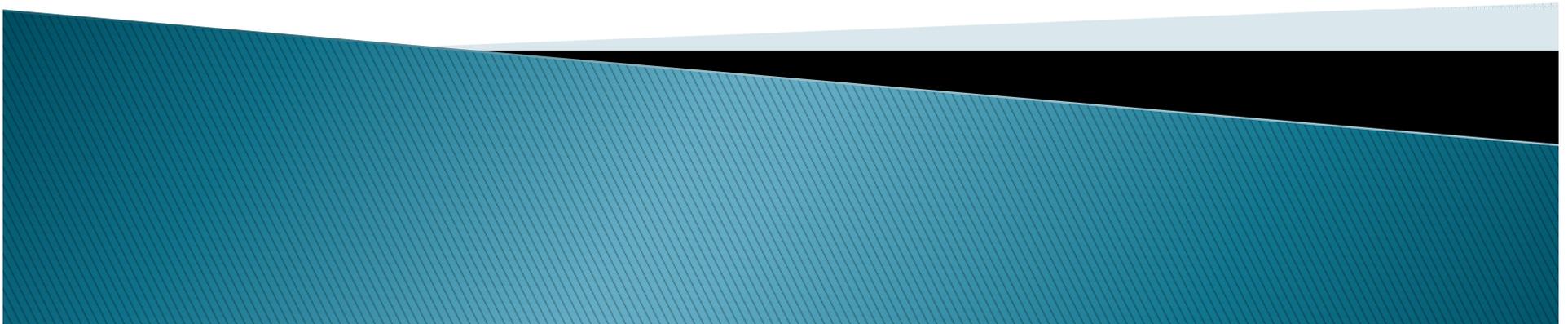


Proj. Planning
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Project Planning Enhancements



Project Programming and Planning

- ▶ We are only as good as our plan
- ▶ This is a critical phase in project delivery that needs to be strengthened
- ▶ It takes teamwork!
- ▶ Project Delivery Efficiency Teams 1 and 2
 - Team 1: Project Planning Considerations Tool (PPC)
 - Team 2: Streamlined Project Programming & Planning Process



Emphasis on Planning

- ▶ Good plans shape good decisions! Calculate the steps forward, don't stumble backwards.
- ▶ So what do we do?
 - Develop an accurate scope
 - Focus on elements that affect:
 - Cost
 - Schedule
 - Footprint
 - Potential impacts
 - Decrease or eliminate:
 - Scope change
 - Re-work
 - Need for additional ground or environmental survey
- ▶ **GOAL: Deliver the RIGHT project at the RIGHT time.**



How can we accomplish this?

- ▶ Enhance District Engineer or Local Project Sponsor involvement earlier
- ▶ Conduct early coordination meetings with cross section of project delivery staff
- ▶ Establish project footprint earlier
- ▶ Identify resources based on footprint, not mile markers
- ▶ Conduct targeted surveys
- ▶ Complete more design, sooner
- ▶ Engage in strategic public involvement



Enhanced District Engineer or Local Project Sponsor Involvement

- ▶ We must think ahead!
- ▶ Consult the experts! Who knows more about the project during programming than the District Engineer or Local Project Sponsor?
- ▶ The District Engineers and Local Project Sponsors will be asked to provide input early and often
 - This will enhance timely coordination and facilitate communication between NDOR and the LPA



Project Planning Considerations Tool

▶ Purpose:

- Provoke thought about what the District Engineer or Local Project Sponsor may want to accomplish with the project
- Communication!
 - Project issues, concerns, or community desires are not always apparent
 - We have metrics, photos, databases
 - We don't know what we don't know!
 - Overtopping areas
 - Maintenance issues
 - Erosion issues



Project Planning Considerations Tool

Project Planning Considerations (Comments for DR73 & DR530)

Common issues with projects:

Pavement

- Should surfaced shoulders be considered? (2', 6', 8', 10'?) Should a 28' top be considered?
- Are you aware of location specific pavement problems? If so, please provide as much information as possible. (i.e. location and specific problem or issue)
- Are there subgrade issues? (location)
- Are the existing right turn lanes in high speed, unsignalized, rural locations offset?
- Are there existing fly-by lanes to be evaluated for conversion to a left turn lane?
- Are there turn lanes where the existing surfaced shoulder width was used to accommodate the necessary width?
- Are there superelevation or cross slope issues?
- Are there turn-outs or access to Historical markers, rest areas, scenic overlooks, etc. be considered in project scope?
- Will mailbox turnouts be constructed or reconstructed?
- Are there intersections with substandard geometry for consideration of modifications (island modification/repair, etc.)?

Drainage/Erosion Control

- Do culverts need to be repaired, replaced or replaced with bridges?
- Are there areas that need hydraulic analysis? (Road overtopping, upstream flooding etc.)
- Are there challenges associated with the erosion of the shoulder that could be remedied by the project?
- Are there locations where snow control issues could be mitigated through grading of the back slopes?
- Are parallel dikes/drop structures needed at the top of backslopes?
- Are there irrigation structures that will be impacted (include name of irrigation company, if known)?

Grading/ Guardrail

- Are there unprotected steep side slopes to be considered for mitigation?
- Are there guardrail locations that a cost effective analysis should be completed to evaluate eliminating the guardrail and flattening the foreslopes or otherwise eliminating the object being shielded?

Environmental

- Are there governmental, historical, public or recreational facilities along the project corridor?
- Is the project in an MS4 community? (Generally communities with populations in excess of 10,000 people)

Urban

- ADA work: List known issues with improving curb ramps to meet ADA (ROW, Historic, replace with park land, etc. etc.)
- Are there areas for consideration of curb repair?
- Are there storm sewer/manhole or utility components that need to be repaired or adjusted to grade? (broken lids, etc.)
- Do the returns to the side streets need to be surfaced/resurfaced?
- City concerns/issues to consider.
- Do the lighting or traffic signals need to be considered for rehabilitation?
- Does the City want utility rehabilitation to be included in the project contract?

Project Planning Considerations (Comments for DR73 & DR530)

Structures

- Are there erosion issues requiring inlets and drop pipes to be added on the bridge approaches?
- Will a contractor crossing be necessary? (Location?)
- Are there cattle passes on the project, if so, provide as much detail as possible (i.e. location, current use, needed for drainage)

Railroad

- Name of railroad and whether it is parallel or crossing.
- Does crossing need repair or widening? (condition)
- Will the crossing need to be raised? (pavement determination)

Constructability

- Is a detour recommended?
 - What is the preferred detour route?
 - Will improvements be necessary on the proposed detour?
- Are there local celebrations to avoid?

Other

- Business considerations (i.e. trucking, etc.) within or in close proximity to project

Are there locations where snow control issues could be mitigated through grading of the back slopes?

- Anticipated issues that may arise during ROW negotiations
- Are there potential impacts to utilities?
- Are there intersections that need to be checked to see if they meet the warrant for street lighting?
- Are permanent pavement markings or signs to be included with project?

Project Planning Considerations Tool

▶ Goals:

- Clarify project expectations
- Discovery during planning, not Plan in Hand
- Reduce scope change
- Reduce scope creep
- Reduce re-work



The DR-73 & Planning Document

- ▶ What's a DR-73 & Planning Document?
- ▶ Planning Documents are created for nearly all NDOR projects to document the intent of the project and to establish important baseline conditions (i.e., cost, schedule, standards, scope....)
- ▶ They are an attachment to the DR-73, our Project Initiation Request form.
- ▶ Every DR-73 and Planning Document is packaged together for approval by NDOR Administration



Streamlined DR-73 & Planning Document Development

- ▶ Right-sizing
- ▶ Focus on essential elements of scope
- ▶ Address PPC items
 - Include in project scope?
 - Exclude from project scope?
- ▶ Reduce review and approval time
- ▶ Take advantage of efficiencies gained by the new CE process
- ▶ Elements of the DR-73 and Planning Document development process will be mirrored for Local Projects



Project Descriptions

- ▶ NDOR requires this for all projects, regardless of type or CE level
- ▶ Current Project Description template:
 - 5 pages
 - Over 40 bullet points options
 - Introductory narratives
 - It's LONG, and sometimes CONFUSING!
- ▶ "Living" document that is updated as the project moves through Design
- ▶ Originally created to align with the T&E Checklist when NEPA work began at scoping



Project Descriptions

- ▶ NDOR established a team to partner with FHWA to create a new Project Description
- ▶ Eliminate bullet points and replace with a narrative of major work items
- ▶ GOAL: Reduce the level of detail to minimize the need to update or modify the content as the project continues through Design.
 - Reduce re-work
 - Reduce re-consultation
- ▶ Provide supplemental scope of work details to assist document writers



Project Descriptions

- ▶ NDOR has had preliminary discussions with FHWA, but additional work is necessary
- ▶ Currently developing BEFORE and AFTER Project Description samples for illustration
- ▶ Once a new template is created, Project Description changes will be implemented on new projects.
- ▶ Implementation for active projects has not been discussed



Early Floodplain/Floodway Identification

- ▶ Early identification of the floodplain and floodway are critical to successful project delivery
- ▶ This information was previously included in the Initial Environmental Review (IER) that was produced by the Environmental Section
 - This review has now been moved downstream in the delivery process and will be called the Preliminary Environmental Review (PER)



Early Floodplain/Floodway Identification

- ▶ The Project Scoping Unit will now complete a PRESENCE/ABSENCE determination during the Planning Phase
- ▶ This will be documented in the Planning Document
- ▶ Potential Outcome:
 - Plan for the time it takes by adding tasks to schedule!
 - Advance critical tasks for completing analysis
 - Consider scope modifications to avoid impacts
- ▶ Roadway Design and/or Bridge Division will provide additional analysis as more details are available.

