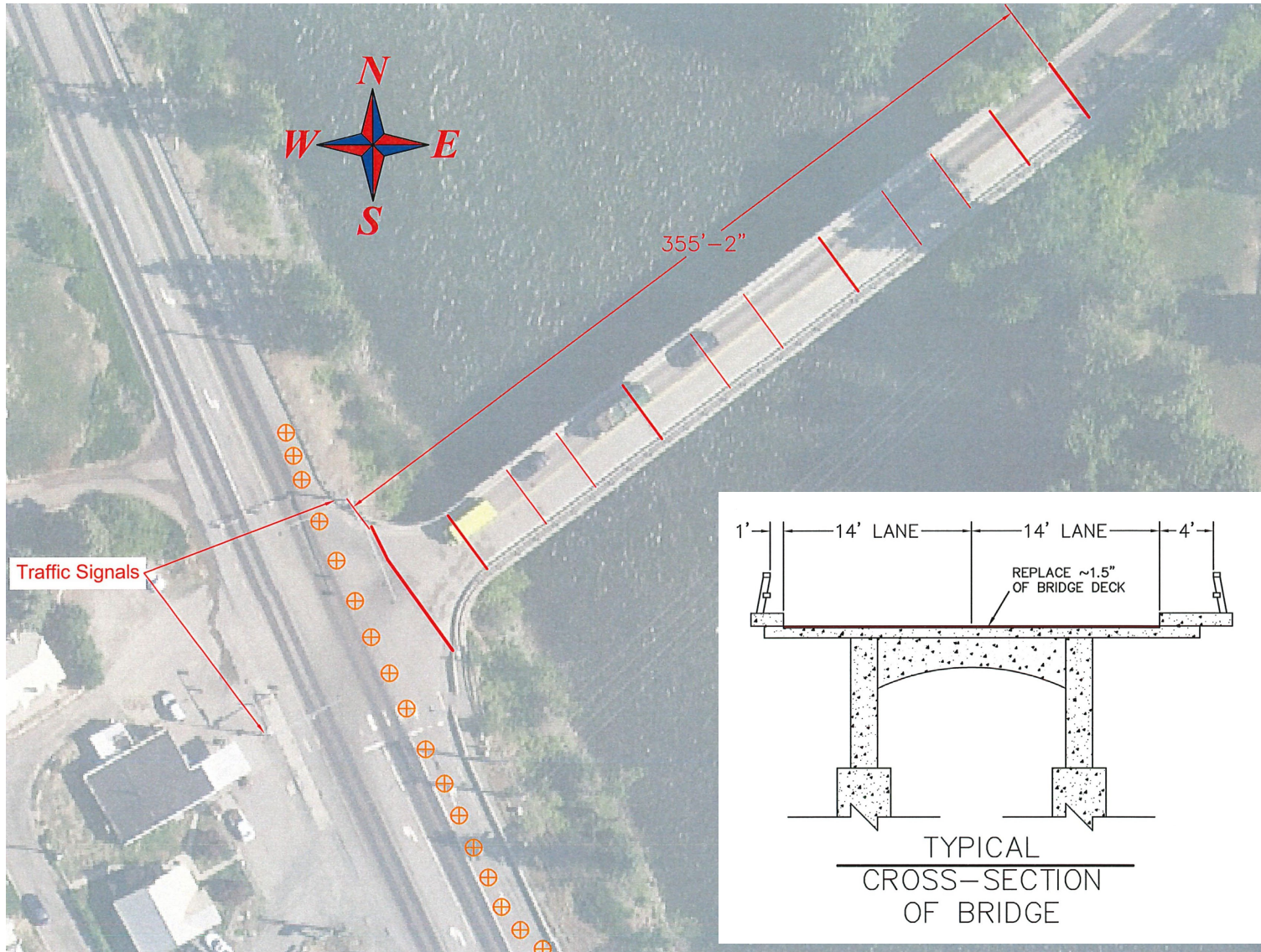


Peshastin Bridge Deck and Joint Repair

**Part of CRP 747
Bridge Deck and Joint Repairs**



Peshastin Memorial Hall
October 12, 2023
5:30pm – 6:30pm



PESHASTIN BRIDGE FACTS

- Bridge Length = 355' – 2"
- Bridge Width = 28' between curbs.
- Deck Area ~ 10,600 Square Feet.
- Existing deck will be removed between 1" and 2" in depth.
- A new concrete deck will be poured to replace what is removed.
- 10 Expansion Joints will be replaced.
- 2 Bridge End Joints will be replaced.
- There is very little work space on the bridge due to the narrow lanes, sidewalks, and guardrails.
- There is very little work space on the west end of the bridge due to the traffic signal on Highway 2.
- There is very little work space on the east end of the bridge due to the narrow roadway and embankments.

DECK REMOVAL USING COLD PLANER



STEP 1

Use Cold Planer to remove the majority of the deck



STEP 2

Use chipping hammers to remove additional unsound concrete



STEP 3

Use Shot Blasting machine to texture the planed deck



STEP 4

Sand Blast the exposed rebar to remove rust

DECK REMOVAL USING HYDRO-MILLING



Collection Tank (aka Baker Tank)
Used to collect debris and water



Hydro-Milling with protective
screening around water jets



Hoses, pumps, etc. used to supply
clean water and collect debris

How does the Hydro-Milling (HM) compare to the Cold Planer (CP)?

- 1) HM requires more equipment to perform the work during a single process.
- 2) HM is more “messy” compared to deck removal using a cold planer, requiring protective curtains and waste water collection and disposal.
- 3) Often times the hydro-milling removes any additional unsound concrete so less hand chipping is required.
- 4) Hydro-milling cleans any exposed rebar so the amount of time needed to sand blast the rebar is reduced or sometimes eliminated.
- 5) Shot blasting the concrete to add texture is not needed.

POURING, FINISHING, & GROOVING THE CONCRETE DECK



Bidwell Bridge Paver



Concrete Truck and Pump set up at the end of the bridge



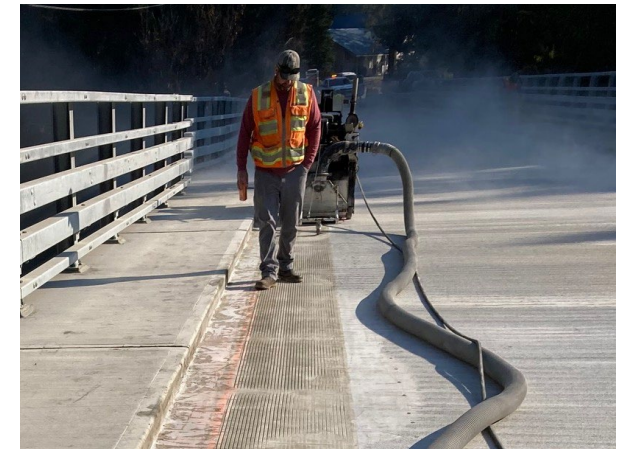
Placing concrete in front of the paver and finishing behind it



Spreading and leveling concrete with the Paving Carriage



Curing blankets and tarps placed over the finished concrete

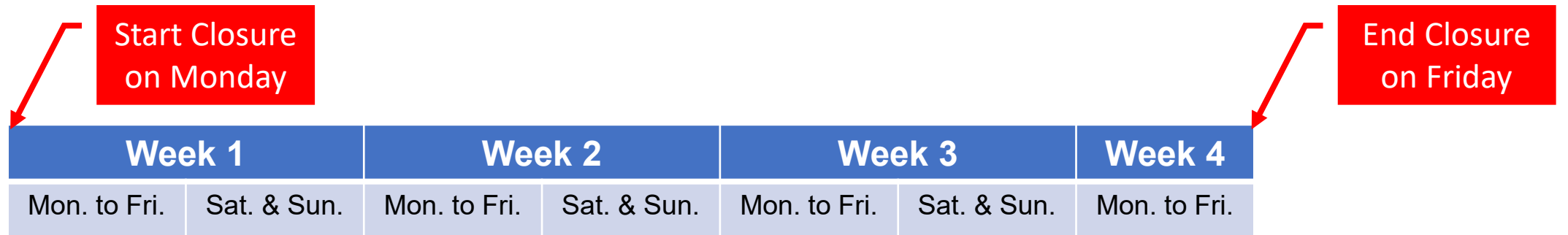


Cutting grooves into the cured deck to increase traction

PROPOSED WORK SCHEDULE

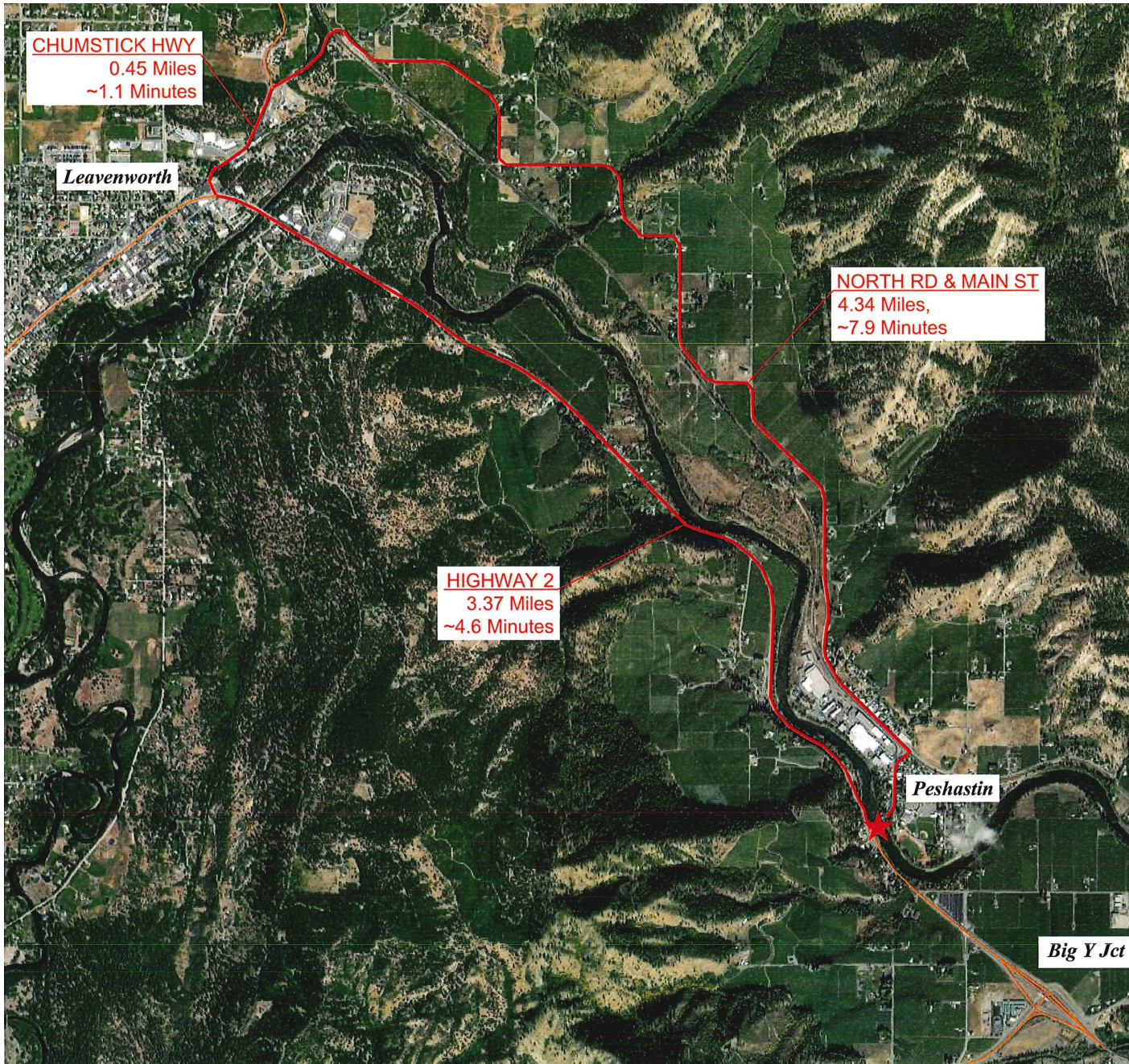
Close Bridge to all traffic for 4 weeks

- Detour traffic utilizing North Rd, Chumstick Hwy, and Highway 2
- Complete all deck removal
- Complete placement of new concrete deck in its entirety
- Complete all grooving of the new concrete deck
- Complete as many joint repairs as possible



Use one-lane flagger controlled traffic to complete the remaining joint repairs

- Work would most likely occur at night to reduce impact to Highway 2 Traffic



DETOUR ROUTE

- 1) Only used when the bridge is closed, 4 weeks maximum.
- 2) Only used when school is out for the summer.
- 3) 4 week duration maximum.
- 4) Reduces construction time.
- 5) Reduces construction cost.
- 6) Increases quality of work.

LEGEND

PROJECT LOCATION



DETOUR ROUTE



QUESTION?