



Project Overview

Project Summary – Replaces Existing Crude Oil Pipeline from Cheyenne WY to Commerce City CO (~102 mi)

❖ Capacity

- ❑ *Existing system constraints*

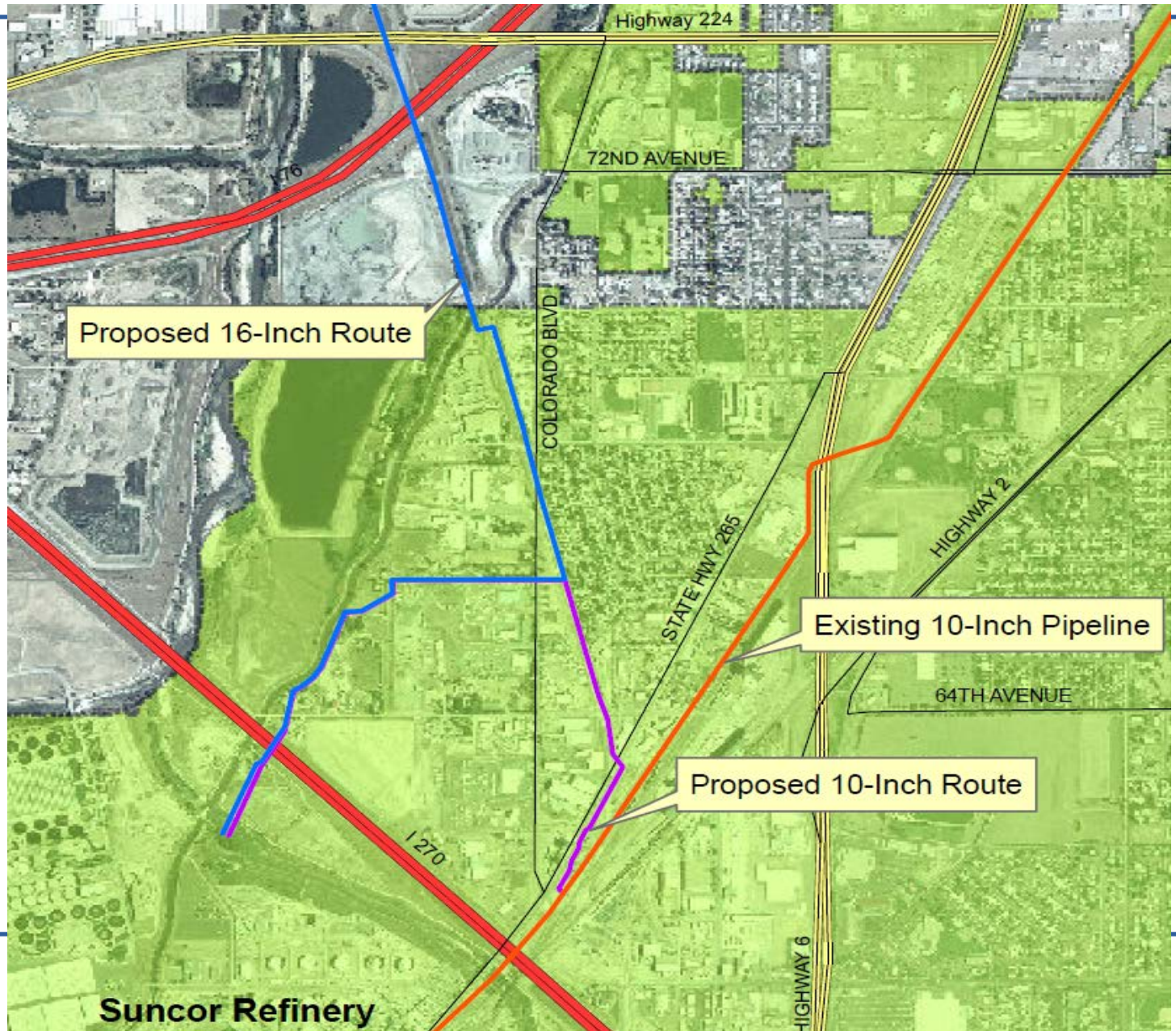
❖ Efficiency

- ❑ *Energy use reduction*
- ❑ *Delivery modes*

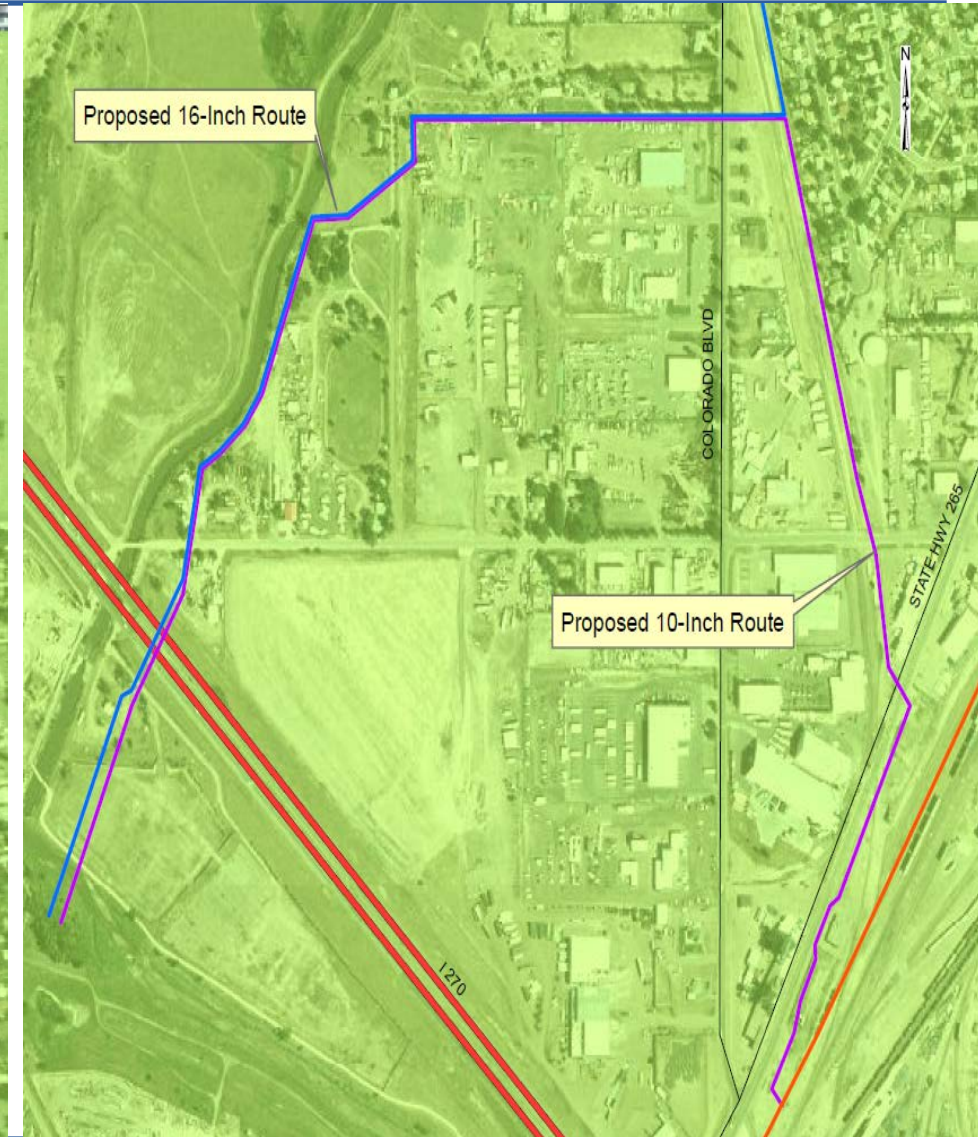
❖ Reliability

- ❑ *Existing maintenance constraints*

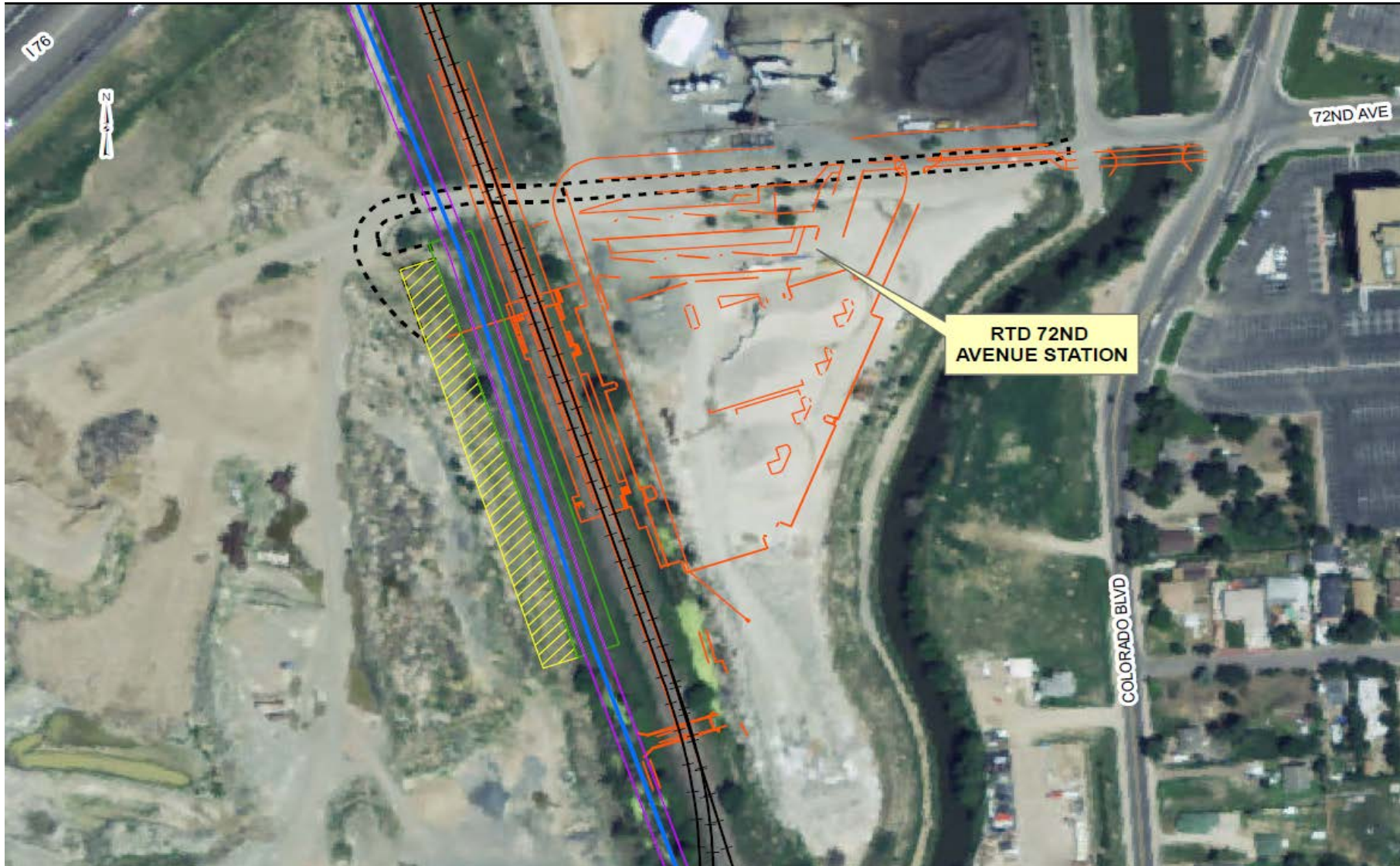
Project Overview – Location



Project Overview – Location



Project Overview – Future 72nd Ave RTD Station



Pipeline Safety

- ❖ Federal regulatory body is the Pipeline and Hazardous Materials Safety Administration (“PHMSA”)
 - ✓ Primary authority to regulate pipelines under established statutes
 - ✓ PHMSA monitors compliance with safety requirements
 - Inspections
 - Incident investigation
 - Direct communication with Operators
 - Enforcement mechanisms

- ❖ Pipelines are much less likely to experience an accident than transport by truck

- ❖ Safety-related statutes and regulations must be adhered to regarding
 - ✓ Design
 - ✓ Construction
 - ✓ Operation & maintenance
 - ✓ Integrity management
 - ✓ Spill response planning

Design – Pipe & Coating

- ❖ *Proper design of the pipe and its components ensures that it will exceed the design life of the system and properly withstand potential integrity threats*
- ❖ *Coating on the pipeline exterior is utilized to prevent external corrosion*
- ❖ *Steel suppliers, pipe mills, and coating plants are pre-qualified to Suncor's quality and safety requirements*
- ❖ *Pipe is manufactured to meet stringent chemistry standards defined in Suncor's written specifications and confirmed by third-party industry experts*

Design & Testing – Pipe & Coating

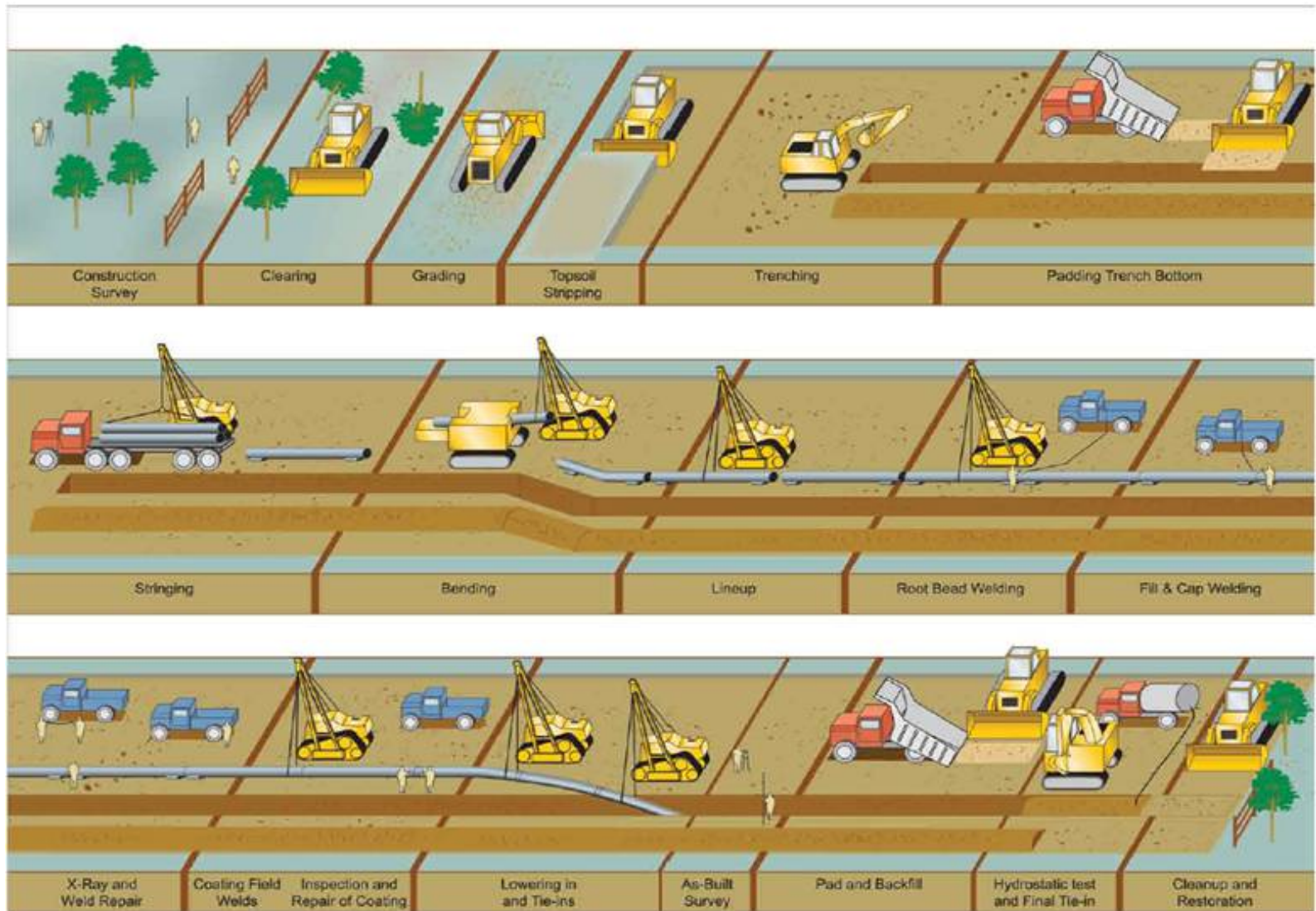
- ❖ *Pipe is designed well above the system operating pressure and PHMSA allowable pressure*
 - ✓ *Pipe is designed for 7X normal operating pressure*

- ❖ *Pipe material is tested before and after installation*

- ❖ *Coating is inspected in the application plant to ensure Suncor's specifications are met*

- ❖ *Testing*
 - ✓ *Pipeline is hydrotested again after installation*
 - ✓ *Baseline In-Line Inspection (ILI) tool will be pushed down the line to examine its condition after construction is complete*

Construction – Sequence



Construction

Pipe arrives by train



Pipe is loaded out on trucks



Construction

Clearing/grading the R/W



Stringing the pipe



Bending



Construction

Pipe line-up & welding

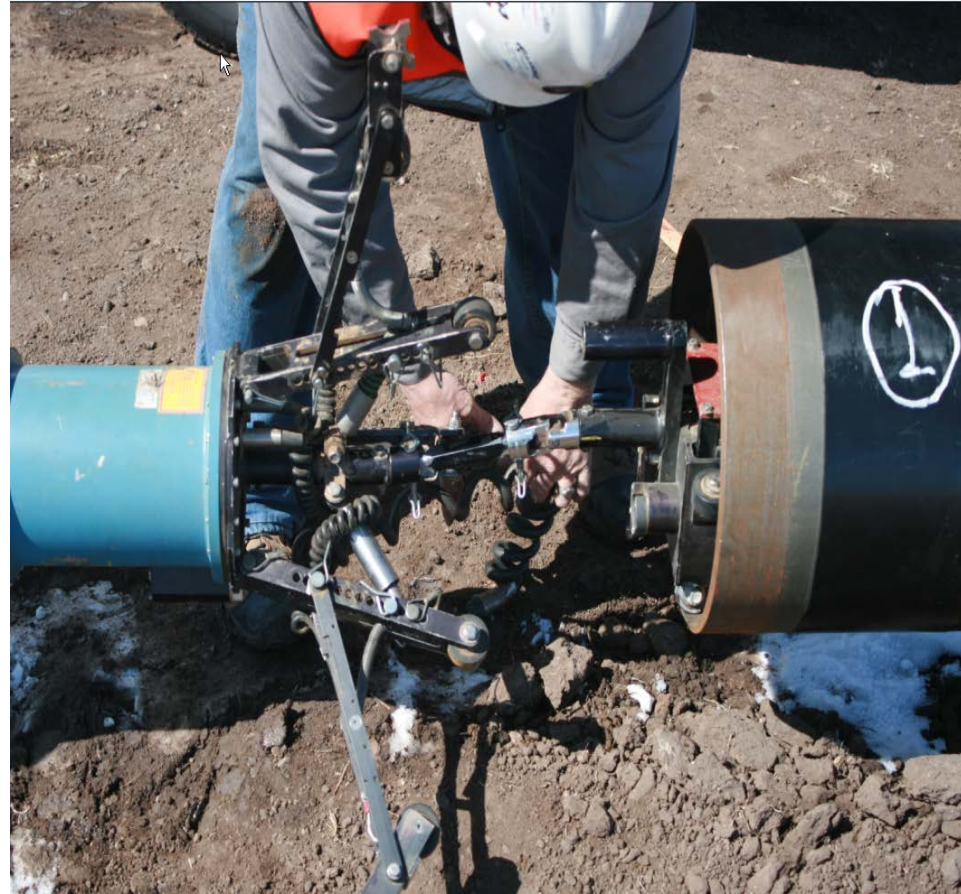


Construction

Finish welding



Weld testing



Construction

Girth weld



Coated girth weld

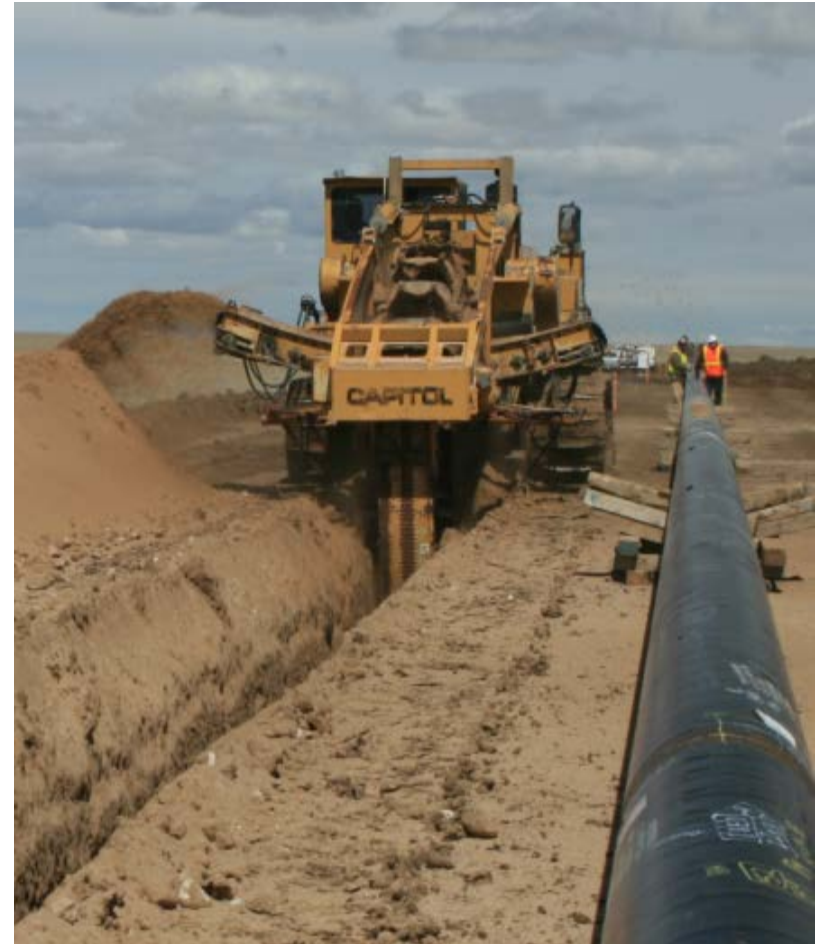


Construction

Trencher



Ditching



Construction

Lowering-in



Construction

Padder



Starting to pad & backfill



Construction

Horizontal Directional Drill

HDD pipe string ready for pullback

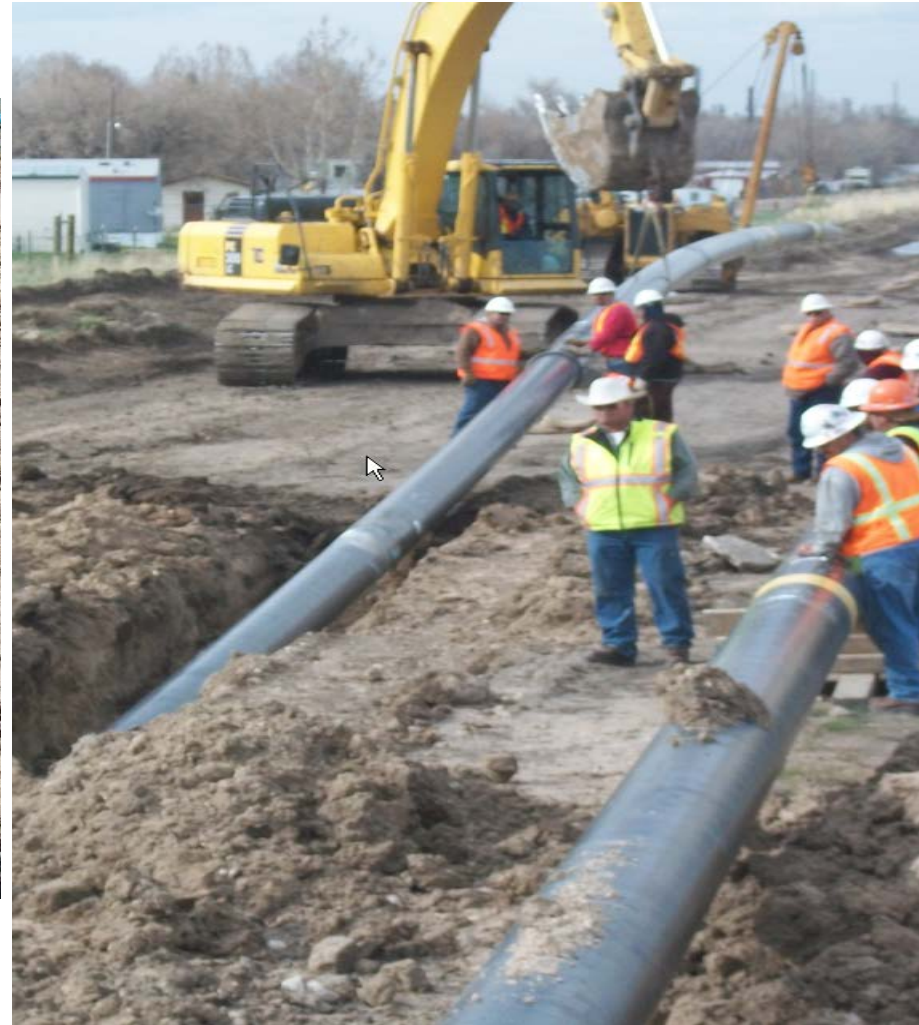


Construction

Pipe attached to pull head



Pipe string being pulled in at an HDD crossing



Construction

R/W reseeded



A typical aerial marker

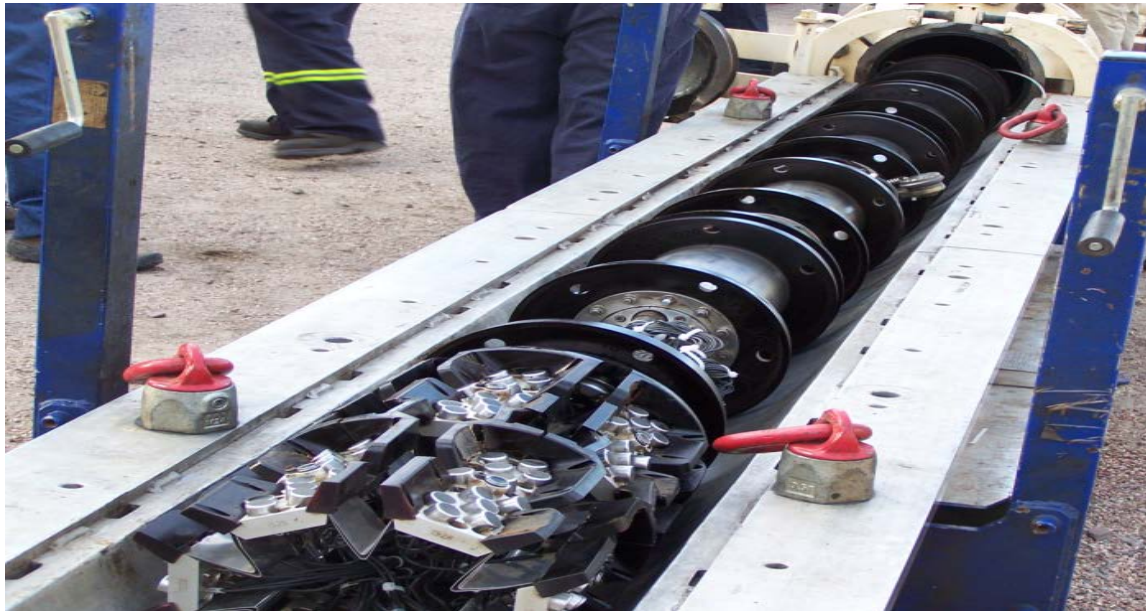


Operation, Maintenance, & Integrity Management

- ❖ *Pipeline will be buried to depths greater than PHMSA requirements*
- ❖ *The pipeline operation is remotely monitored and controlled 24/7 by trained & qualified control center operators via satellite communications and data acquisition*
- ❖ *Leak detection systems are utilized to monitor crude oil volumes*
 - ✓ *Remote monitoring*
 - ✓ *Direct observation*
 - ✓ *In-line valves utilized to isolate pipeline sections for testing and emergencies*

Operation, Maintenance, & Integrity Management

- ❖ *Regular frequency of in-line inspections are utilized to monitor internal and external corrosion, third party damage, or construction/manufacturing issues*

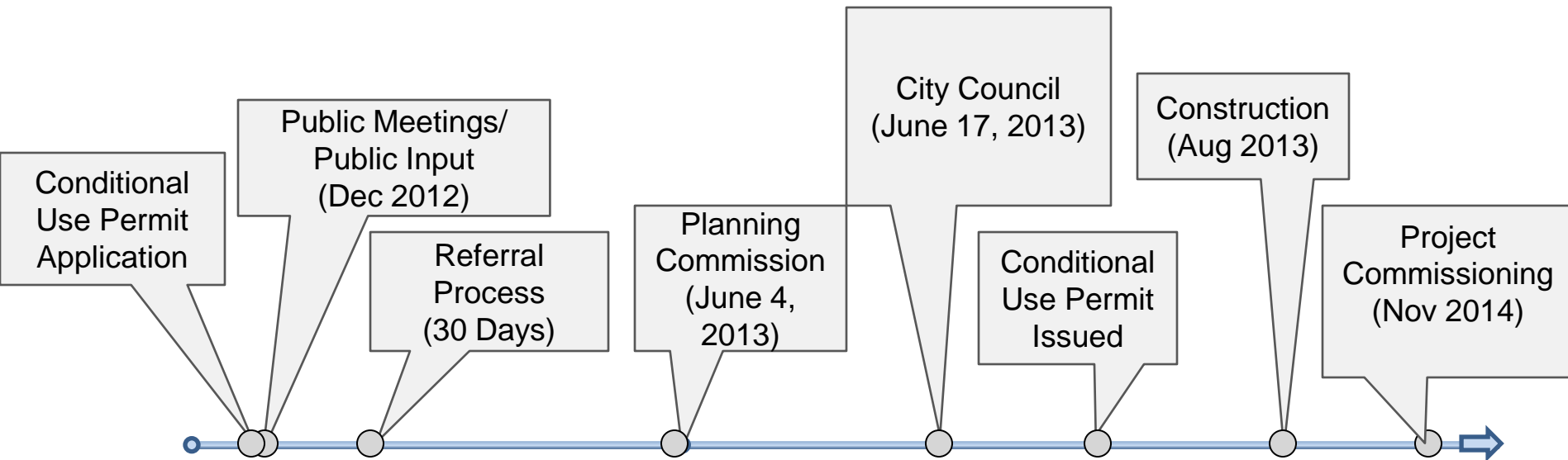


- ❖ *Additional integrity management measures are utilized to address specific threats*
 - ✓ *Internal corrosion prevention*
 - ✓ *External corrosion prevention*
 - ✓ *Third party damage prevention*
 - ✓ *System overpressure*

Operation, Maintenance, & Integrity Management

- ❖ *Emergency response plans are in-place per Federal regulatory requirements*
- ❖ *Emergency response exercises are conducted annually*
- ❖ *Suncor's pipeline system from Cheyenne to Commerce City has operated 65+ years with no significant issues or releases*

Schedule – Conditional Use Permit (CUP)



- Construction is scheduled to commence late Summer 2013

Standards of Approval – Conditional Use Permit (CUP)

The Proposed Use:

- a) Complies with the general purposes, goals, objectives, and standards of the Comprehensive Plan
 - *The use will contribute to the economic vitality of the area, including construction and ongoing refinery jobs, by ensuring a stable and reliable source of crude for the refinery*

- b) Will not result in substantial or undue adverse effects on adjacent property or the neighborhood, or any adverse effect has been mitigated
 - *Following construction, the pipeline will be located completely underground, and as such, it will be screened from surrounding property*

- c) Has a community of need
 - *Economic development and fiscal stability of retaining the Commerce City Refinery infrastructure & ability to operate at current capacity is beneficial to the community and the area's economic development*

- d) Is located on a site that is suitable
 - *The pipeline will utilize existing utility corridors where practical and will ultimately result in an overall decrease in truck traffic through the City*

Standards of Approval – Conditional Use Permit (CUP)

The Proposed Use:

- e) Can be adequately screened with landscaping
 - *The pipeline will be buried after construction and the rights of way returned to the their original condition*

- f) Will be adequately served and not impose an undue burden on existing improvements
 - *Suncor has worked with adjacent utilities and the City to ensure the existing improvements are not disrupted or burdened by the pipeline construction*

- g) Will be adequately maintained
 - *The pipeline will be maintained to ensure compliance with Federal code requirements, as well as adherence to Suncor's Integrity Management Program*

- h) Will not violate federal, state or local requirements
 - *Suncor's pipelines are Federally regulated and audited to ensure compliance with established requirements*

Thank You