



Welcome to the INDOT Bridge Design Conference

Use QR code to engage
with us in Slido →



Conference Objective

Share Knowledge & Useful Take-Aways

Policy Updates

- Design Memo Review

Lessons Learned

- Life Cycle Panel

- Cost Estimating

- Accelerated Bridge Construction

Practical Design Topics

- Steel Design

- Stormwater

- Thoughts from INDOT Legal





Thank You

**Speakers
Production Team
Structures Committee
Survey Responders**



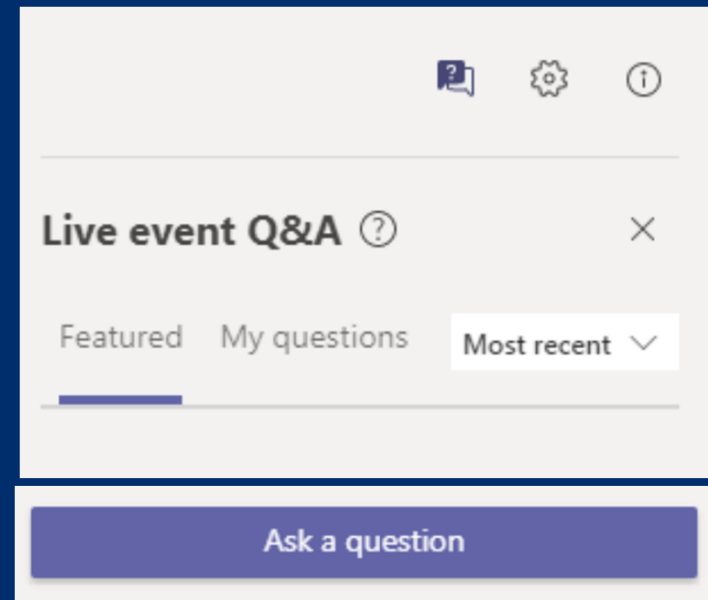
Housekeeping: Virtual

Credit for time signed in

Questions:

Use Q&A in Teams

Send questions early



Housekeeping: In-Person

Paper Sign-in Sheets
Sign in and out!



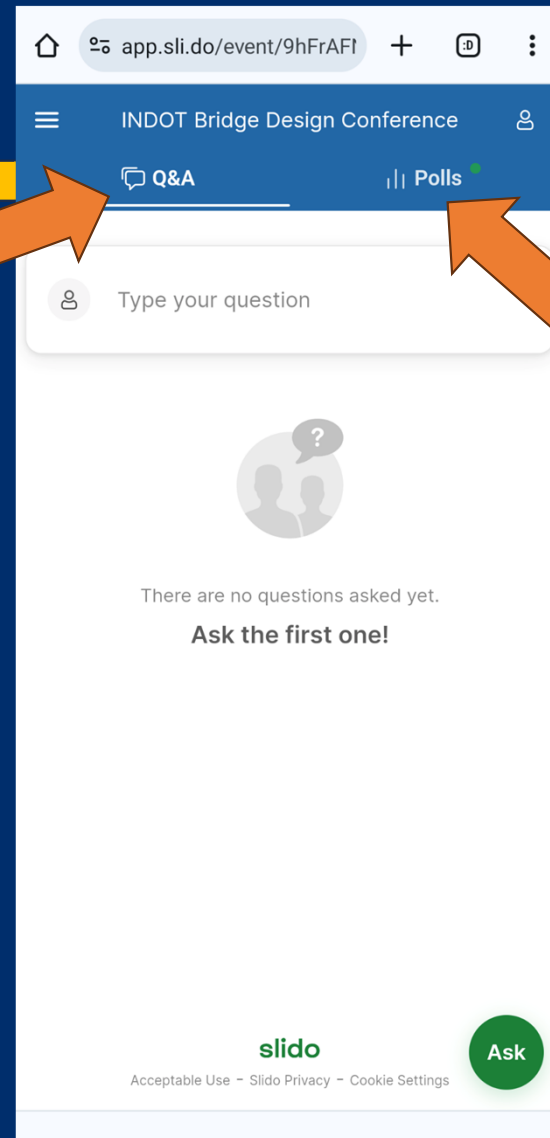
Questions:

Use Slido QR code or
Sli.do enter code: 1256865



Slido 101

Post Questions
(Elevates others' Q's too)



Respond
to Polls



slido



What type of organization do you represent?

ⓘ Start presenting to display the poll results on this slide.

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How many years of experience do you have?

ⓘ Start presenting to display the poll results on this slide.

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What is your work title?

ⓘ Start presenting to display the poll results on this slide.

Final Housekeeping: For All

☐ Presentation files to the web

Posted within days

☐ Attendee Survey

@ end of day and via email

☐ CEU Certificates

via email (Weeks)



• [INDOT Bridge Design Conference Presentations](#)

- [Federal Lands Design Resources](#)
- [Purdue Road School Archived Presentations](#)

The screenshot shows a web browser window with the URL in.gov/indot/doing-business-with-indot/consultants/bridge-design-and-load-rating/. The page header includes the Indiana Department of Transportation logo and a menu icon. The main heading is "Bridge Design and Load Rating". Below the heading is a breadcrumb trail: "Doing Business with INDOT > Consultants > Bridge Design and Load Rating". The main content area starts with a paragraph: "The Bridge Engineering Division is responsible for the design of new, replacement and rehabilitated bridges," followed by a section titled "General Information". Under "General Information", there is a sub-section "Employment Opportunities" with a link to "Outreach flyer". Below that is the "ASCE-INDOT Structures Committee" section.



Small Bites (Sweet and Salty)



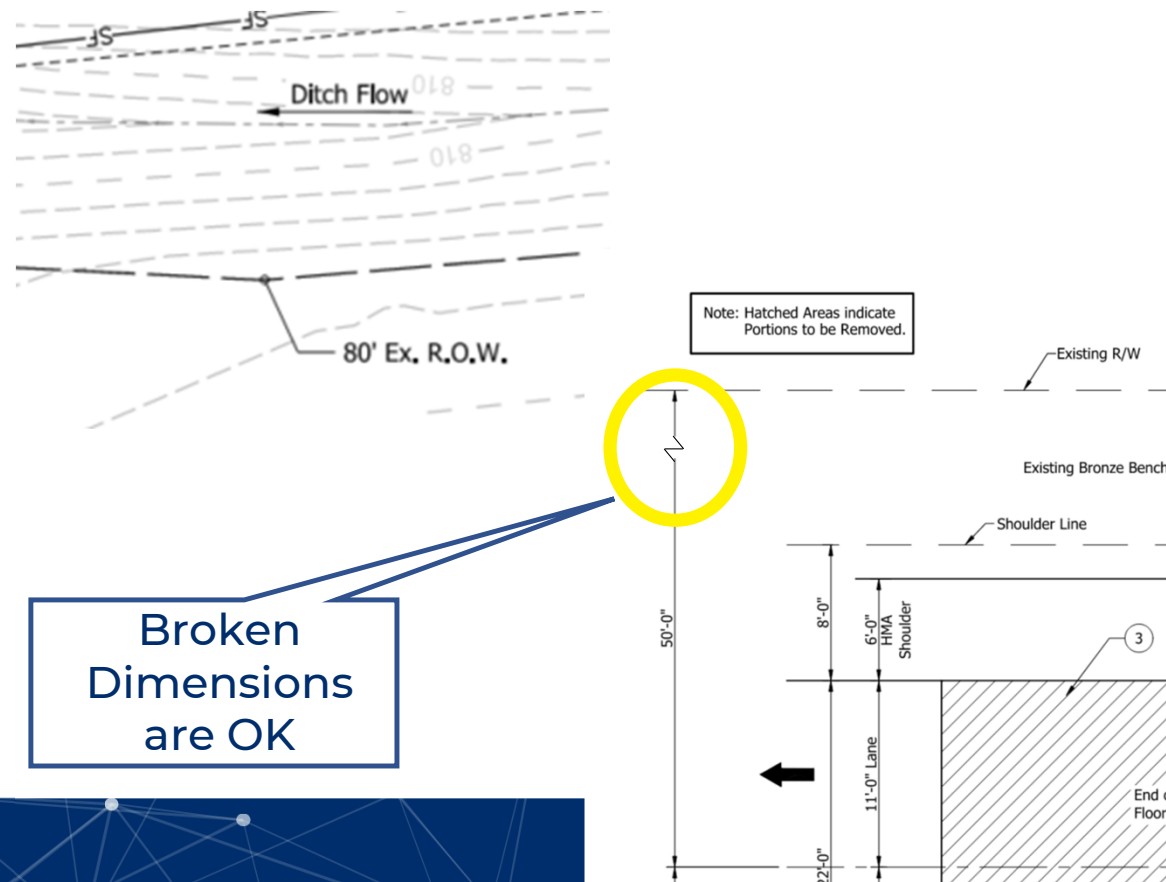
Salty – R/W on PM Plans



- If contractor needs to be off the pavement to do the work...
RW must be shown!

- Examples:

- Scour Countermeasures
- Substructure Patching
- Superstructure Painting
- Coping Work



Salty – Use of PM vs Rehab

TITLE SHEET PLAN TYPE

- Indicates design criteria

Full Level One Checklist



INDIANA DEPARTMENT OF TRANSPORTATION

STATION
Structure
250+45.00 Lr+ 74'

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 156 AT: RP 4+88

1 Contr

Text Font = Tahoma (Typ. All Text)
Text Height = 0.50", Bold

Typ. All Tables on Title Sheet:
Table Title Text Height = 0.1
Table Data: 12 Pt Text

Text Height = 0.70"

Text Height = 0.37"

Text Height = 0.40"

MOT Level One Only



INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PREVENTATIVE MAINTENANCE PLANS

BRIDGE THIN DECK OVERLAY

CONTRACT NO. B-00000

1

Same goes for STG1
Report Names

Meeting Minutes vs. Rehabilitation Report



Salty – FT Permit Files

Include permit application in FT Permit File

14-1.02(04) Final Tracings Submittal [Rev. Oct. 2018, Jun. 2021]

All final tracings documents, except unique special provisions, should be submitted electronically into ERMS in accordance with Section 14-1.02(02). It is the responsibility of the designer handling a lead project to ensure the tracings for all kinned projects are brought together and submitted to the project manager. The project manager is responsible for submitting the Final Tracings package to the Contract Administration Division.

Documents for final tracings submittal should be marked "Letting Date Critical" to indicate the letting date. The Final Tracings Checklist, including established naming conventions and instructions, is available on the INDOT [Design Manual Editable Documents](#) webpage, under Design Submittal.

Final Tracings Checklist

FINAL TRACINGS CHECKLIST

ERMS ID (DOT_#####)	Document Description	File Type	Remarks (see FT Checklist Additional Instructions)	Description Abbreviation	ERMS Doc. Type
	Permits		Letting Date Critical. See instructions for file content and organization.	Permits	Permits

- Permits*. All permit approval documents with their associated permit applications and conditions should be in a single file. For General permits where an approval document is not issued, the general permit conditions should be included in the file. For a Rule 5 permit, the entire permit (date-stamped NOI, NOS, SWPPP, narrative, attachments, maps, conditions, etc.) should be included. For contracts with multiple Des. numbers, use the lead Des. number in the ERMS Title and include a summary sheet identifying which permits are applicable to which Des. number. Ensure that the combined PDF is keyword searchable and include bookmarks to locate different permits within the file. Where projects are bundled, duplicate permit conditions should be removed.

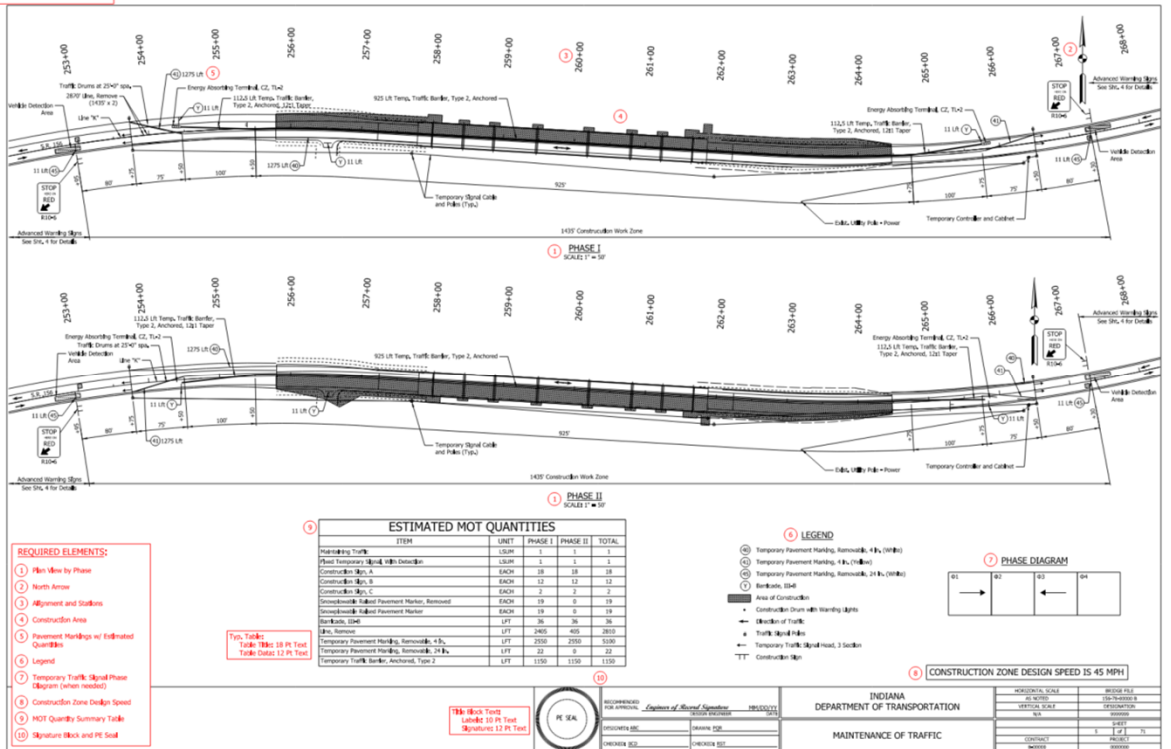
Sweet – Rehab Sample Plans



Highlights

- Temp. Signal MOT

PURPOSE:
The purpose of this drawing is to show Traffic Control Layout and details by Construction Phase.



Sweet – Rehab Sample Plans



Highlights

- Temp. Signal MOT
- Existing GP
- Specific Notes

PURPOSE:
The purpose of the General Plan - Typical Section is to show necessary information.

7 GENERAL NOTES

Reinforcing steel covering shall be 2 1/2" in top and 1" minimum in the bottom of the floor slabs and 2" in all other parts unless noted.

The tops of wing walls, tops of pier caps and concrete railing to be sealed in accordance with Article 702.21 of Specifications. Estimated Quantity = 4,454 Sft.

Where new work is to be fitted to old work, the Contractor shall check and verify all dimensions, elevations, and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new construction to the existing structure.

Portions of Present Structure to be removed.

Data shown for existing bridge and subsequent geometry for proposed structure taken from original structure plans. Due to the unknown original datum from the existing plans, the Q100 Elevation from the hydraulics and the Low Water Elevation from the existing plans were adjusted by 1.33' which is the approximate difference between the bridge seat elevations from the existing plans versus the 2019 survey.

Plans for existing structure are on file in the Research and Document Section at the Indiana Department of Transportation, as Bridge File No. 156-78-03115 and are available upon request. The existing bridge was built and alignment was established under Project No. S-33(5) and Contract No. 4418.

GENERAL NOTES
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DESIGN DATA
Design loading in accordance with 1953 AASHTO Specifications.
Design in Approach Spans, and reconstructed hard caps designed for 1953 AASHTO Specifications.

REQUIRED ELEMENTS
1 Existing Typical Section
2 Proposed Typical Section
3 Structure Data
- Lane/Crossroad
- O. to O. Clear
- Clear Roadway
- Beam Spacing
- Guardrail Type
4 Limits of Removal
5 Limits of Surface
6 Deck Drains
7 General Notes
8 The New Survey
9 Indication of Elevation
10 Design Data
11 Construction Limits
12 Seismic Design
13 Jacking Loads (support of the required)
14 Title (Proposed)
- Superstructure
- No. of Spans
- Span Length
- Slab
- Clear Roadway
- Route/Crossroad
- County
15 Line Designation
16 Signature Block

CONTRACT NO. 156-78-03115 PROJECT NO. S-33(5) CONTRACT DATE 10/2018 PROJECT DATE 10/2018

Sweet – Communication

Designers

- **Early coordination on unique situations**
 - **Design Exceptions**
 - **Field Check Requests**
 - **Major Projects Noted**

INDOT

- **RSP Updates impacting designers**
- **New ListServe service coming soon**





...on to the Main Course

