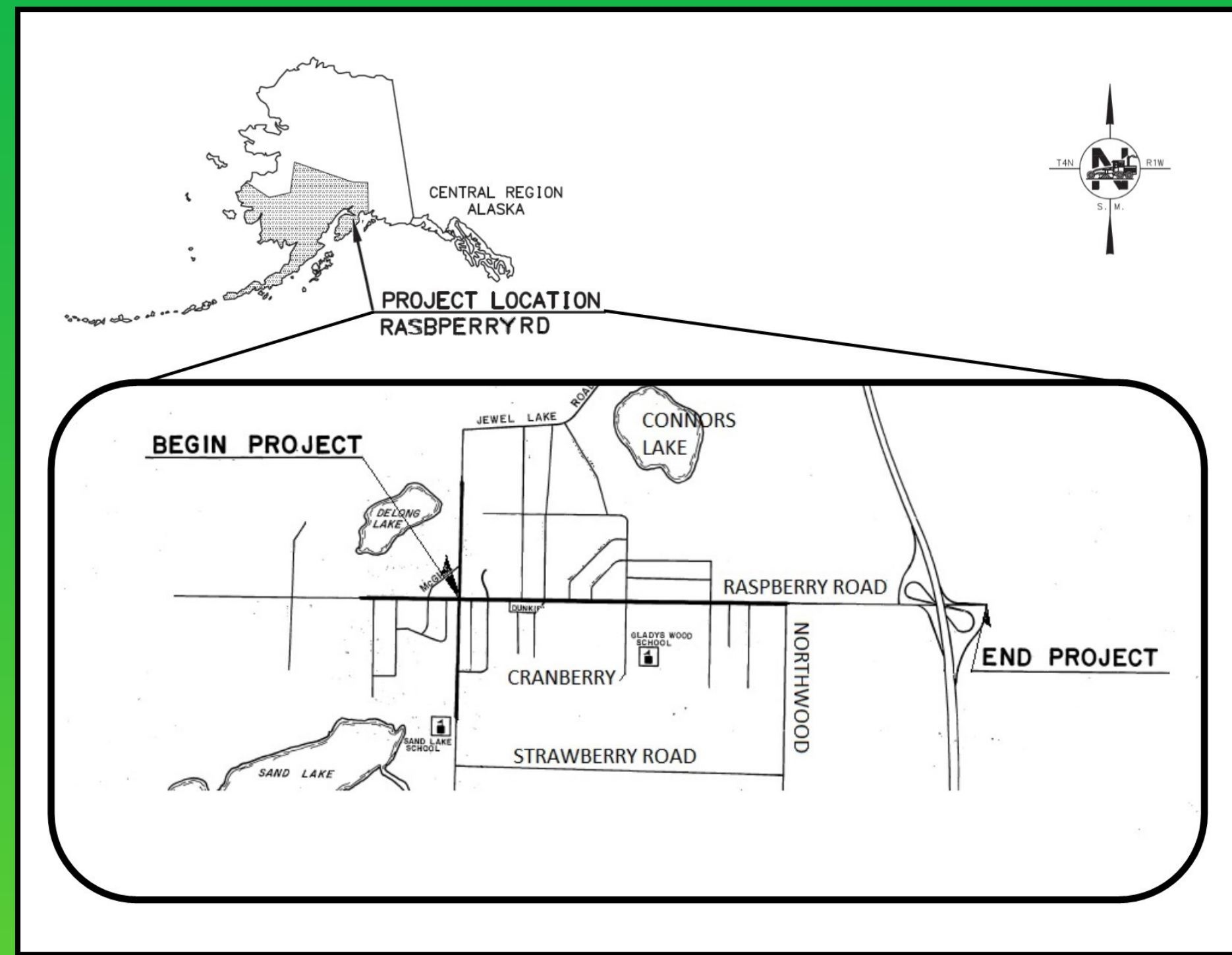


## Project Location & Introduction



As West Dowling is re-aligned and extended to Raspberry Road, the anticipated traffic flow and required level of service will be increasing. Seawolf Engineering was instructed to provide a 4R design proposal for the project. We provided a proposal including major design feature changes that would maximize the safety and level of service for all users of the facility.

### Existing and Anticipated Traffic Flows

	Eastbound Cranberry St. to Northwood St.	Westbound Northwood St. to Minnesota Ramps	Northbound Strawberry Rd. to Raspberry Rd.	Southbound Minnesota Off-Ramp
AADT 2012	17,300 veh/day	25,700 veh/day	11,000 veh/day	7,500 veh/day
AADT 2035	26,200 veh/day	25,800 veh/day	16,100 veh/day	10,000 veh/day

### The Project Team

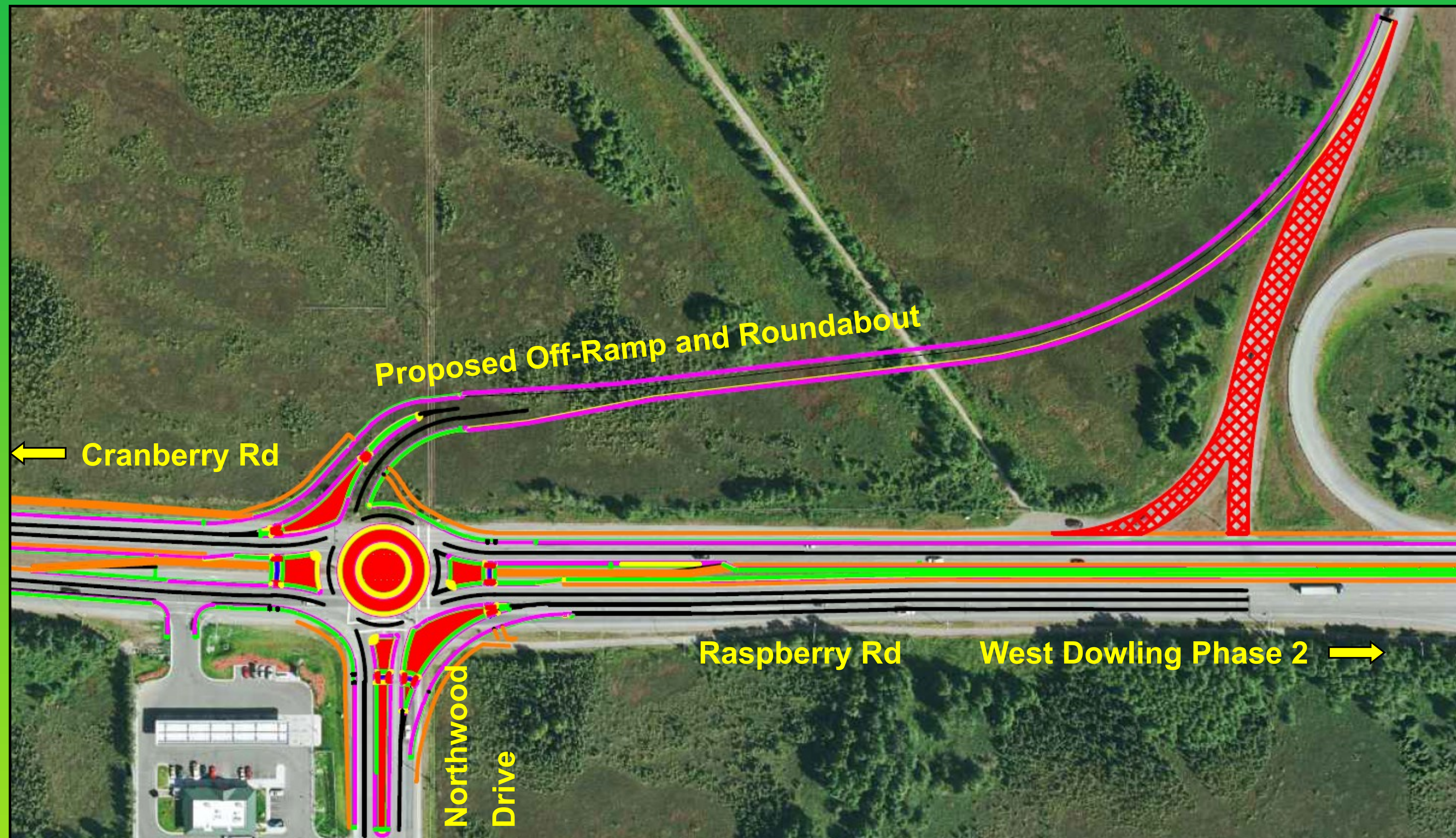


In Association With:



## SEAWOLF ENGINEERING 2015

### RASPBERRY ROAD, JEWEL LAKE RD TO MINNESOTA DR



### Roundabout Detail

- Roundabout offers a high level of service
- Low maintenance costs
- Enhances safety for bicyclists and pedestrians

### Key Design Features

- 2 lane roundabout with slip lanes at Raspberry/ Northwood intersection
- Re-alignment of southbound off ramp to direct traffic through roundabout
- Addition of full bicycle lane and facilities throughout the whole project

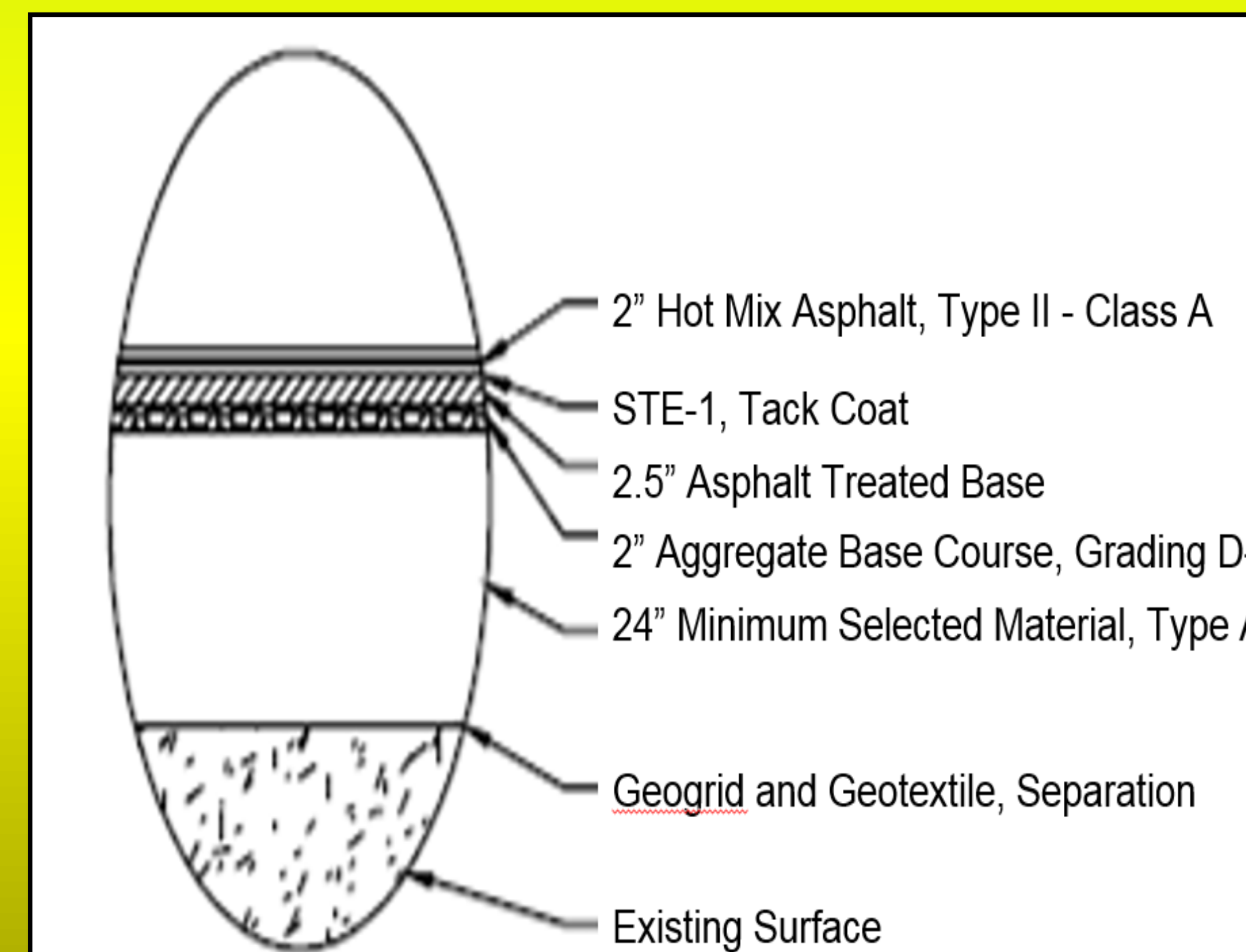
### COST ESTIMATE FOR PROJECT

Preliminary Engineering	\$270,000
Right-of-Way	\$180,000
Utility Relocation	\$75,000
Construction	\$7,300,000
Total	\$ 7,825,00

### Challenges of this Alternative

- Right-of-way acquisition
- Section 404 permit and mitigation fees will be required to construct in the surrounding wetlands
- Utility realignment and retrofitting
- Public awareness and involvement plan will be demanding to inform and engage the public on the changes to the facility

### Excavation Detail and Pavement Structural Section



## Bicycle & Pedestrian Facilities Overview

This project entails the addition of signed/stripped bicycle lanes from Jewel Lake Road through to the West Dowling Phase 2 connection to Raspberry Road. As well as adding these features for bicycle/pedestrian users, the proposal will include new standards not yet adopted within Alaska.

### Bike Boxes

- Creates space for cyclists at key transitions such as intersections
- Bike lane transitions from right to left side
- An exemption from standard policy will be requested to construct according to NACTO standards.



### Left Hand Bike Lanes

- Increase cyclist visibility
  - Minimize right-turn conflict with motorists
  - Maximize cyclist speed and consistency
- Left side bike lanes are being prescribed by NACTO and other agencies on heavy use, median divided streets with high right turn opportunities. Raspberry Road fits this criteria.



### More Information Available

<http://thompsontravis.wix.com/seawolfengineering>

