



IRI SMOOTHNESS:

Status and Construction of Certification Track



OUTLINE

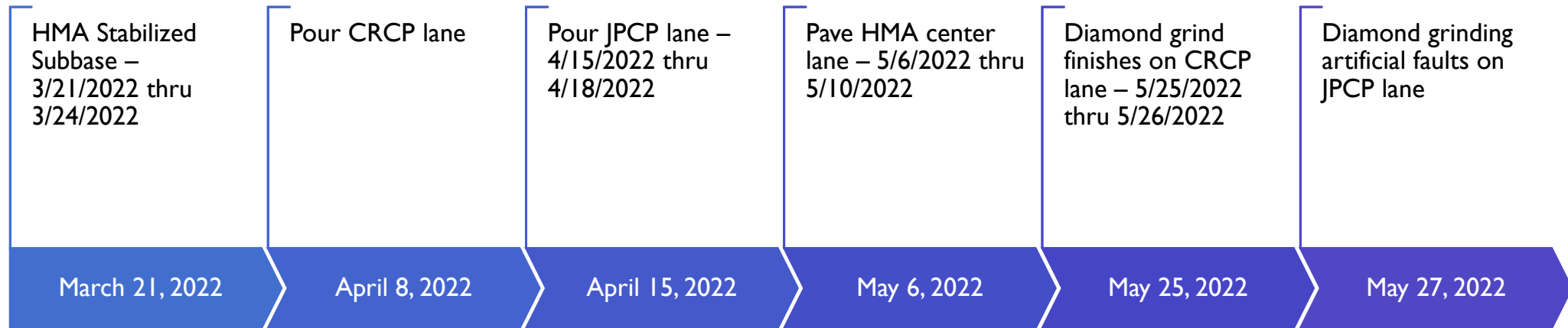
- Track Status
- Spring Schedule
- Features
- 2022 IRI Specification
- IRI Workshop
- 2021 Results

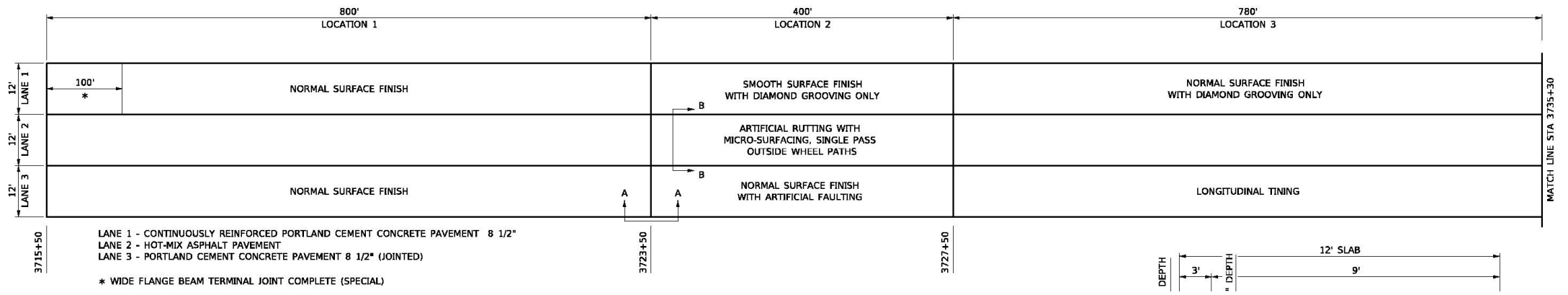
CERTIFICATION TRACK STATUS

- Remains under construction
- 12” Aggregate Improved Subgrade placed
- Weeps holes needed to be cut to help drain the aggregate layer

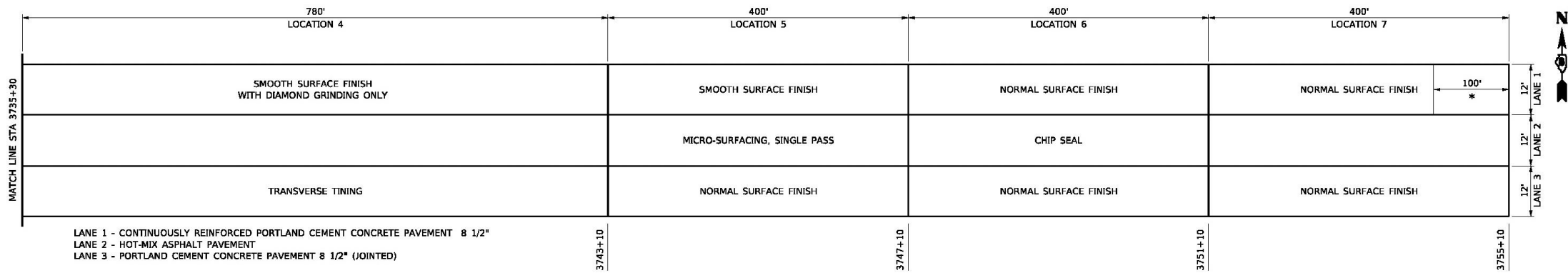


CURRENT PROGRESS SCHEDULE





TRACK PLANS - LOCATIONS 1-3



TRACK PLANS - LOCATIONS 4-6



GUIDED TOUR

FUTURE PLANS

New Building for staff and equipment.

Potentially ASTM Friction Rodeo

RPUG Meeting and Equipment Rodeo

Certifications for other states via reciprocity

Research on curling and warping

Research on rejuvenators

Research on texture and friction

OTHER
USES

Falling Weight
Deflectometer
Calibration
Center

Ground
Penetration Radar
calibrations

Locked-Wheel
Skid Tester Force
Calibrations

Locked-Wheel
Skid Tester
Correlation pads

Mobile retro
reflectivity testing
and verification

3-D Laser Data
Collection Vehicle
Certification
Center

LOCKED-
WHEEL
SKID
TESTER



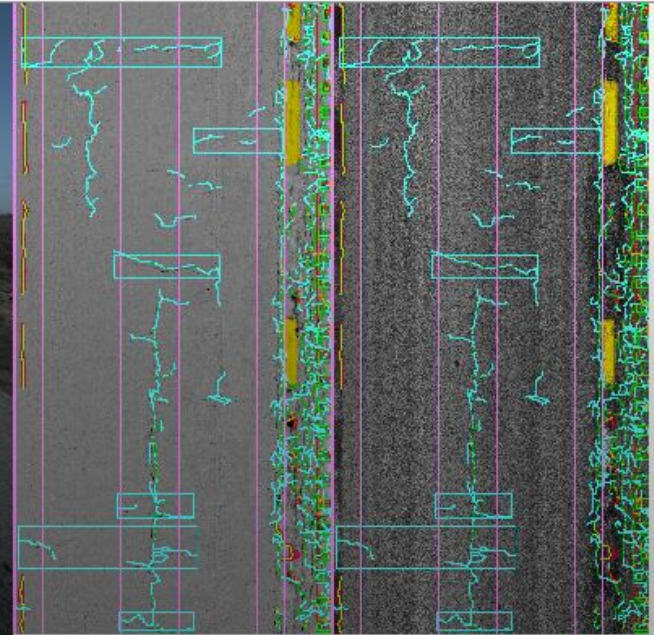
GROUND PENETRATING RADAR





3-D DATA COLLECTION VEHICLE

DATA FROM 3-D SYSTEM



Distress Rating

L M N O P Q R S T U V W X

1 3 1 3

Calculated CRS Manual CRS Override Comments Surface

6.2 5.8 M progressed to W 640 Rated

Station

Begin	Current	End
0.00	0.21	3.87



Sensor Data

IRI	Rutting	Faulting
60	0.10	0.00

Info

Inventory Number	PRT
084 10055 000000	E: 3 to 5 years



FALLING WEIGHT
DEFLECTOMETER



2022 IRI SPECIFICATIONS

- Requirement to measure the smoothness changed from 3 to 7 days
- Corrective work on high speed mainline changed from an MRI greater than 100 in./mi. to sublots greater than MRI_D .



IRI WORKSHOP

- March 22, 2022 – 9:00 a.m. to 3:00 p.m.
- Discuss collection and analysis process of 2021
- Brainstorm ideas for improvement

- ILEAS Training Center
- 1701 E. Main St., Urbana, IL 61802
- <https://forms.gle/5HHD7sDUEe9iNP9p6>



2022 PEV PROGRAM

- Last year at Rantoul Airport
- Dates - April 11th thru April 22nd
- Same procedures as last year
- Register at
<https://forms.gle/D8gFj2aEbt5L4dyr8>
- Scheduling -
<https://profileequipmentverificationprogram.setmore.com>

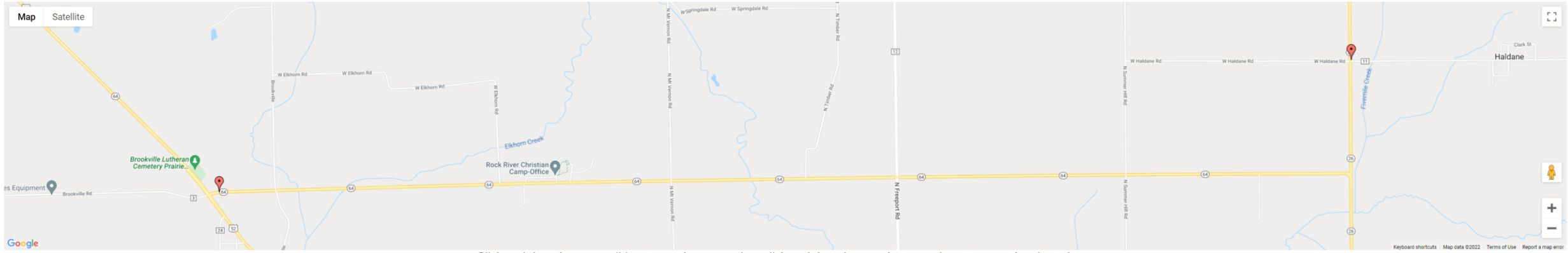
IDOT ALR TOOL



- Created to help identify profile features that are creating ALR
- <https://www.idotalrtool.com/>
- Displays multiple pieces of information synchronized together
 - ALR analysis
 - IRI Traces
 - Actual Profile
 - Map of the location (if GPS information is provided in file)

Upload .ERD File | Upload .PPF file

Threshold (in/mi) 150 | Segment Size (ft) 25 | Recalculate



Click and drag the range sliders to set the range, then click and drag the area between them to move the chart views.



2021 IRI RESULTS

- Statewide QC average - 49.82 in./mi.
- Statewide QA average - 49.93 in./mi.
- Percent improvement lots - 3927
- Standard lots - 4197
- Average preconst. IRI - 127.94 in./mi.



REGION 1 - RESULTS

Lowest Sublot – 39.6 in./mi.

- 62M06 – D Construction, Inc.

Greatest % Improvement – 50.1%

- 62M02 – Iroquois Paving

Lowest Overall IRI for Contract - 59.68 in./mi.

- 62M06 – D Construction, Inc.

REGION 2 - RESULTS

Lowest Sublot – 21.6 in./mi.

- 66K40 - Iroquois Paving Corporation

Greatest % Improvement – 83%

- 64G94 - Advanced Asphalt Co.

Lowest Overall IRI for Contract – 28.9 in./mi.

- 66K40 - Iroquois Paving Corporation

REGION 3 - RESULTS

Lowest Sublot – 24.8 in./mi.

- 70A65 - Rowe Construction

Greatest % Improvement – 79%

- 68G16 – Gunther Construction

Lowest Overall IRI for Contract – 34.3 in./mi.

- 70A65 - Rowe Construction

REGION 4 - RESULTS

Lowest Sublot – 25.6 in./mi.

- 72L66 – R.A. Cullinan and Son

Greatest % Improvement – 78%

- 72L80 – Illinois Valley Paving

Lowest Overall IRI for Contract – 34.1 in./mi.

- 72L80 – Illinois Valley Paving

REGION 5 - RESULTS

Lowest Sublot – 23.5 in./mi.

- 78810 - E.T. Simmonds Construction Co.

Greatest % Improvement – 72%

- 78785 – E.T. Simmonds Construction Co.

Lowest Overall IRI for Contract – 33.4 in./mi.

- 78810 - E.T. Simmonds Construction Co.

QUESTIONS



Illinois Department of Transportation

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