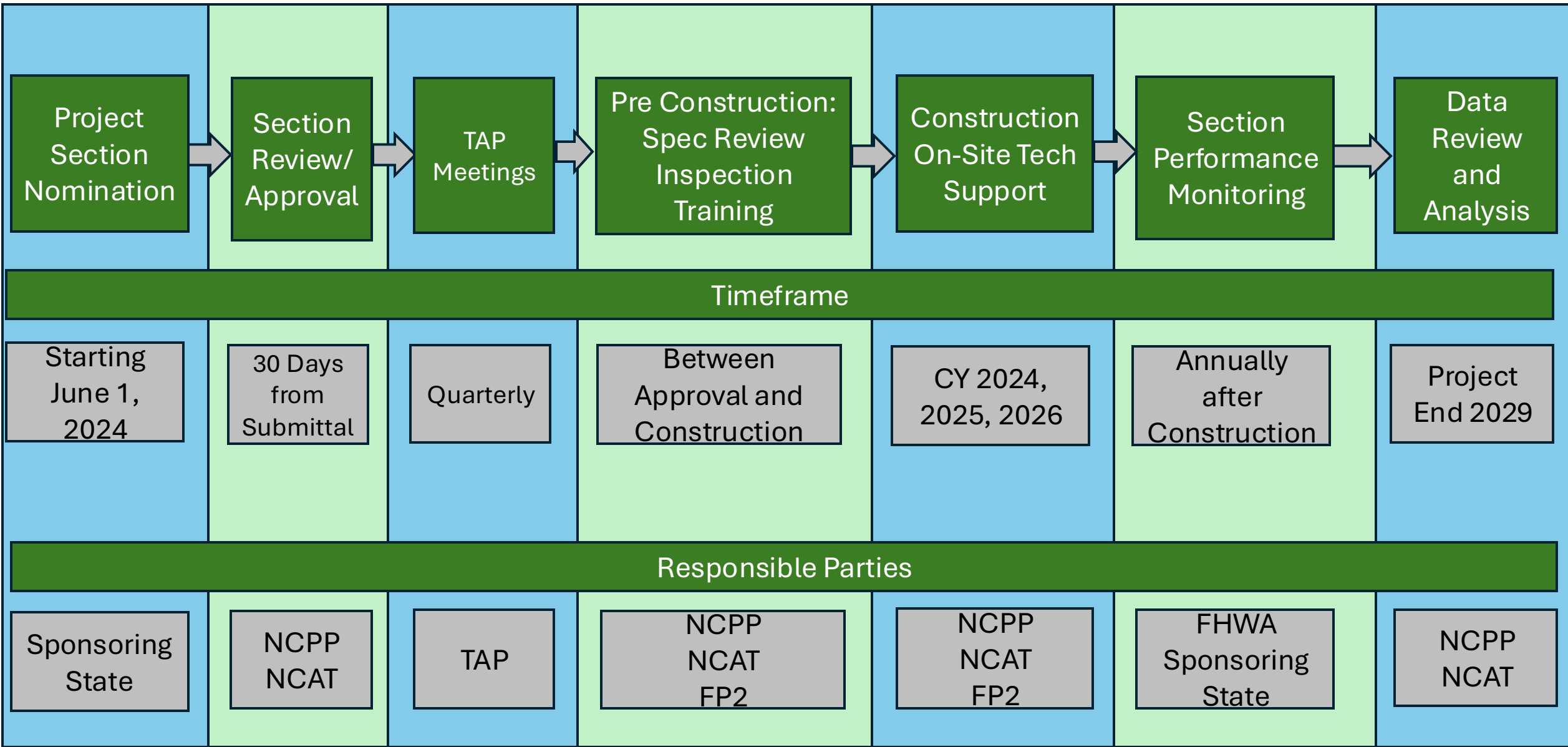


PG3 Nomination Process and Overview

Todd Shields
PG3 TAP Meeting
May 6, 2024

PG 3 Project Flowchart



Definitions

▶ Project

- A complete contract or “job”
- May include multiple treatments
- May include multiple roadways

▶ Section

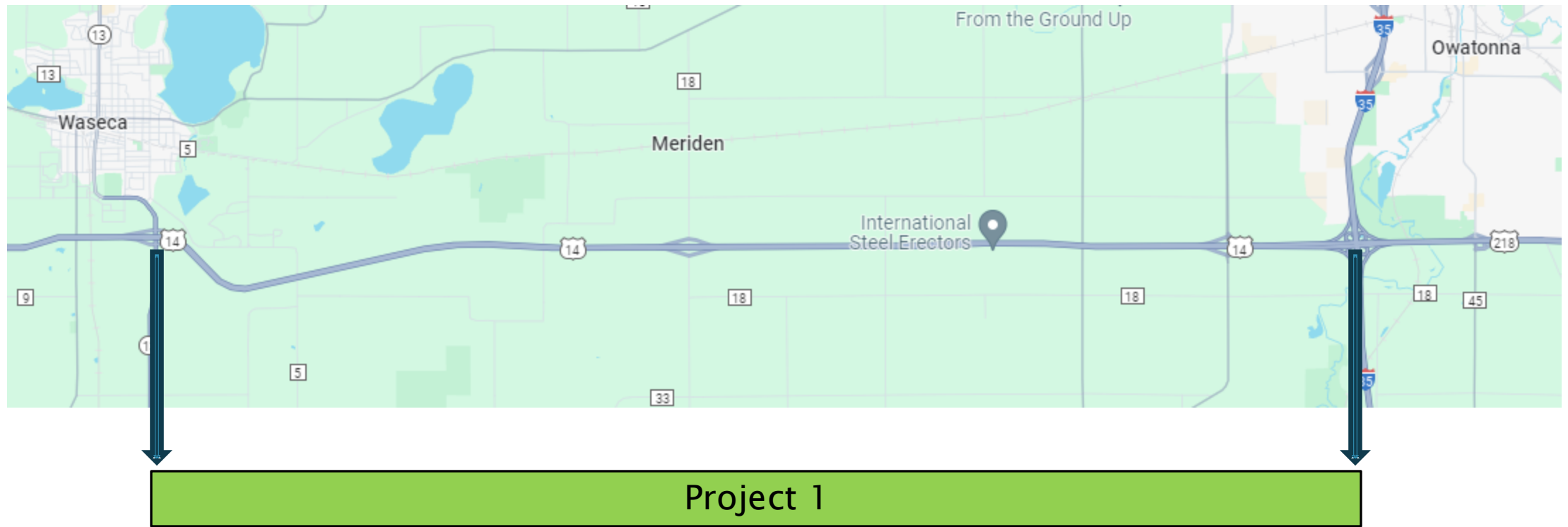
- One specific treatment (or combination treatment)
- One specific roadway
- Included in study
- Field visit during construction
- NCAT performs material testing

Definitions

- ▶ **Supplemental Section**
 - A different section/treatment to be included in the study
 - Agency will provide data and testing
 - Project team will not visit during construction
- ▶ **Test Cell**
 - The portion of the section or supplemental section that will be included in data analysis for the study
 - Typically will be a 500' long section, predetermined location
 - One lane, one direction
- ▶ **Control Cell**
 - The portion of the section left untreated
 - Typically will be a 500' long section, predetermined location
 - One lane, one direction

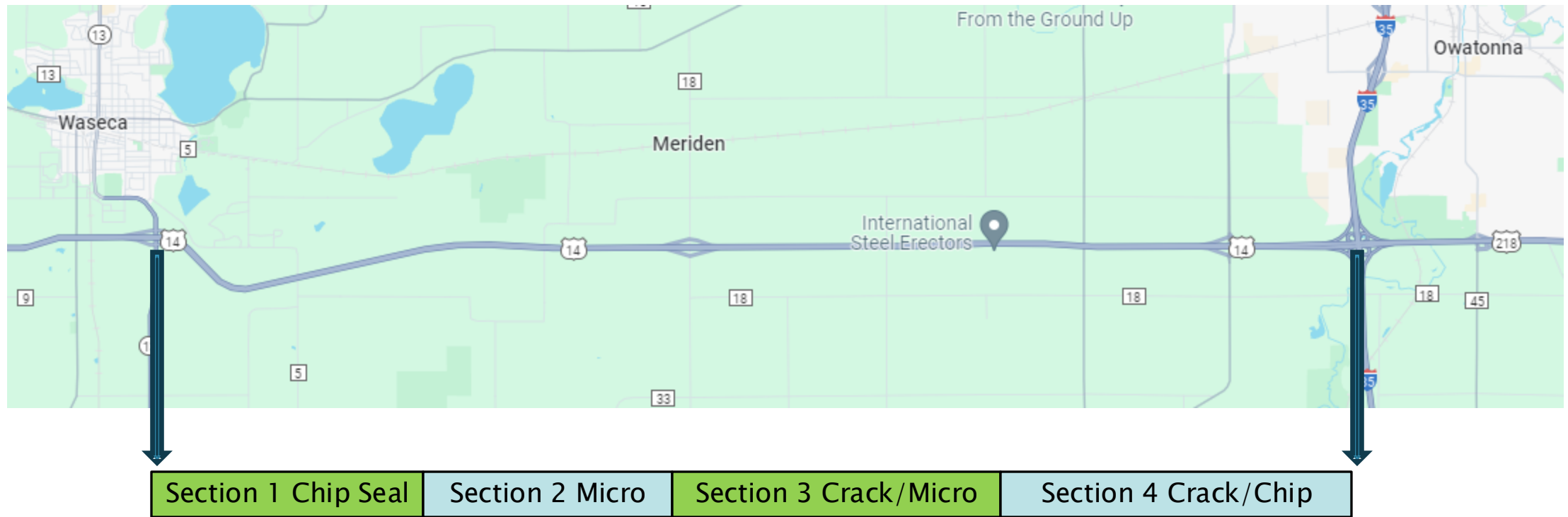
FOR EXAMPLE

- ▶ Project = US 14 from SR 13 to I 35



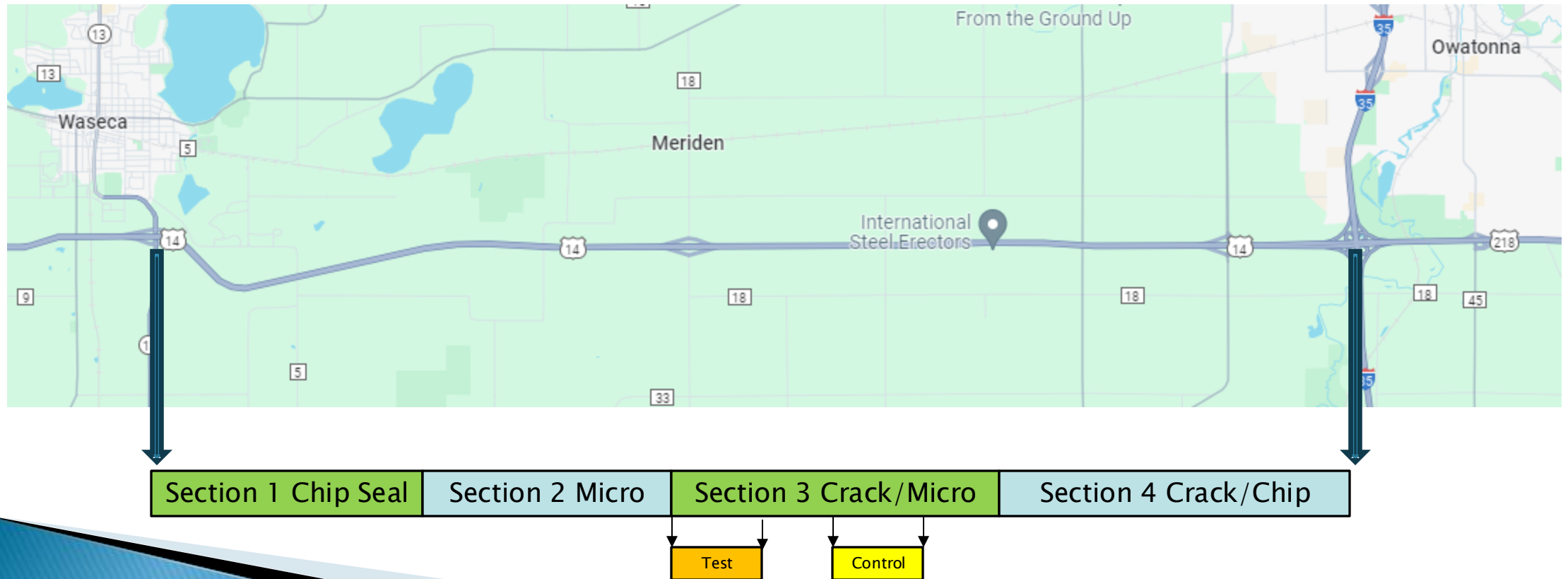
FOR EXAMPLE

- ▶ Section = each specific treatment/combination within the project



FOR EXAMPLE

- ▶ Test Cell = the treated section selected for inclusion in the study
 - 1 Lane/1 Direction
- ▶ Control Cell = the untreated section



Project Nomination

- ▶ Sponsor states may begin nominating sections for inclusion in the study June 1, 2024
 - The Technical Team is available to assist in project selection/nomination
- ▶ Nominations will be submitted through an online survey portal
 - Required data will include
 - Project Location, etc
- ▶ States may submit up to 2 sections for inclusion
 - Both will have data collected and be included in the study
 - Only 1 will have on-site technical support

Project Review

- ▶ Technical team (NCPPE and NCAT) will review submissions
- ▶ Reviews will be complete within 30 days
 - Discuss review with submitting state
 - Inform TAP (Include or Not)
 - TAP will meet (either quarterly or special meeting) to discuss
 - Agency responsibilities will be discussed
- How often can the agency provide pavement condition data?
 - Annual
 - Semi-annual

Technical Advisory Panel (TAP) Meeting

- ▶ Submitting state will make a brief presentation of their section(s) at a virtual TAP meeting
 - Discussion
 - Questions
 - Comments/Suggestions
- ▶ TAP gives consensus for project inclusion in study

Pre-Construction

- ▶ Once a state's project is approved, Pre-Construction Activities will include
 - Specification Review
 - Comments/Suggestions
 - Identification of
 - Test Cell – 500' treated section that will be monitored for the study
 - Control Cell – 500' untreated section that will be monitored for the study
 - Training on Data Collection Forms
 - Requirements for Post Construction Data Collection
 - All forms to be completed by agency
 - Training for field inspection staff

Construction

- ▶ A member of the Technical Team (NCP/NCAT/FP2) will be on site during construction
 - Answer questions and provide support
 - Assist agency on how to collect and document information and data
 - Assist agency on the proper completion of construction documentation forms and documents
 - Collect and document information and data related to the construction of each preservation treatment
 - Equipment Calibration
 - Application Rates
 - Materials
 - Weather

Construction

- ▶ Agency will take material samples from 1 section and ship to NCAT for testing
 - Agency conducts testing for any other sections

Section Performance Monitoring

- ▶ Post Construction, Test and Control Cell Limits will be validated
 - Test Cell Limits will be referenced (LRS, GPS, Signage, etc)
- ▶ Implement appropriate in-service performance monitoring protocols
 - Currently using TPM – cracking/IRI/rutting
- ▶ Agency will collect annual condition data
 - Provide to Technical Team
- ▶ FHWA will collect pavement condition data
 - Need to confirm this

Section Performance Monitoring

- ▶ Agency Responsibilities
 - Testing must be done pre and post construction.
 - Required to conduct the testing and provide traffic control.
 - Testing frequency can be increased above the minimal frequency noted to catch seasonal pavement performance (Spring, Summer, Fall and Winter if possible).
 - Calibrations are required for all equipment.

REQUIRED Section Performance Monitoring

Monitoring	Minimum Frequency (Post Construction)	Process
Distress Survey (Full)	1 / Year	LTPP Manual Distress Survey – (Get link for LTPP) Process – (get link for LTPP) Forms – MnDOT Provide spreadsheet Summary Spreadsheet -
Distress Survey (Site Summary)	1 / Year	LTPP Manual Distress Survey Definitions Forms –
Falling Weight Deflectometer (FWD)	1 / Year	Outer Wheel Path minimum testing and optional mid-lane testing at 100' spacing (25-100-200-300-400-500) per 528' test section. Can do more points or stationing. Test Setup – (use LTPP – no load histories required)
Digital Inspection Vehicle (Ride, Rutting, Video,)	1 / Year	Collection with the calibrated statewide pavement management van. Could include a number of manufactures. Database contains ride, rutting, ... Spreadsheet Format – Provided by MnDOT
Friction	1/ Year	Lock wheel skid trailer
Photographs	1 / Year	Collection of minimum of 4 shots per test section. 1 showing the start, 2 in the middle, 1 at the end. More can be taken. Pictures should be renamed with Section-MonthDay-Year-# taken and shared with contractor. Example 16901-March12-2024-1 then 2,3,4,...
Forensics	End of Study	Are we as PG3 coordinators include pre-application coring and sampling?? Possible 6" Cores as needed after test sections are taken out of the study. Non-structural type of forensic (test pits would not be required)



OPTIONAL Section Performance Monitoring

Monitoring	Process
Drone Video	
Light Weight Profiler	
Pavement Texture (Sand Patch)	
Pavement Texture (Circular Texture Meter)	
Pavement Texture (Dynamic Friction Tester)	
On-Board Sound Intensity (OBSI)	
Other Monitoring?	NA Work with MnDOT to determine the tables that might be needed to accommodate other data types

Data Review and Analysis

- ▶ The Technical Team will compile and analyze annual data
- ▶ Review and Evaluate of Post-Construction data
- ▶ Provide feedback on data review
- ▶ Data will be summarized and available on a website

Outreach and Information Dissemination

- ▶ One TAP Meeting per year at a Regional Pavement Preservation Partnership
 - 2024 – RMWPPP Sacramento California
 - November 12–14
- ▶ One TAP Meeting per year at either MNROAD or NCAT (will rotate)
 - May 6, 2024 NCAT
- ▶ Project Updates
 - Up to four venues per year to report on the project
 - Annual project webinar
 - Annual Pavement Preservation Journal article

Outreach and Information Dissemination

▶ One Page Project Summaries

TSP2 TRANSPORTATION SYSTEM PRESERVATION
TECHNICAL SERVICES PROGRAM

AASHTO PAVEMENT PRESERVATION

NCHRP 20-44(26) Demo Project Mississippi DOT Microsurfacing

Project Overview

This Mississippi Department of Transportation (MDOT) project involved the application of a micro surfacing treatment on 17.5 miles on MS State Route 18 in Clarke County, Mississippi. The pavement is 2 lanes in each direction with a maximum ADT of 550 vehicles per day. The previous surface was a chip seal and was in good condition making this an excellent candidate for micro surfacing.



The specification for the micro surfacing project was developed by modifying the existing MDOT micro surfacing specification and inserting some of the elements of the AASHTO micro surfacing specification. Some of the AASHTO elements that were included were: updated material requirements, updated mix design tests, a preconstruction meeting, and a quality control section. The general contractor was T.L. Wallace Construction out of Columbia, MS.

The project scope included surface preparation, calibration of the materials, and the placement of Type II micro surfacing.

Project Details At-a-Glance

Agency:	Mississippi DOT
Route/Location:	State Route 18/Clarke County, MS
Area/Length:	17.5 miles (Intersection of SR 511/18 to Alabama State Line)
Pre-Condition:	Fair Condition (weighted PCR of 75)
Completion Date:	August 2021
Materials:	CSS-1EP (emulsion) ISSA Type II (aggregate) Portland Cement (mineral filler)
Application Rates:	25.4 lb/sy
Weather:	84°F, 81% humidity, partly cloudy



09/2021

PG3 Project Closeout

- ▶ At end of study period (2029)
- ▶ All documentation will be compiled
- ▶ Final report prepared and submitted

Questions???



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