Road Design Review Checklists

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History

• Designers:
  • Uniformity
  • Consistency

• INDOT:
  • Risk Based Approach

• Reviewers:
  • Clarity

GOAL

Not Accurate
Not Precise

Accurate
Not Precise

Not Accurate
Precise

Accurate
Precise
Development

• > 12 Months of Development
  • INDOT Road Review Group
  • Consultant Reviewers from Michael Baker and Burgess & Niple

• Goals
  • Update the Road Submittal Evaluation Criteria
  • Create Comprehensive Checklists for each Stage Submittal
  • Develop a Transmittal Letter Template for each Submittal
  • Update Chapter 14 of the Indiana Design Manual for the Checklist Changes
  • Develop Sample Road Plans
Theory

- New/Forthcoming Requirements
  - Current Chapter 14 Requirements
  - Historical Data

Review Checklists
Conceptual Changes

INDIANA DEPARTMENT OF TRANSPORTATION

ROAD PLANS
ROUTE: S.R. 28 FROM: RP 138+29 TO: RP 138+95
PROJECT NO. 1593245 P.E.
1593245 R/W
1593245 CONST.

STAGE 3

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100 Complete

NextLevel INDIANA
Road Plan Review Checklists

- Checklists Developed For Stages 1, 2, 3
  - Include requirements from Ch. 14
  - Additional items will require updates to Ch. 14
  - Revised evaluation criteria are being developed
  - Checklist will be a guide for the evaluation criteria

- Deficiencies at Stage 3
  - Require Resubmittal
  - Last Engineering Dept. Review
  - No Surprises at Advertisement
**Checklist How To**

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**Reviewer**
- Download & Complete
- Attach to TransLtr in ERMS

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**Designer**
- Internal QA
- Do NOT Submit Checklist
- Respond to Comments
- Upload at MarkUps File

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**Road Review Stage 1 Checklist**

**REVIEW INFORMATION**
- Doc Location
- Designer/Team
- Submitted Date
- Reviewer/Team
- Review Date

Review columns are abbreviated as follows: Sufficient (S), Deficient (D), and Not Applicable (NA). All items marked NA are not reviewed.

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**TRANSMITTAL LETTER**

<table>
<thead>
<tr>
<th>S</th>
<th>D</th>
<th>NA</th>
</tr>
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<tbody>
<tr>
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1. The transmittal letter includes the file uploaded.
2. The transmittal letter explained the status of any missing items, special circumstances that might aid the reviewer during the review, and was signed by the responsible person for the substantive evaluation.
3. The transmittal letter was attached to the email notifying the Coordinator of the ERMS upload with the MEU file listing the files that were uploaded. The MEU email subject line was revised to: [Doc No.], route, and stage submitted.
4. Noted any added value demonstrated in the proposed design.
5. Noted the status of the commitments report.
6. Noted the status of any hydraulics approval, if required.
7. Noted if a Geotechnical investigation is required and, if so, the status of the geotechnical investigation report.

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**NextLevel INDIANA**
Transmittal Letter

- Transmittal Letter for Communication
  - Designer:
    - Items included/missing in the submittal
    - Updates on non-ERMS coordination
  - Reviewer:
    - Uniform Communication – all comments in one place
    - Attach Checklist to Transmittal Letter
  - Transmittal Letter Template
    - Under development - will list all the key communication items

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An explanation for any files or specific items not submitted is noted below.

The hydraulics submittal is currently being reviewed by INDOT Hydraulics. The draft unapproved hydraulics report is provided. The approved report will be submitted at Stage 2.

No commitments have been entered into the database at this time as the environmental document is not complete. Commitments will be submitted at Stage 3.

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An explanation of any added value proposed with the stage 1 submittal.

Added value has been demonstrated in the design of this project by recommending a culvert rehabilitation rather than a replacement for Str. No. 2. This revision to the scope of work was approved by the district as documented in the Addendum to the Abbreviated Engineer’s Report. The revision resulted in an estimated savings of $125,000 to the project construction cost.
Forthcoming

- Increased Usability of Checklists
- Grace during this Transition

Summer/Fall 2021

- Evaluation Updates
- Chapter 14 Updates
- Sample Road Project Plans
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LESSONS LEARNED

• Safety
• Documentation Submission and Completion Time
• 3 R and Partial 3 R Project
• Miscellaneous
SAFETY

- Worker Safety
- Motorist Safety
- Pedestrian Safety
DOCUMENTATION SUBMISSION AND COMPLETION TIME

• Project Scope
• Design Exception
• Proprietary Material
• ADA Technical Inquiry
• Separate Traffic Plan Submittal
• IHCP Documentation
• Cost Estimate
• USP
• MFUT ERMS upload
3 R AND PARTIAL 3 R PROJECTS

- 3 R Projects
- Partial 3R Projects
MISCELLANEOUS

• Small Structure and Other Maintenance Projects
• LPA Project Submittal with Sidewalk / Curb Ramp
• Performance Evaluation