

I-205 Improvements Project: Abernethy Bridge



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Urban Mobility STRATEGY I-205 IMPROVEMENTS

Brought to you by the Oregon Department of Transportation's Urban Mobility Office



Local Area Improvements



Top: Aerial photo of the Abernethy Bridge from West Linn looking north.



Below: Aerial photo of the Abernethy Bridge from Oregon City looking south.

Urban Mobility STRATEGY I-205 IMPROVEMENTS



West Linn Interchange Improvements

OR 43 interchange ramp reconfiguration and roundabout – underway now

OR-43 - Pedestrian & Bicycle Improvements



Urban Mobility STRATEGY I-205 IMPROVEMENTS



Oregon City Interchange Improvements

OR 99E SB ramp reconfiguration (2023 - 2024)

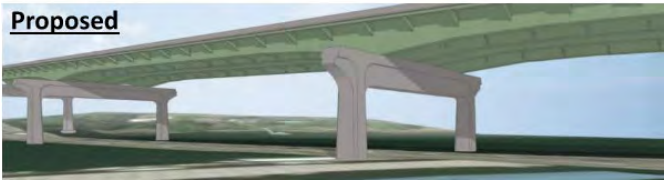
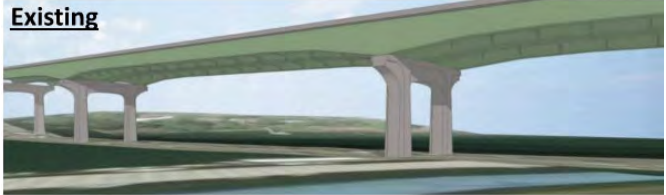
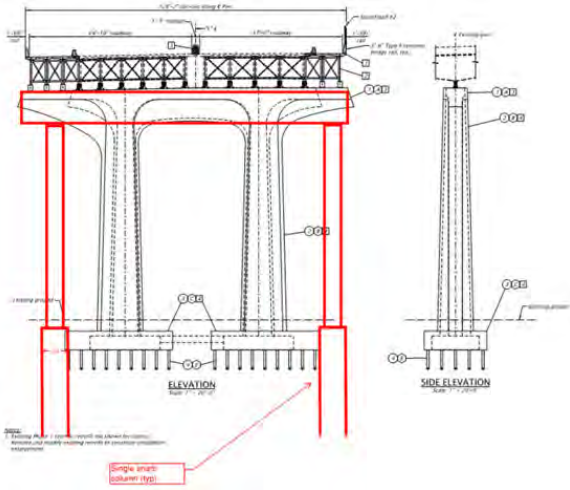
OR-99E - Pedestrian & Bicycle Improvements



Urban Mobility STRATEGY I-205 IMPROVEMENTS



Abernethy Bridge Construction Substructure Retrofit



- Outrigger bents at piers 3-6 in river
- Additional outriggers at piers 2, 7 and 8
- Other piers widened in kind with existing substructure



Abernethy Bridge – Symmetrical Widening Bridge slide and median widening (2025)



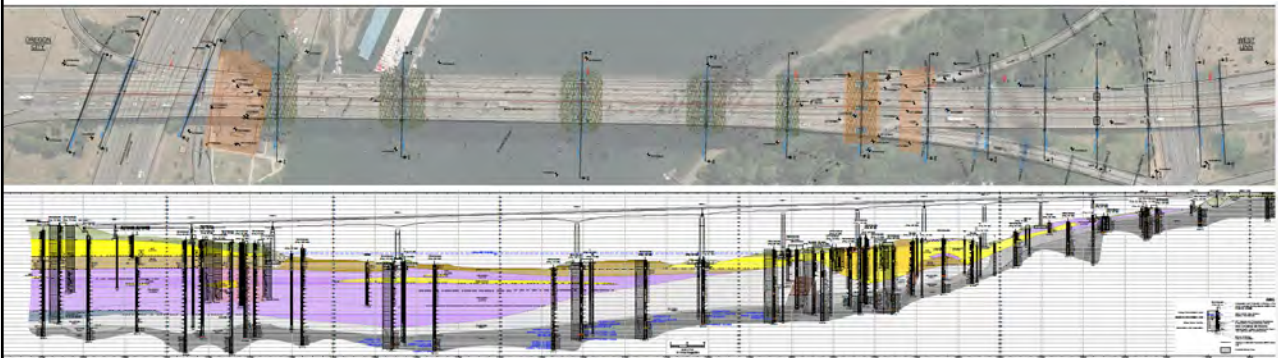
1. Slide northbound lanes by 8 feet
2. Slide southbound lanes by 8 feet
3. Construct the median
4. Final bridge configuration



Abernethy Bridge Slide



Subsurface Conditions



- | | |
|-----------------------|-------------------|
| Fill | Decomposed Basalt |
| Gravel Alluvium | Basalt |
| Sand Alluvium | Fault Breccia |
| Fine Grained Alluvium | |



Abernethy Bridge Construction

Temporary Work Bridges and Pier Construction (2022 - 2023)



Construction barges on the Willamette River looking into West Linn.



New bridge support, temporary work bridge and barges.



Nighttime construction work on the river.



Crews installing new support for the Abernethy Bridge.



Current Activities

Temporary Work Bridges



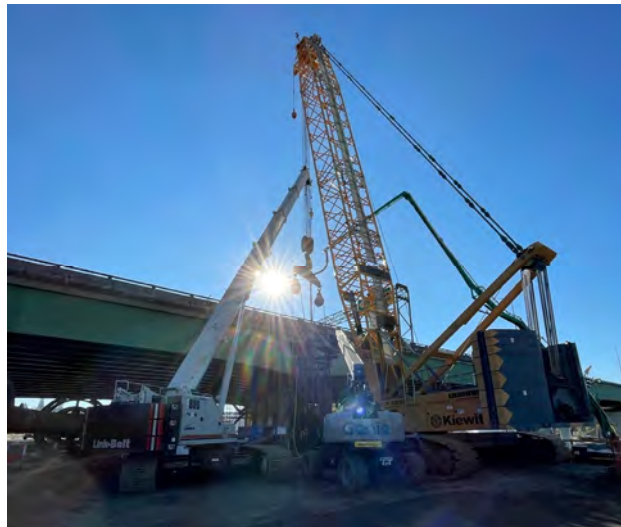
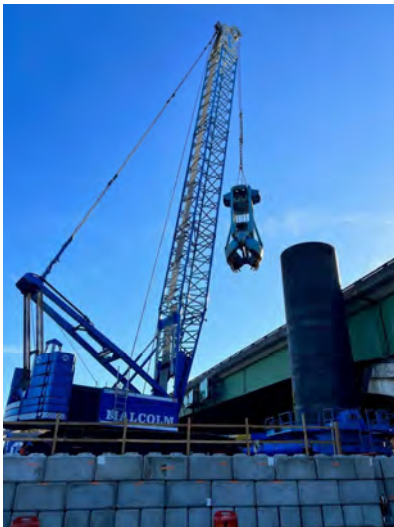
Drilled Shafts

- 12' dia. shafts – 10 total – Approx. 1,790 feet total
 - largest shaft 240'
 - One of the most powerful oscillators in North America.
 - Weight – 221,000 lbs
 - Torque – 22.9 million lb-ft
 - Extraction Force – 2.8 million lbs
- 10' dia. Shafts – 2 total – Approx. 270 feet total
 - largest shaft 130'
- 8' dia. Shafts – 9 total – Approx. 1,040 feet total
 - largest shaft 130'
- 7' dia. Shafts – 1 total – Approx. 282 feet total
 - largest shaft 282' with bi-directional load test
- 6' dia. Shafts – 6 total – Approx. 230 feet total
 - largest shaft 50'



Current Activities

Load Test Shaft (2B) – 45,950 kips



Current Activities

Drilled Shafts

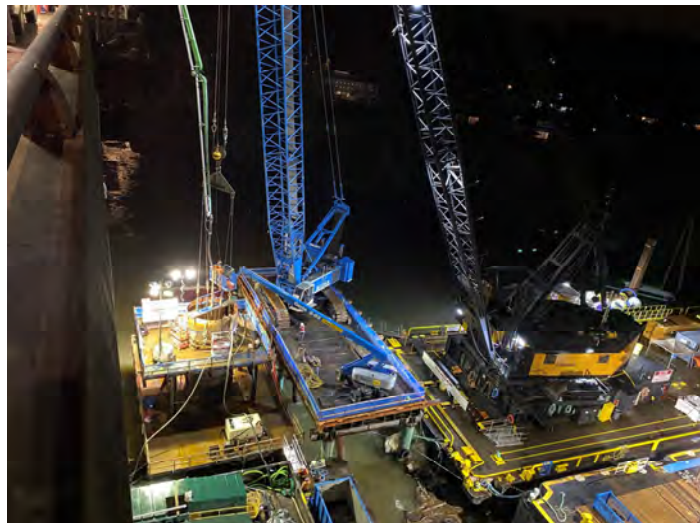


Urban Mobility I-205 IMPROVEMENTS
STRATEGY



Current Activities

Drilled Shafts



Urban Mobility I-205 IMPROVEMENTS
STRATEGY



Current Activities

Drilled Shafts



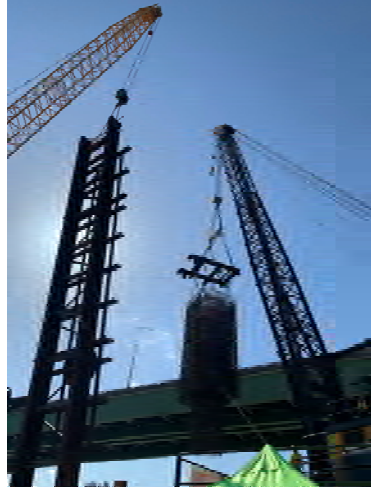
Current Activities

Column Construction



Current Activities

Column Construction

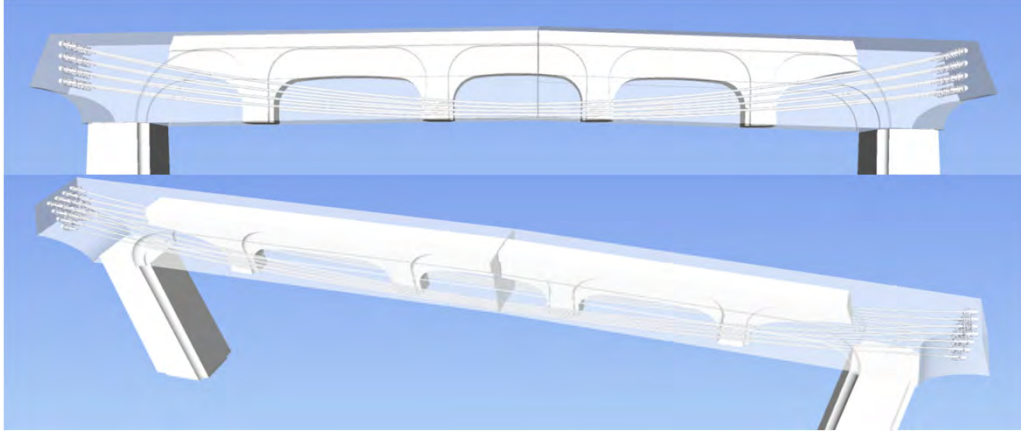


Current Activities

Column Construction



Encapsulating existing cross beams



- UP TO 50(EA) 37 STRAND TENDONS AND 100(EA) PT BARS IN A SINGLE CROSSBEAM
- NEARLY 2 MILES OF PT DUCT AND 70 MILES OF STRAND IN A SINGLE CROSSBEAM



Partnering

- Co-located at jobsite
- Formal partnering sessions quarterly
- Project First
- Diversity and workforce dashboard



CONTRACT DOLLARS
Percent to Disadvantaged Business Enterprises (DBE)



WORKFORCE HOURS
Apprentice Non-Operating Engineers (Overall)



WORKFORCE HOURS
Apprentice Operating Engineers



WORKFORCE HOURS
Tribal Employment Rights Office (TERO) Referred



Stay Connected!

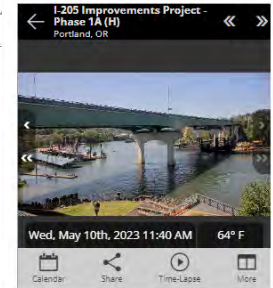


View our live construction cameras!

Track our progress in real time as construction of the first phase of the I-205 Improvements Project moves forward.

Use the navigation arrows in the top right corner of the video frame to see all four of our time-lapse construction cameras.

View all four construction live feeds » *(link takes the user offsite)*



See our progress on our live construction cameras.

✉ 205improvements@odot.oregon.gov

☎ Project hotline: 503-731-8276

💻 i205Corridor.org

📷 [@OregonDOT](https://www.instagram.com/OregonDOT)



Nighttime noise hotline: 503-294-2125

🐦 [@OregonDOT](https://twitter.com/OregonDOT)

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Thank you!

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Stafford Road to OR 213

