Looking Before You Leap

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Red Flag Investigations (RFI)

- What are they?
- When are they required?
- How are they used?
  - Case Study #1
  - Case Study #2
  - Case Study #3
What is a Red Flag?

Area of Concern within a Study Area
What is a Study Area?

“…within ½ mile radius of the project area (boundary)...”
What is an RFI?

- **Document**

- **Preliminary Investigation**
  
  “Preliminary investigation performed for INDOT projects which outlines the project area and environmental concerns.” (INDOT Hazardous Materials Manual - 2009)

- **Research Tool**
  
  “...a research tool that helps to determine if any Red Flags (potential issues) are located within the project area...” ...(INDOT Categorical Exclusion Manual – 2011)
What is an RFI?

• **General Overview**
  - “...give a general overview of the environmental condition of the area...” (INDOT Hazardous Materials Manual -2009)
  - “A review of resources and features in the project area to determine whether any of a range of potential environmental concerns are present. ...” (INDOT Categorical Exclusion Manual – 2011)

• **Areas of Concern**
  - “…determine areas of concern within the project study area...” (INDOT Categorical Exclusion Manual – 2011)
  - “…screen the project area and identify points of concern, including environmental, constructability, and engineering issues...” (INDOT Categorical Exclusion Manual – 2011)

• **Areas to Avoid**
  - “…highlight areas which may need additional environmental work or areas to avoid entirely...” (INDOT Hazardous Materials Manual -2009)
Benefits?

“..Conducting a Red Flag Investigation early on in the process allows the preparer to more closely examine areas or items of concern that might be impacted as a result of the proposed action.” (INDOT Categorical Exclusion Manual – 2011)

“...first-step screening tool to identify and eliminate any alternatives which may be fatally flawed on environmental grounds...” ...” (INDOT Categorical Exclusion Manual – 2011)
What is included?

• Project Description
  • Proposed Right-of-Way
  • Type of Excavation
  • Other Factors Influencing Recommendations
• Infrastructure
• Water Resources
• Mining & Mineral Exploration
• Ecological Information
• Cultural Resources
• Hazmat Concerns
Is it required?

- Required First Step in NEPA Process
- Not Usually Reviewed by INDOT or IDEM, unless a State Project
- Required Inclusion with NEPA Document Submittal
CASE STUDIES
Adventures in RFI Customization
Why?

• FY 2012 FHWA Planning Emphasis Area
• Indicates possible environmental impacts early in project development
• Corresponds with increased emphasis on performance measures – actually quantifying impacts instead of educated guesses
Which?

- LPA Projects in TIP
- No state or federal projects
- Initial effort was system-level while last 2 years have been project by project prior to preliminary engineering
What?

• Broadened categories where needed
• Switched from INDOT’s provided infrastructure data to local “points of interest” data and other local data sources
Other Customizations

• Added FEMA delineated local floodplain
• Added local historical information
• Converted from web service to file geodatabase to allow updates, keeping analysis data flexible
• General data cleaning and quality control
Before & After

Beginning

After Cleaning
Location, Location, Location

Beginning

After Verification
Possible Future Revisions

• Finer analysis
• Make more widely available
RFI as an Opportunity
NIRPC’s Initial Approach

Great Expectations

• PEL and RFI as an opportunity to coordinate transportation projects with regional environmental projects and plans.
• Fine Tuning INDOT RFI tool with local data, regional plans, and field knowledge
• Helping LPAs and INDOT Identify local partners for early coordination and mitigation efforts
• Highlighting deal breakers early in the process.
Early Attempts and Learning Experiences

- 2011: I-94 Bridge Rehab: “Willow Creek Channel Realignment” in TIP
- 2012: SR 51 Pipe reline
- 2011-2013: LPA projects we are still behind the curve.
Town of Schererville- Kennedy Ave. Scoping Study

- Evaluate widening, extension, and/or relocation
- Considerable number of potential environmental and cultural concerns
- Project area includes portions of Hoosier Prairie DNR Nature Preserve
Porter County- Division & Smoke Road Intersection Improvement

- Safety improvement
- Rural area - wooded
- Project area bordered by wetland
- Portion of project area within floodplain
City of Hobart - 3rd St. Streetscape Project

- Pavement reconstruction and resurfacing
- Pedestrian friendly
- Historically and aesthetically sensitive
- Sanitary and storm water pipe replacement and repairs
- Incorporate “green” design concepts
What have we accomplished?

Less than helpful:
• Duplicative review
• Annoyed INDOT Environmental
• “Told you so....”
• Missed opportunities

Helpful?
• Increased knowledge of future transportation projects when stakeholders/citizens ask.
• Hobart Project –
  • Leverage transportation project with watershed implementation and other funding sources
  • Consider all needs in transportation project.
• Utilize RFI Tool in NIRPC corridor study project
Adding more value

- Marketing and Outreach to LPAs on RFI services
- Better Environmental mitigation cost estimation
  - Tools
  - Authorization/Encouragement
- Land Acquisition – learning from local Land Trusts how to identify willing sellers.

Tools we could use
Ensuring Project Success... At all Costs

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What did I get myself into?

1. LPA has limited funds
2. How bad do you want it?
3. I’m the Low Bidder, what next?
4. Notice to Proceed (NTP) Received
5. Project Development Begins...
6. Crap, it’s gonna cost waaaaay more
7. LPA can’t afford the Scope
8. Scale Back & ReScope
9. Delay
10. Federal Funds Threatened
11. Angry Customer
12. Lost Revenue
Use it, or Lose it

• Fiscal Constraint
• Programmed Estimate
• Programmed Schedule, Letting Date Set
• Funds for Each Phase must receive FMIS & PO Opened in the Funding Year as listed TIP &/or STIP
• FMIS Months = Begin annually with July and End annually with March/April
Estimation vs. Guess-timation

- Plan for the Worst
- Realistic, not Hopeful
- Consider
  - Past Project Costs
  - Recent Item Costs
  - Projected Cost Inflation for Spending Year
  - Specific Project Characteristics
Cattails & Other Evils

- Historic Districts (NR, Interim Report, Local Designation)
- Indiana Brown Bat
- Bald Eagle
- Cattails (Wetland)
- Floodplains
- Park-Land Conversion
- Right-of-Way Acquisition
- Railroad Properties

- Utilities (any & all)
- Emergency Services (Access)
- School Bus (Access)
- Historic Sites & Elements (NR, Interim Report, Local Designation)
- Caves
- Old Gas Station on the Corner
- ADA Accessibility
- Unhappy Public
Maybe they won’t notice?

• Crossing Your Fingers
• Maybe It will get overlooked
• Doesn’t Apply to Us
• Claim Ignorance
• Never Had to Do that Before
Proactive vs. Reactive

- Look Ahead, Think Ahead, Plan Ahead, Design Accordingly
  or
- Ignore, Design, Fail, Delay
  - ReDesign
  - ReSubmittal
  - Additional Review Periods
  - Potential Loss of Federal Funds
  - Angry Customer
Due Diligence

1. Gather Existing Information, Initial Review
2. Bid
3. NTP
4. Collect New Information, then Review
5. Study Warranted, then Review Results
6. Design Accordingly
How?

- Consider All Aspects of a Project Area
- Look for Potential Issues
- Consider Local Uses & Needs
- Ask yourself...
  - “What could delay this project?”
  - “Will the potential delay impact the project timeline?”
  - “How much will the potential delay cost?”
  - “Does the potential delay require additional studies?”
- “Are we qualified to conduct these additional studies in-house?”
- “Will the potential issue impact proposed alignment?”
- “Will the potential issue impact the design?”
- “How complicated will it be to address this potential issue?”
- “Will the potential issue add new costs to my project?”
- “Will the potential issue increase the cost of my design?”
Project Eligibility Review

- Occurs Prior to inclusion in Long-Range Transportation Plan (LRTP)
- Occurs prior to being Considered for an MPO Funding Award
Project Eligibility Review

2-Step Process

Step 1 – Received Proposed Project Requests & Project Ideas
- Review Submission from LPA ERC & Prepare RFI Document
- Develop Detailed, Written Scope (termini, specific requirements, specific required elements)

Step 2
- Provide RFI Document & Scope to LPA ERC
- Receive Proposed Project Submission
  - Project Estimate Stamped by PE
  - Amount Requested for each Phase & Funding Year when Local Match will be Available
  - Proposed Project Schedule
Questions?

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