


# Alaska Department of Transportation & Public Facilities

## AMATS: Glenn Highway Integrated Corridor Management Study

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Our mission is to *Keep Alaska Moving* through service and infrastructure.



# Today's Topics

## **Anchorage Metropolitan Area Transportation Solutions (AMATS): Glenn Highway Integrated Corridor Management (ICM) Study**

### **Phase I: Infrastructure**

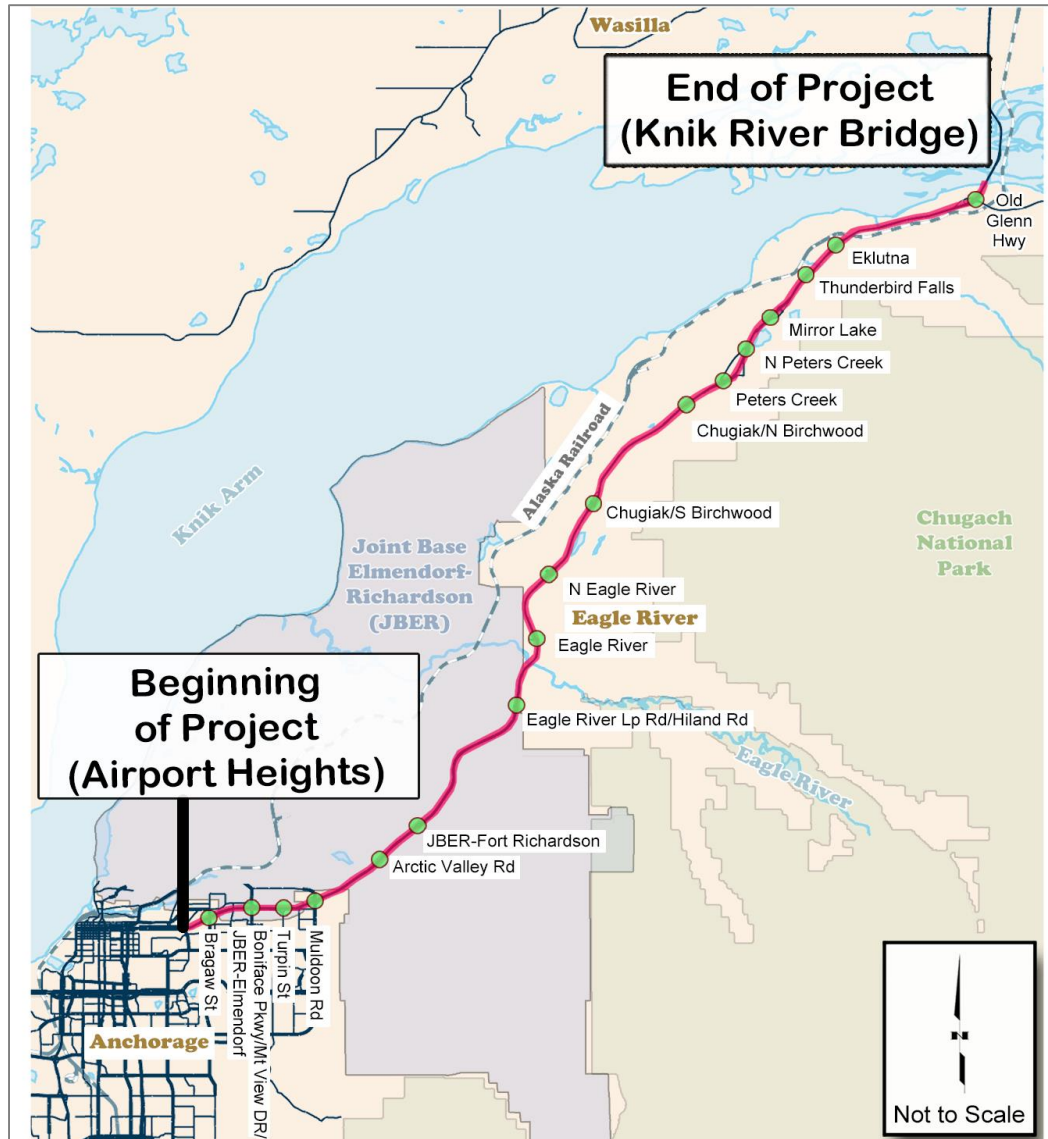
- Purpose
- Existing Conditions
- Objectives
- Strategies

### **Phase II: Incident Management**

- Purpose and Need
- Objectives
- Traffic Control Plans

**Reports Prepared by Kinney Engineering LLC  
Jeanne Bowie, PE, PhD, PTOE**

# Project Area





# **AMATS: Integrated Corridor Management Study (ICM) Phase I**

## **Existing Conditions**

## **Proposed Infrastructure, Communication, and Policy Strategies**



# Phase I : Purpose

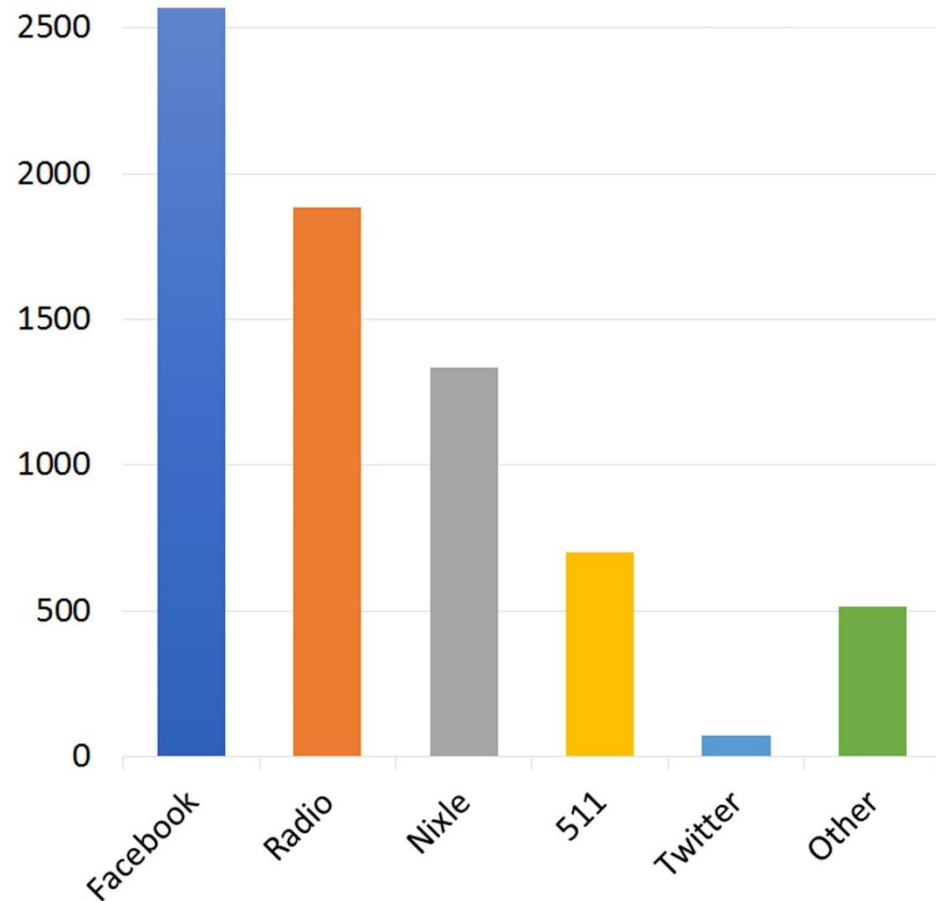
## ICM Study Purpose:

- Identify methods to improve the movement of people and goods along the Glenn Highway
- Discuss how existing facilities and agency coordination can be used during incident management
- Discuss future infrastructure, technology, and agency needs



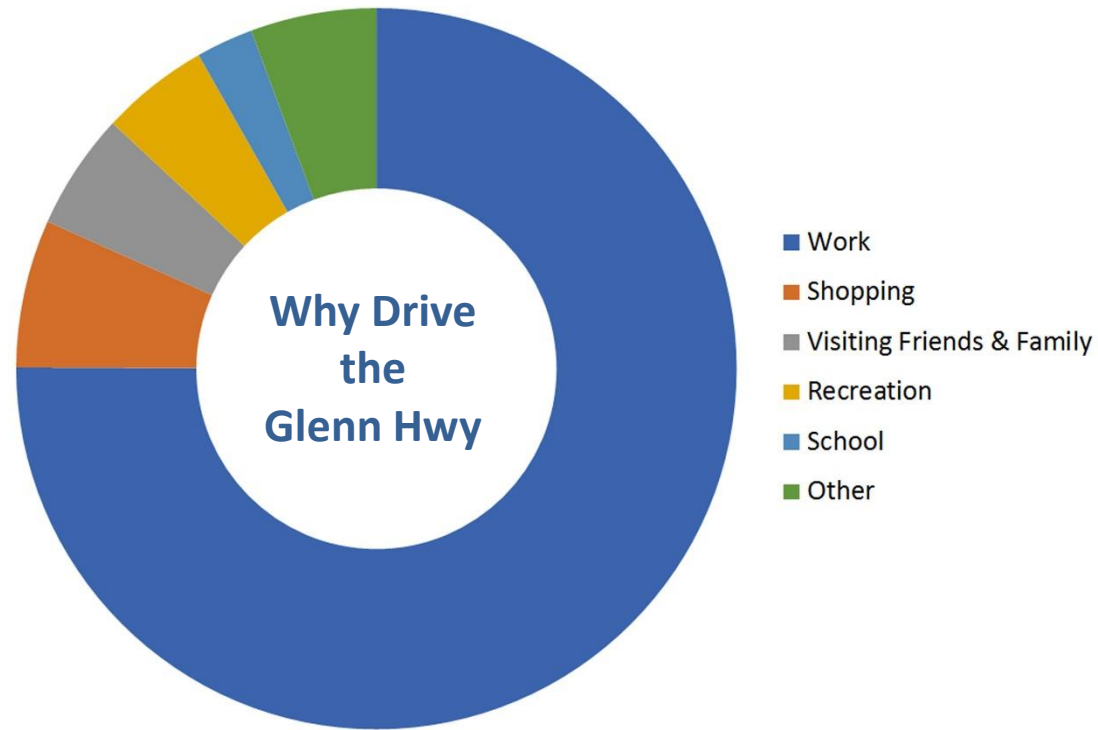
# Phase I: Existing Conditions

- The Glenn Highway has sections where there are no parallel routes
- Segments with alternative routes, but not able to meet the capacity of the Glenn Hwy
- Limited locations to turn traffic around
- Limited ways to inform the traveling public when an incident has occurred
- High cost of crashes and delays

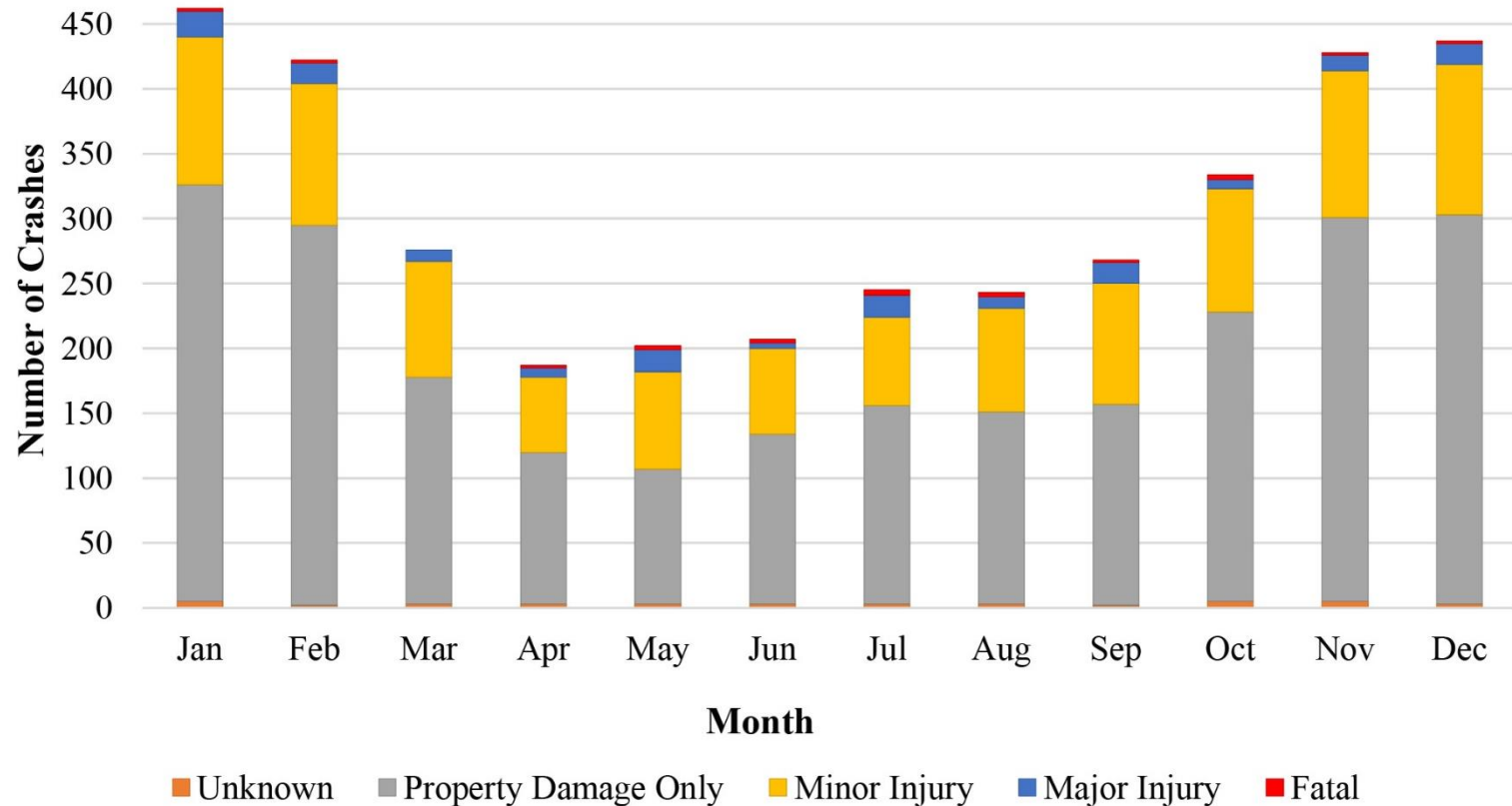


# Phase I: Existing Conditions

- More than 35,000 vehicles travel the Glenn Hwy between Anchorage and the Knik River Bridges every day
- Used for work, commercial transport, recreation, and more
- Part of the Strategic Highway Network – considered critical to US strategic operations



# Phase I : Crashes



**Cost of crashes = \$ 421.5 Million from 2005 to 2014**

**Cost of Delay = \$ 1.7 Million per year**

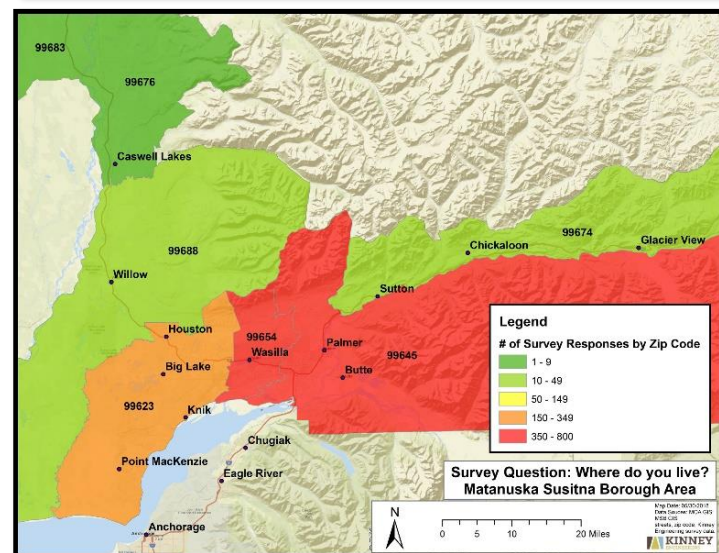
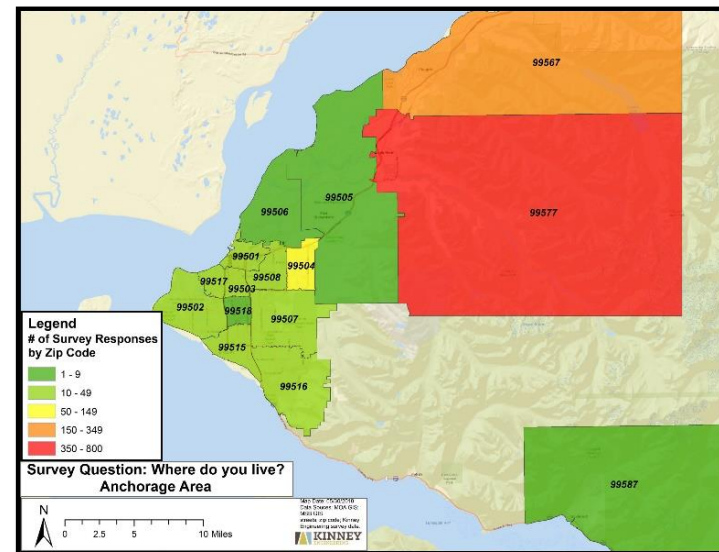
**\$ 44 Million dollars per year in Delay and Crash Costs**



# Phase I : Existing Conditions

## Public and Agency Input

- Metroquest Online Survey  
4,891 participants
- **Public Input:** Online survey, open House Meeting, Community Council Meetings, Anchorage Metropolitan Area Transportation Solutions (AMATS) Meetings, Anchorage & Mat-Su Transportation Fairs
- **Agency Input:** Stakeholder Meeting, Department of Transportation, Municipality of Anchorage and Mat-Su Borough, Emergency Responders, Transit, Joint Base Elmendorf-Richardson (JBER), Alaska Railroad, Alaska Trucking Association, Tribal Representatives, and Chugiak/Birchwood/Eagle River Rural Road Service Area (CBERRRSA)





# Phase I : Objectives

Goal A: Improve Safety

Goal B: Improve Mobility

Goal C: Improve Incident and Emergency Management

Goal D: Improved Information Sharing



# Phase I : Strategies

**Roadway Strategies:** improvements to the roadway network that will improve safety and traffic flow

- 4 New Frontage Roads
- 5 Interchange upgrades
- Adaptable shoulder lanes

## **Institutional Strategies:**

- Incident Management plans
- Service Patrol Program
- Virtual Traffic Management Center Improvements

**11 Technology based options:** improve traffic flow, traveler information, and communication between agencies



# **AMATS: Integrated Corridor Management Study Phase II**

## **Incident Management & Traffic Control Plans (TCP's)**



# Phase II : Need & Purpose

## **Legislative Intent for DOT&PF for FY 2019:**

It is the intent of the legislature that given the March 2018 accident that closed the Glenn Highway, rerouting traffic for multiple days and negatively impacting commuters and local communities, the Department of Transportation and Public Facilities develop a temporary traffic control plan, as well as emergency traffic control guidelines for the Glenn Highway, specifically from milepost 0 to milepost 35 and make the plan and guidelines available to the legislature and the public by January 30, 2019.

## **DOT&PF Contracts with Kinney Engineering to:**

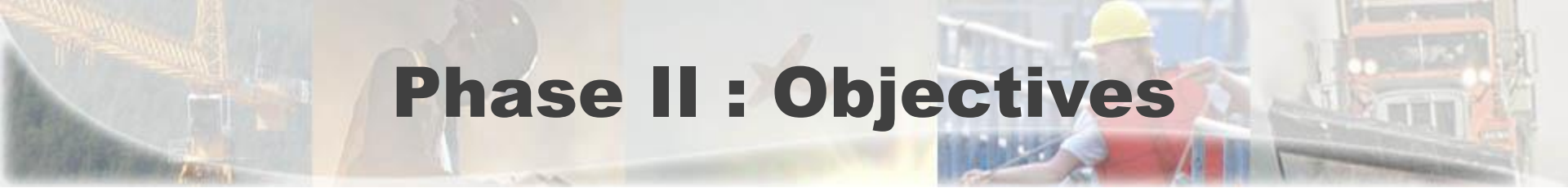
- Develop temporary traffic control measures that can be used by the incident command management team as needed on the Glenn Highway
- The traffic control plans (TCP's) will include information needed to redirect traffic and inform the public during a non-recurring event/s



# **Phase II : Traffic Control Plans**

## **Stakeholder Involvement in the Development of the TCP's**

- Anchorage Police Department (APD)
- Municipality of Anchorage
- Emergency Responders
- Transit – People Mover and Valley Transit
- Joint Base Elmendorf – Richardson
- Alaska Railroad
- Native Village of Eklutna
- Trucking / Freight
- Anchorage School District Transportation Department
- Chugiak/Birchwood/Eagle River Rural Road Service Area (CBERRRSA)
- Community Council
- Public Outreach



# Phase II : Objectives

## Equipment Staging Plan

- where the needed equipment will be located
- how to get it to the location of the closure

## Communication Plan

- which agencies need to be contacted
- how the contact will be made
- how to reach the public with messages regarding the effects of the closure on travel so they can make informed travel decisions

## Traffic Control Plans

- describe proposed detour routes and equipment needed to implement them
- Consider short term and long term detour needs



# Phase II : Traffic Control Plans

**Prepare a set of traffic control plans for closures on the Glenn Highway that can be used for:**

- Short term closures – less than 12 hours
- Long term closures – more than 12 hours
- Northbound (NB) closure
- Southbound (SB) closure
- NB & SB closure
- Consider an incident per freeway segment
- Consider an incident at an interchange / bridge





# Phase II : Traffic Control Plans



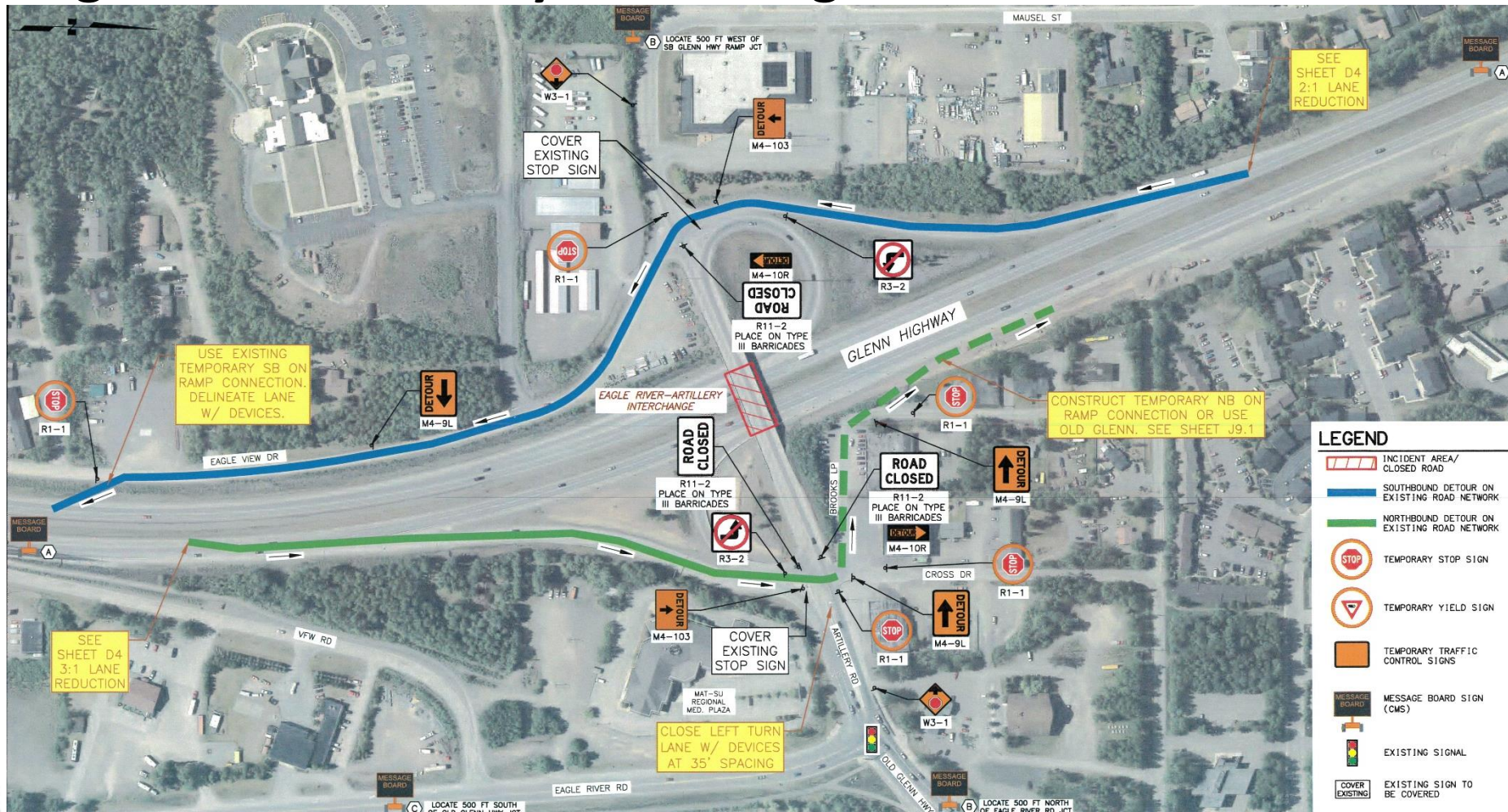
# Phase II : Traffic Control Plans





# Phase II : Traffic Control Plans

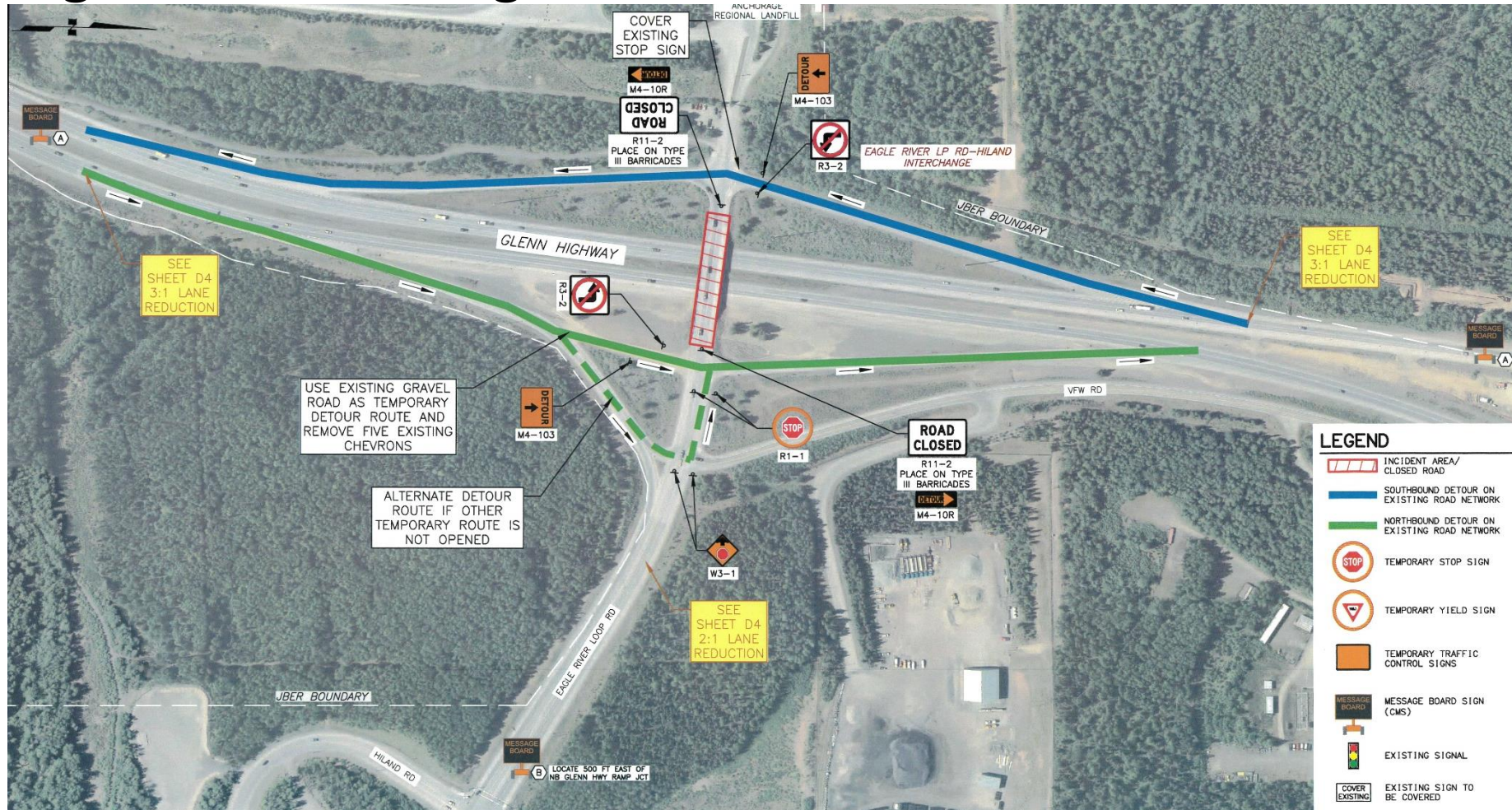
## Eagle River – Artillery Interchange closure:





# Phase II : Traffic Control Plans

## Highland Interchange closure:





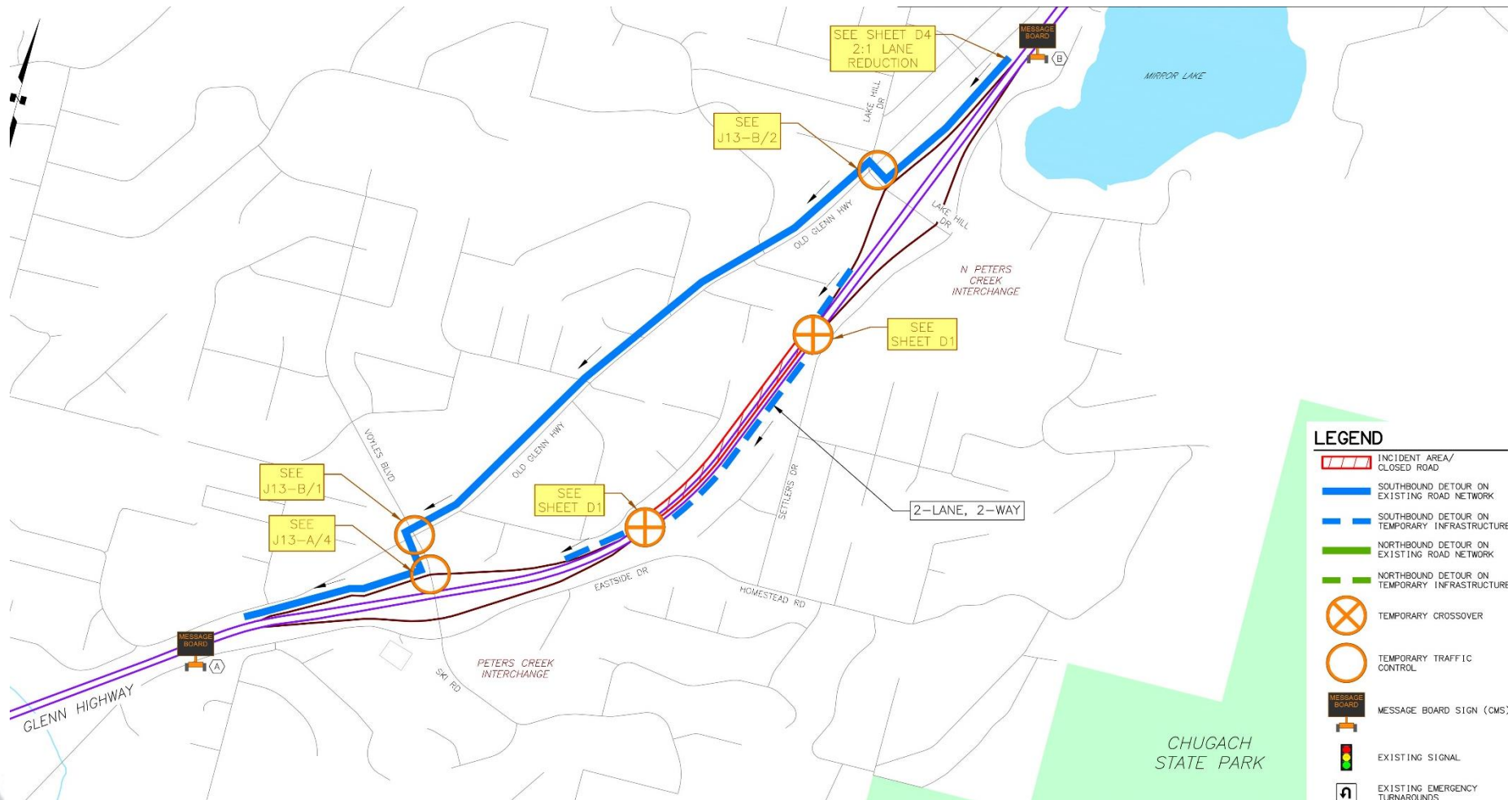
# Phase II : Traffic Control Plans

## Northbound (NB) segment closure with parallel routes:



# Phase II : Traffic Control Plans

## Southbound (SB) segment closure with parallel routes:



# Phase II : Traffic Control Plans

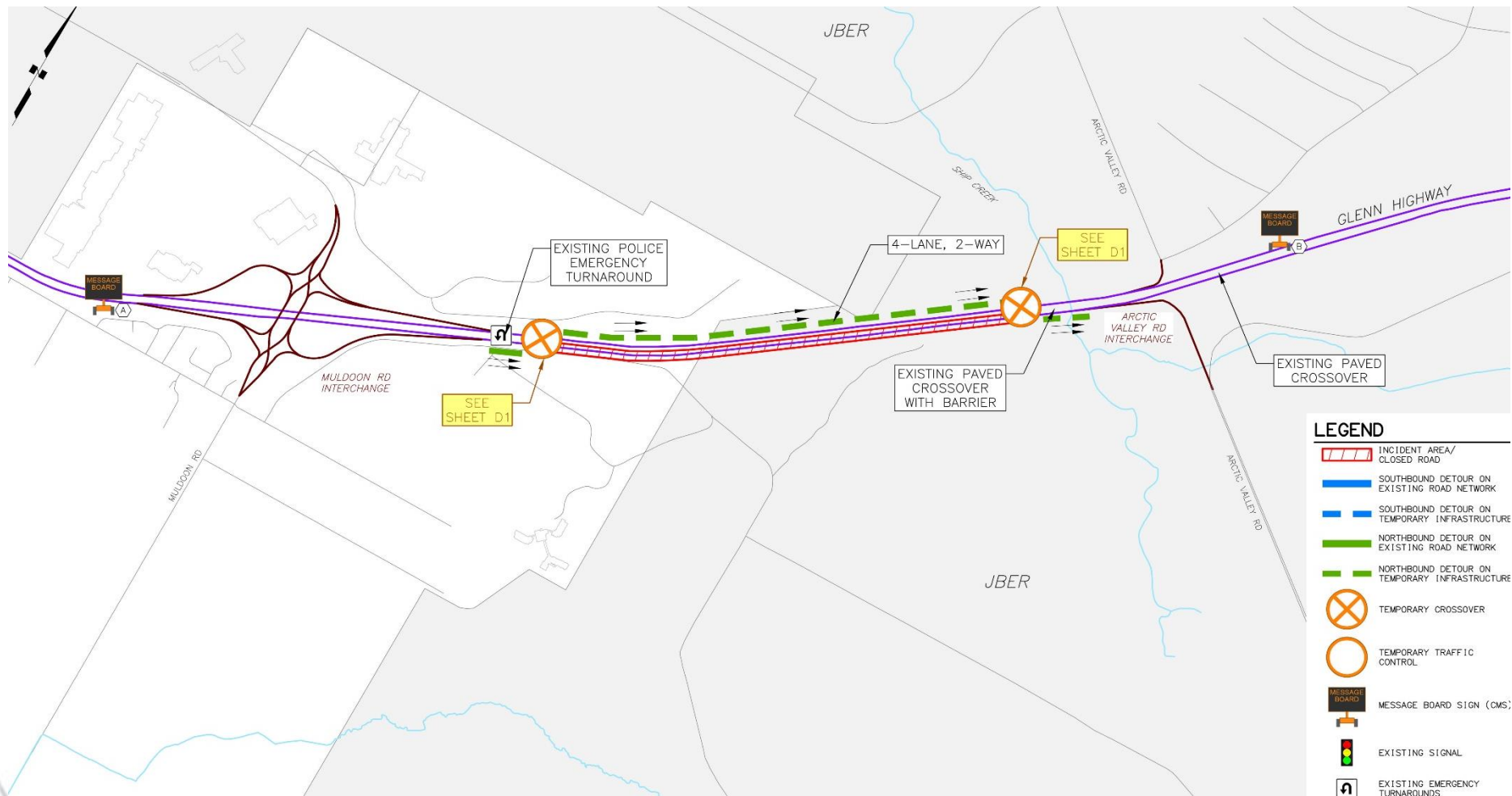
## NB and SB segment closure with parallel routes:





# Phase II : Traffic Control Plans

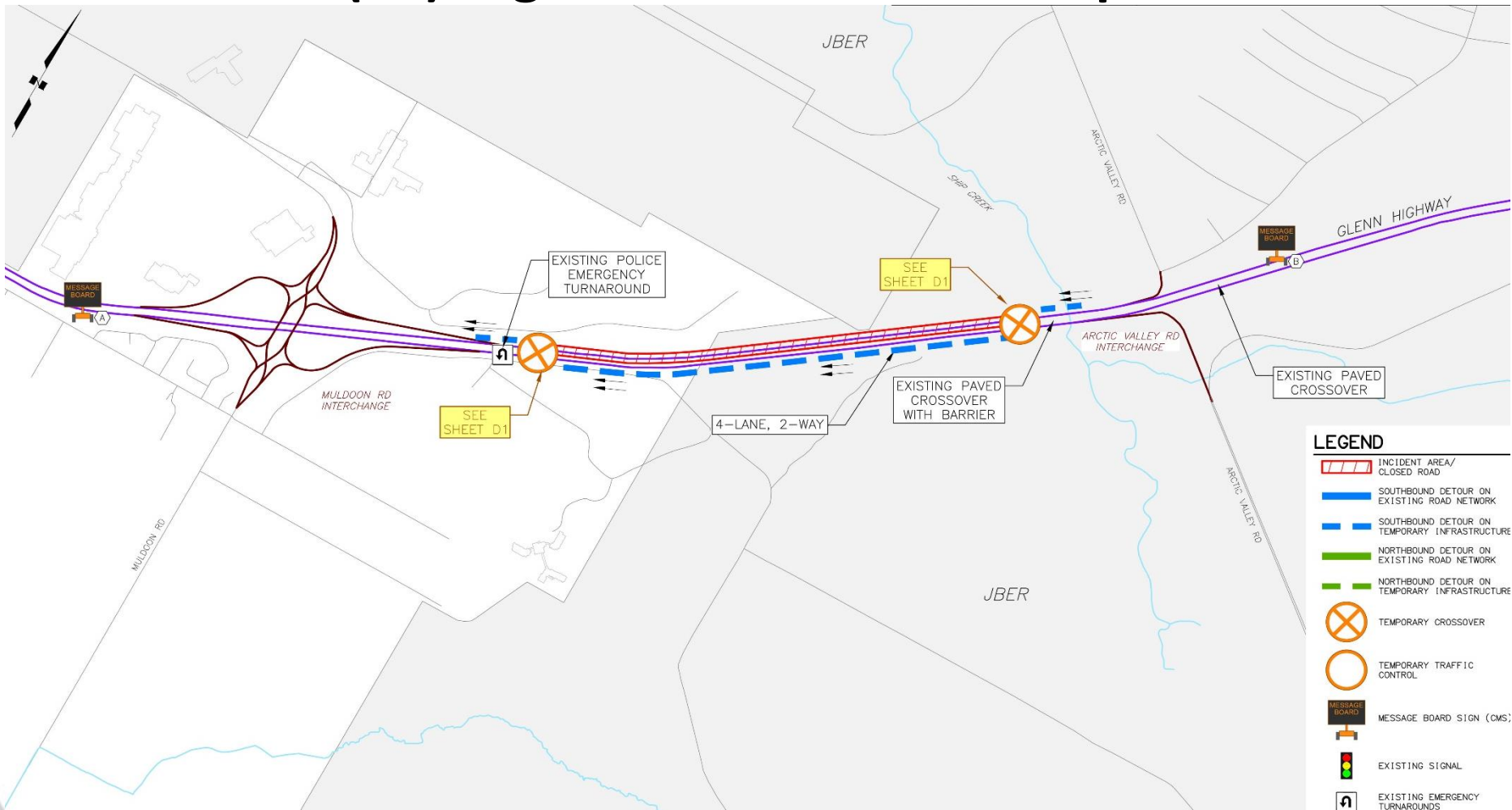
## Northbound (NB) segment closure without parallel routes:





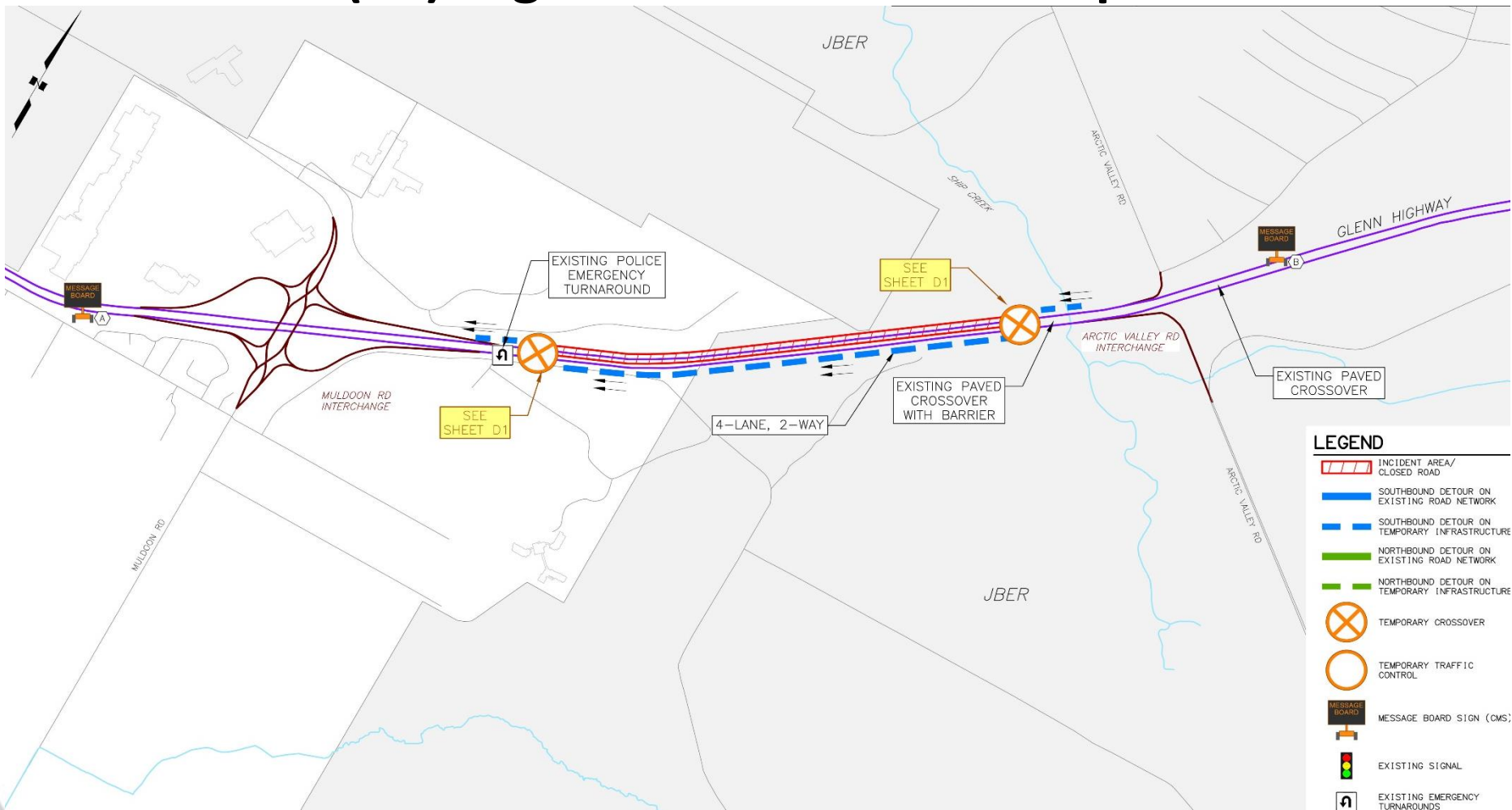
# Phase II : Traffic Control Plans

## Southbound (SB) segment closure without parallel routes:



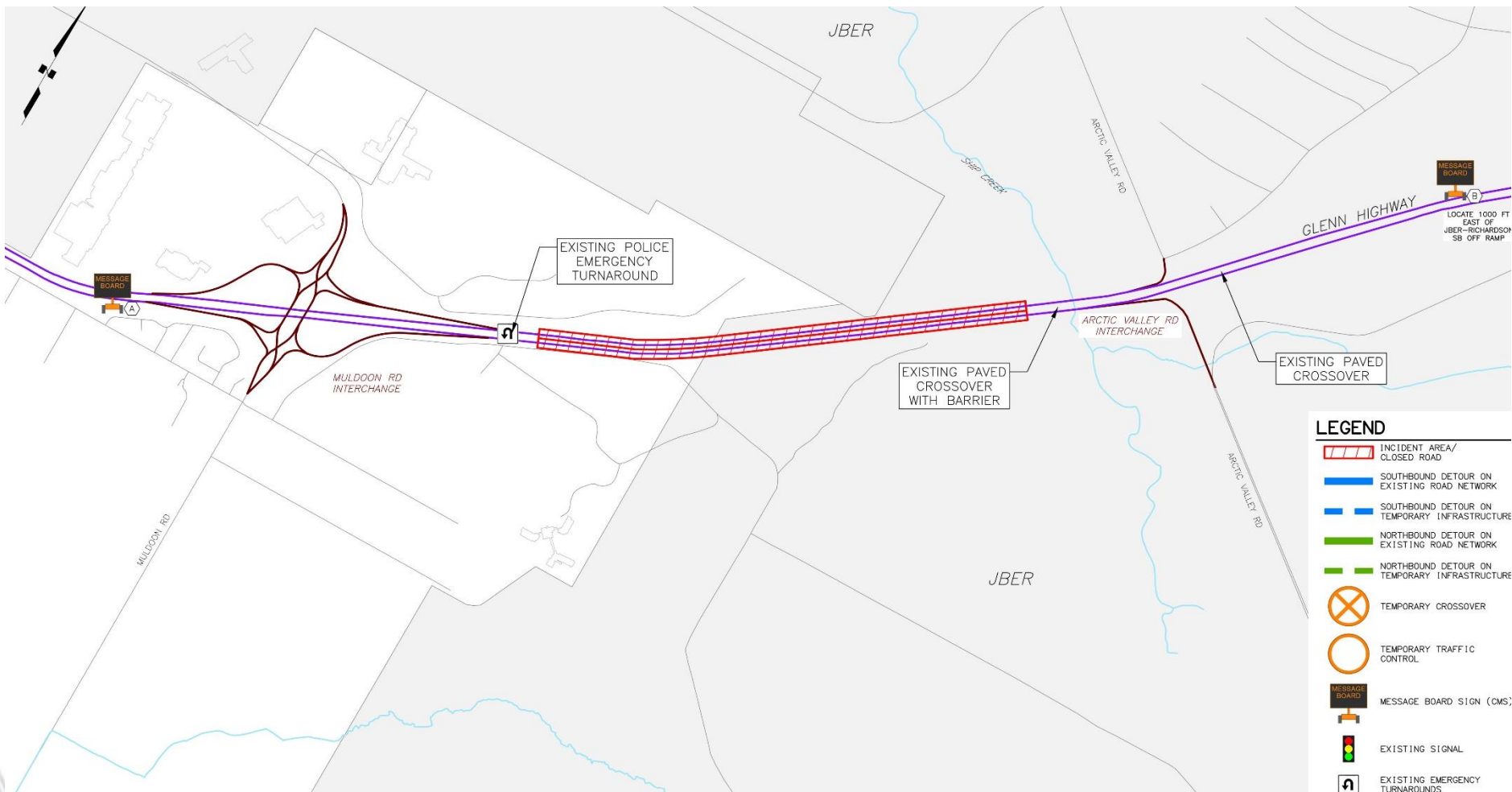
# Phase II : Traffic Control Plans

## Southbound (SB) segment closure without parallel routes:



# Phase II : Traffic Control Plans

## NB & SB segment closure without parallel routes:





# Thank you

## Questions?

