CITY OF CASTLE PINES

HAPPY CANYON INTERCHANGE PUBLIC OPEN HOUSE



DOUGLAS COUNTY COLORADO

COLORADO Department of Transportation

DIVERGING DIAMOND INTERCHANGE

CITY OF CASTLE PINES

Diverging Diamond Interchanges (DDI) are newer and innovative design configurations that provide significant safety and traffic flow benefits to areas with heavy directional traffic volumes



Scan the QR code to view Colorado Department of Transportation's informational video on how to navigate a **Diverging Diamond Interchange**

DIVERGING DIAMOND INTERCHANGE DESIGN

A **Diverging Diamond Interchange (DDI)** is a highway interchange configuration where the two directions of traffic on the cross street (Happy Canyon Road) temporarily cross to the opposite side of the road, allowing vehicles to make left turns onto the interstate (I-25) without crossing oncoming traffic



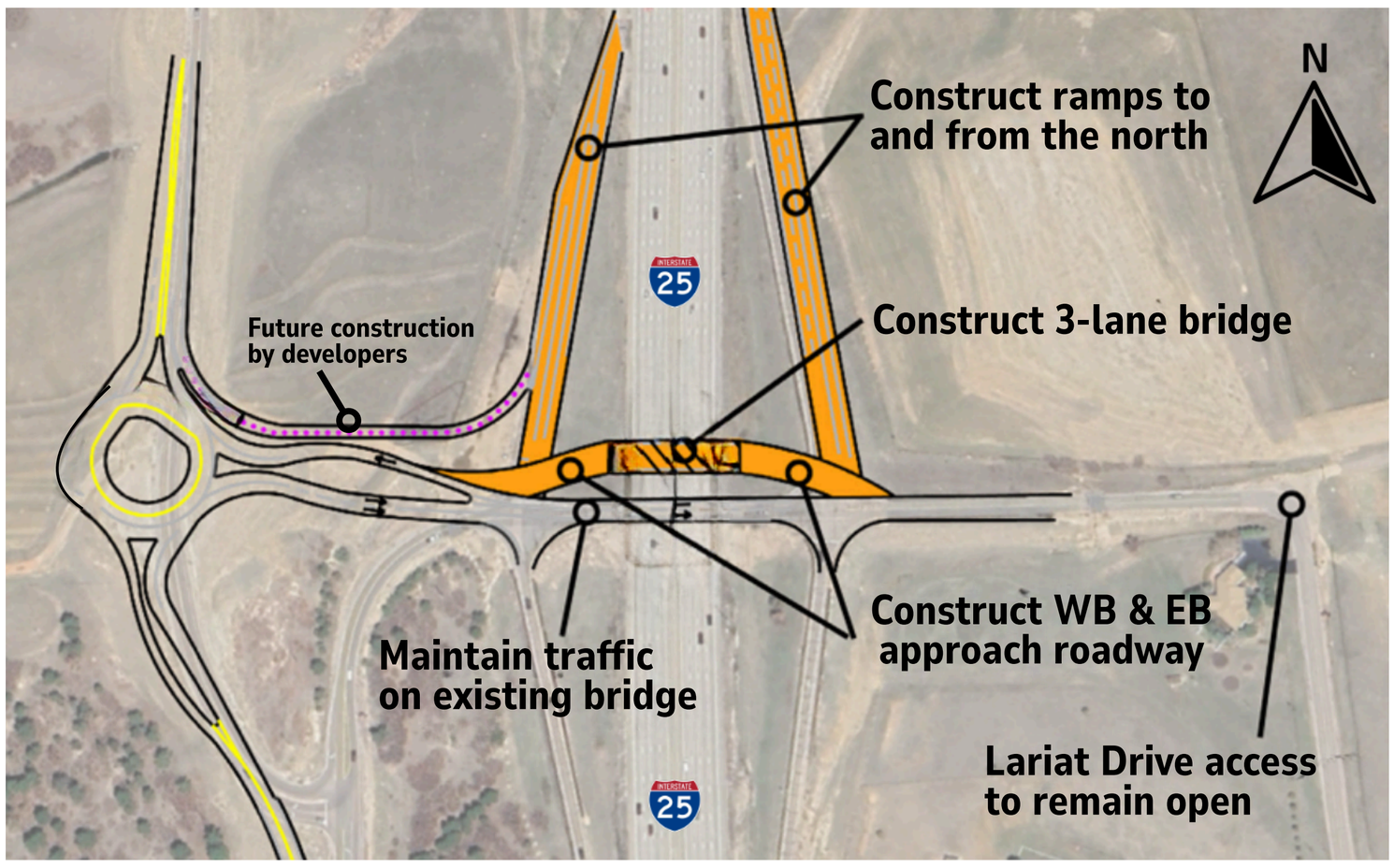
Benefits of a Diverging Diamond Interchange:

- Reduces delays using a two-phase signal as opposed to a traditional four- or six-phase signal
- Requires four fewer lanes while accommodating greater traffic volumes
- Reduces conflict points at intersections
- Improves pedestrian crossing safety with easier access to medians
- Increases left turn capacity
- Eliminates wrong-way entry to ramps
- Costs less than a typical free-flow interchange that utilizes unidirectional flyover ramps

CONSTRUCTION PHASING

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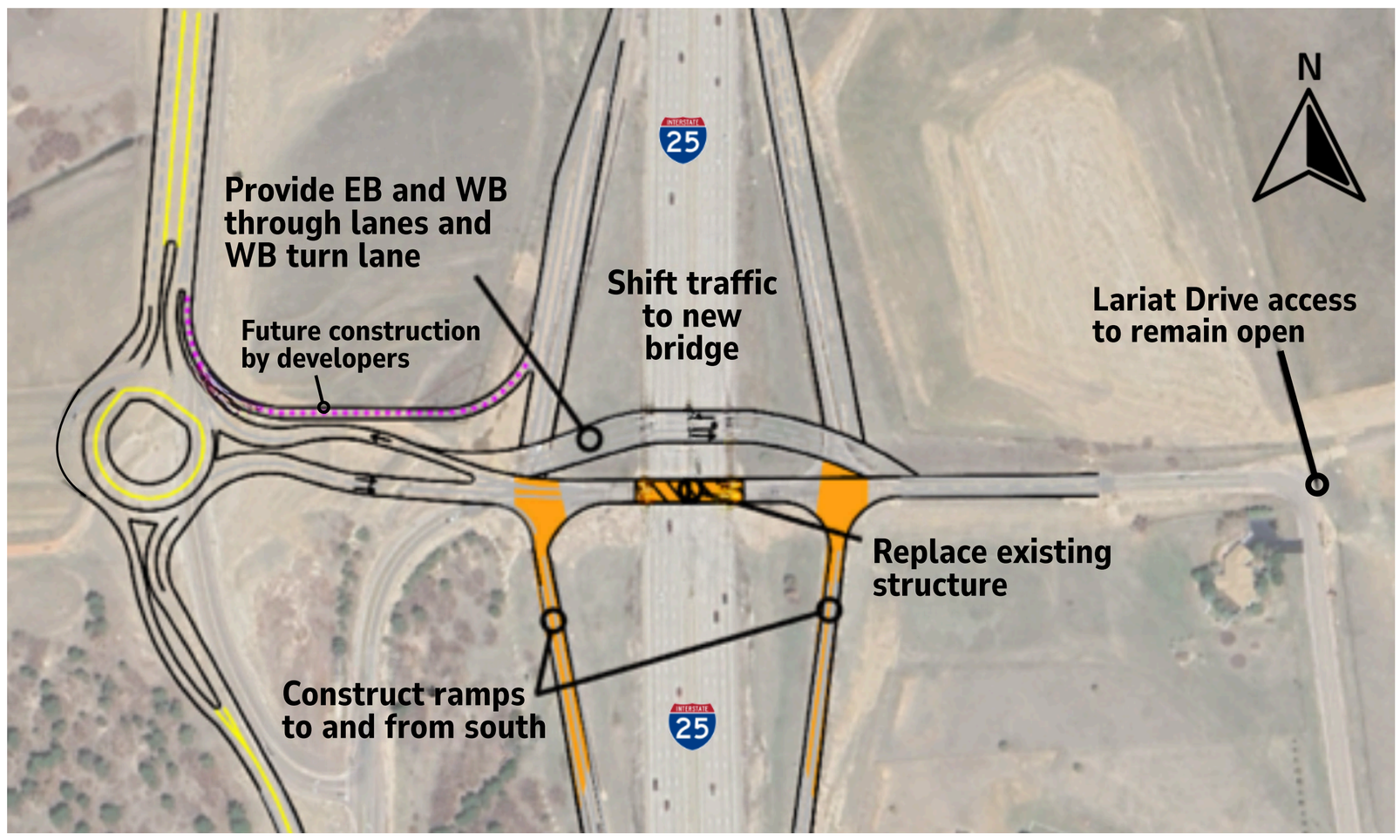
Phase 1 Construct a new bridge structure over I-25, north of the existing bridge



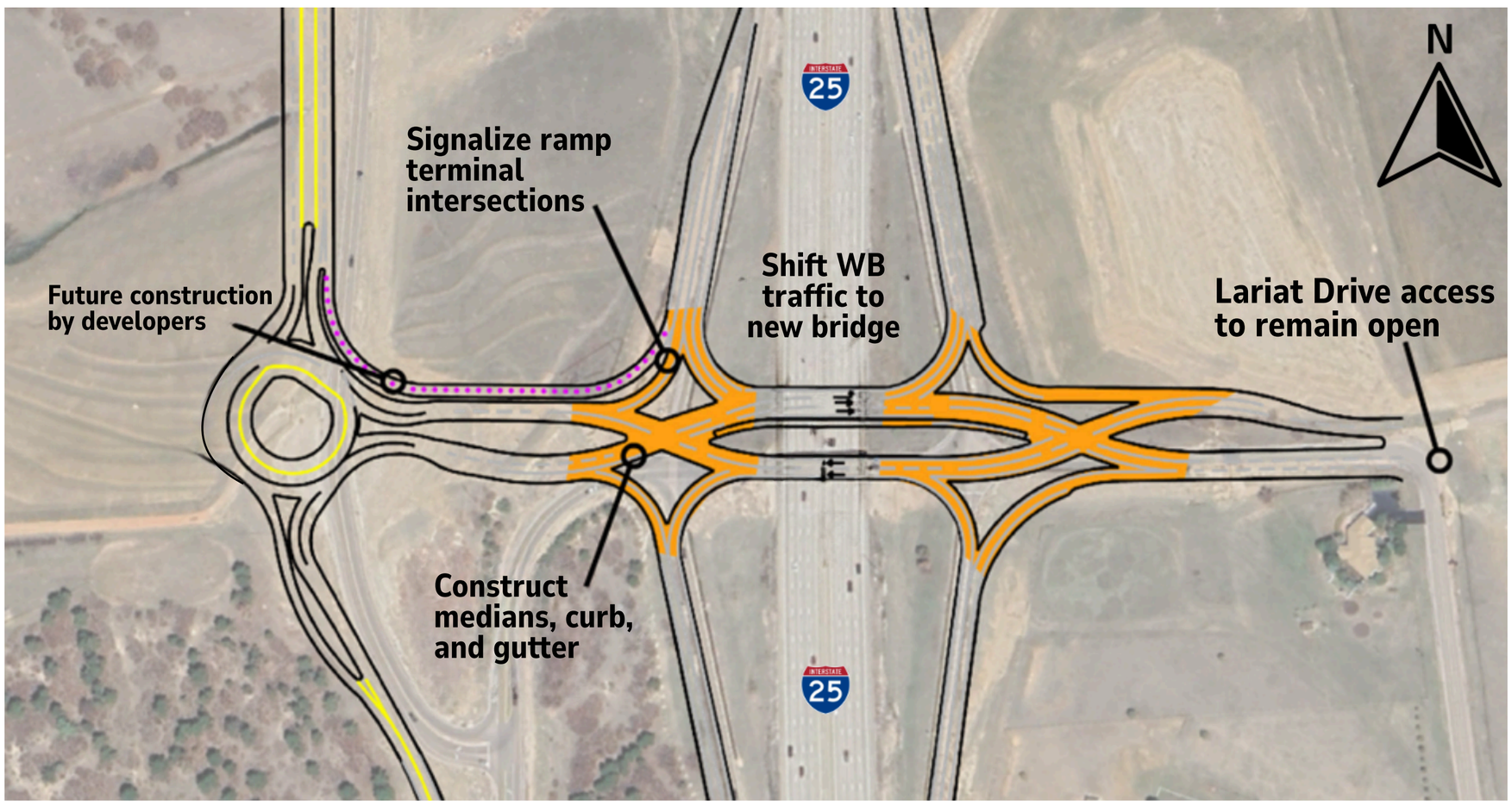
- I-25 lanes will be narrowed and temporarily shifted
- Nighttime I-25 closures for girder installation
- Happy Canyon Road traffic will continue to use the existing bridge
- Intermittent ramp closures are expected for the northbound I-25 on-ramp and the southbound I-25 off-ramp

Phase 2 Demolition of the existing bridge and construction of the southern bridge structure

- Happy Canyon Road traffic moved onto newly built northern bridge for access to/from and over I-25
- Nighttime I-25 closures for bridge demolition and girder installation
- Intermittent ramp closures of the southbound I-25 on-ramp and the northbound I-25 off-ramp



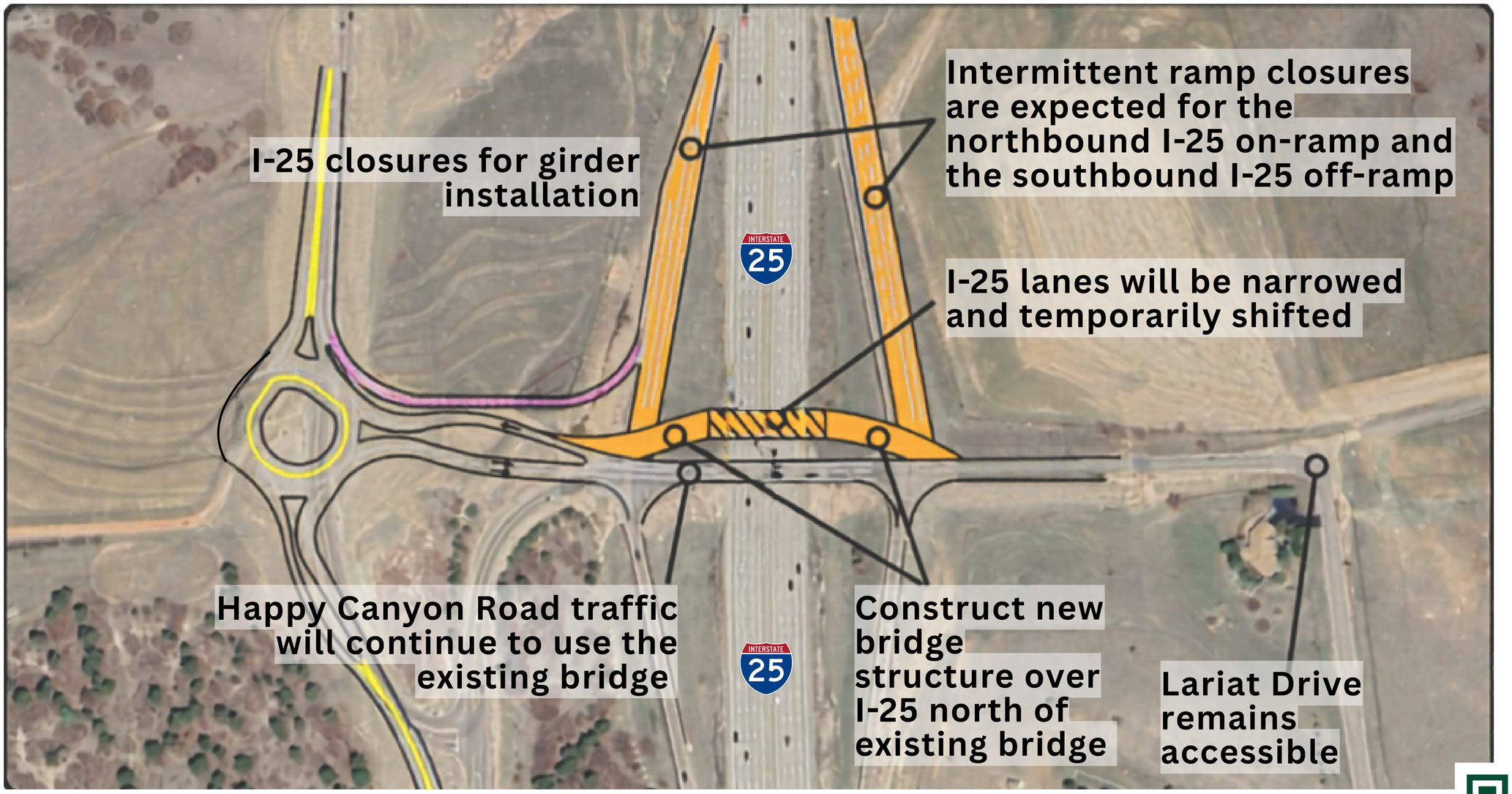
Phase 3 Tie-in new ramps and bridge structures



- I-25 lanes will be narrowed and temporarily shifted
- Intermittent ramp closures
- Various lane closures on I-25 and Happy Canyon Road for finishing work

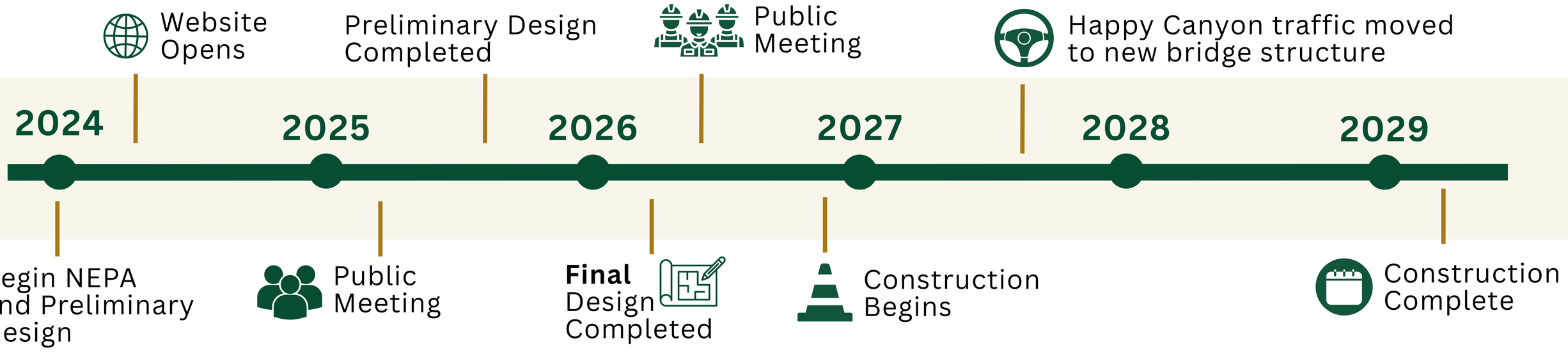
ANTICIPATED IMPACTS

Phase 1



To receive updates on upcoming impacts and more, scan the QR code and sign up for ***The Source*** community e-newsletter

TIMELINE AND FUNDING



Funding Source		Contribution
Interchange Construction	The City and associated developments	$12.8 Million
	Douglas County	$15.3 Million
Bridge Replacement	CDOT	$11.2 Million
Total funding		**$39.3 Million**

PROJECT DELIVERY METHOD

CITY OF CASTLE PINES

Construction Manager/General Contractor (CM/GC)

A collaborative process between the owner (Castle Pines) and contractor partner (Kraemer NA)is divided into two primary phases

Preconstruction (Design)

Contractor works alongside project owner and designer to provide constructability input, scheduling, value engineering, and risk identification.

Construction

After negotiating a competetive price, the contractor begins construction with an optimized schedule, reduced public impacts, fewer change orders, and lower project risk.

Benefits of a CM/GC Project

- **Early contractor involvement** improves design quality and reduces change orders
- **Contractor partnership** supports better design decisions and coordination
- **Value engineering** improves cost control and budget planning
- **Collaborative planning** encourages innovation and cost-saving solutions
- **Early scheduling** helps reduce traffic and construction delays
- **Identifying utility and right-of-way issues early** keeps projects on track
- **Early risk identification** helps reduce project costs and delays