# Instructions NDOT 530-I

This document provides instructions for filling out the NDOT 530 form, as well as guidance to the amount of detail expected. The numbered steps below correspond to numbers identifying each section of the NDOT 530. Contact the Urban/Transportation Alternatives or the Secondary Roads Unit Head if you have any questions. Electronic submittal of the NDOT 530 is preferred and should be submitted to the appropriate Unit Head.

Unit Head contact information can be found at:

http://dot.nebraska.gov/business-center/lpa/projects/

#### 1. New/Revised

- a. Check NEW if this form is the first for the project.
- b. Check REVISED if this form is a revision to a previous NDOT 530 for the same project.

# 2. LPA and County Name

a. The name of the Local Public Agency sponsoring the project. Indicate the county, if the county is not the LPA. <u>Example – Nebraska City (Otoe)</u>

# 3. Responsible Charge/Project Liaison

a. Print name of the Responsible Charge who will manage the project for the LPA. If NDOT performs the RC duties, print name of the project liaison who will be the LPA's contact person.

# 4. Purpose and Need/Project Description

- a. The Purpose and Need Statement serves as the cornerstone for the alternatives analysis but should not discuss any specific alternate. Care should be taken that the purpose and need statement is not so narrowly drafted that it unreasonably points to a single solution.
  - i. The purpose portion is a goal for the project that defines the transportation problem to be solved. Examples: "The purpose of the project is to maintain the transportation asset, improve the reliability of the transportation system, perpetuate the mobility of the traveling public, to reduce the incidence of crashes, reduce congestion", etc.
  - ii. The need portion is a numbers driven statement that proves that a problem exists and provides data to support the purpose. Examples: "The need of the project is to address rutting, faulting, cracking, narrow pavement, narrow shoulders, bridge sufficiency rating, scour critical, functional obsolete, crash numbers, highway maintenance costs", etc., giving data for the need that exists.
  - iii. The Purpose and Need Statement is intended to clarify the expected outcome of public expenditure and to justify that expenditure answering the question: What are you trying to accomplish and why you think it is necessary? It also establishes what the current condition is and what the desired condition would be.

- iv. The Purpose and Need Statement gives information that is adequate for use to evaluate, eliminate, or advance alternatives and does not restrict consideration of an alternative.
- b. The Project Description lists the type of activities that will be analyzed for environmental clearance. The Project Description defines the project footprint and location with logical termini, existing facilities, construction activities, and types of improvements so the FHWA and other state and federal resource agencies can understand the full effects of the project on both the natural and human environment.
  - i. If the Project Description does not include all project activities when environmental clearance is sought, the project could experience delays as information not previously included in the Project Description has to be resubmitted for environmental clearance.
  - ii. Project Descriptions must be written so a member of the general public who has no prior knowledge of the project can understand what the project entails, without the benefit of looking at a plan set. Nomenclature and terms typically used in engineering plans and roadway projects may not be understood by the public. If possible, avoid use of station/offset to describe locations. If specific locations need to be described, use mile marker or cardinal directions from a landmark, intersection, or other geographical feature to locate specific areas or items (i.e., "A right-turn lane will be constructed in the southwest corner of the 156th Street and West Center Avenue intersection to accommodate the eastbound to southbound turn movement").
  - iii. For the purposes of the Project Description, the numerical value for mile marker is equivalent to the reference post value. Substitute a decimal point for the "+" symbol when reporting a reference post as a mile marker. Spell out the words "feet" and "inches". Do not use abbreviations or tic marks for units of measure. When appearing for the first time in a project description, any acronym (i.e., ADA, MM, SWPPP, etc.) should initially be spelled out with the acronym following in parenthesis. For any subsequent use in the project description, the actual acronym can be used. First use of the term "3R" should be as follows: 3R (Resurfacing, Restoration, and Rehabilitation). Any subsequent use in the Project Description can appear as "3R".
  - iv. The latitude and longitude points to the general center of the project. Google Earth of Google Maps can be used to assist with defining the latitude and longitude.
  - v. Attach a required location map. Attach any supporting documents or additional page(s) detailing the project description.

## 5. Funding Type

- a. Indicate which type of Federal funding is being requested for the project.
  - i. Surface Transportation funds (STP)
  - ii. Bridge funds (BR)
  - iii. Safety funds (HSIP)
  - iv. Transportation Alternatives (TA)
  - v. If some other type of Federal funding is proposed, indicate the type of funding on the line provided.
- b. Refer to Chapter 2 of the LPA Guidelines Manual for a description of each funding type.

# 6. Estimated Project Funding

- a. In the first column, indicate the Federal Fiscal Year (FFY) of the TIP/STIP that each phase of the project (PE Phase, ROW, Utilities, Construction, and CE Phase) is expected to begin.
- b. Fill out the following table with project cost estimates for each phase. Place the appropriate amount in each column, Federal, State, Local Match and Non-Participating. If a project utilizes the "Locally Funded Procurement Procedure", all costs for services procured shall be placed in the Nonparticipating column. Non-Participating costs do not count towards the local match of the Federal funds. Both non-participating and local match will be funded by the LPA.
- c. Nonparticipating also refers to costs which are not required for the improvement of the Federal-aid route or are considered to be a betterment to the LPA. Examples include: extensions of work onto non-Federal-aid routes beyond the minimum required, upgrades to utilities, etc. Non-Participating costs or work phases must be clearly identified in this table and in the project description. Call the NDOT Project Coordinator for guidance on specific situations.
- d. Attach calculations which show the justification and basis of all cost estimates.
- e. Refer to the LPA Guidelines Manual, or contact the NDOT Project Coordinator, for local match requirements and typical Federal funding percentages for the requested funding type.
- f. Note: The required local match is assessed by work phase, NOT on the total project cost. Also, Federal funds will reimburse the appropriate percentage of ELIGIBLE costs only.

#### 7. PE Phase

#### a. PE

- i. For estimated construction costs < \$1,000,000, NDOT recommends using 10% of the construction cost estimate.
- ii. For estimated construction costs > \$1,000,000, NDOT recommends using 8% of the construction cost estimate.
- iii. Does NOT include environmental (NEPA) documentation costs.
- iv. INCLUDES Final Design costs, UNLESS project's environmental classification is expected to be an EA or EIS.

#### b. NEPA

- i. NDOT recommends a \$15,000 estimate for NEPA costs for all projects, UNLESS the project's environmental classification is expected to be an EA or EIS.
- ii. If you anticipate the project's environmental classification to be an EA or EIS, contact the NDOT Project Coordinator for help in determining an appropriate NEPA cost estimate for the project.

# c. Final Design

- i. Separate Final Design cost estimates will be required ONLY if the project's environmental classification is expected to be an EA or EIS.
- ii. NDOT recommends using 3% of the construction cost estimate for the Final Design cost estimate.

## d. RC

- i. Use this line ONLY if the LPA plans to perform RC duties and request reimbursement for RC expenses with Federal funds. A detailed RC cost estimate will be required at a later time.
- ii. For estimated construction costs < \$1,000,000, NDOT recommends using \$5,000 PLUS 2% of the construction cost estimate.
- iii. For estimated construction costs > \$1,000,000, NDOT recommends using \$5,000 PLUS 1% of the construction cost estimate.

#### e. NDOT

- i. When the LPA performs the RC duties, the total NDOT pre-letting costs (including those incurred for the ROW and Utilities phases) are generally \$10,000 and should be included on this line. If the project being requested includes pre-letting activities, include \$8,000 in the Federal funding column and \$2,000 in the Local Match funding column on this line for NDOT total pre-letting costs, assuming a typical 80/20 funding split (adjust as needed). NDOT pre-letting costs may be adjusted upon review of the NDOT 530.
- ii. When NDOT performs the RC duties, include the costs from either d. ii. or d. iii. Above, plus the costs from e.i.

#### 8. ROW

- a. Include both the cost for the actual right-of-way and the right-of-way acquisition.
- b. Actual right-of-Way (fee title, permanent easements, temporary easements, etc.) cost estimate, including relocation assistance, relocation costs, and expenses. Include a ROW estimate in this section even if ROW is expected to be a part of the preliminary engineering agreement.
  - i. Determine ROW cost estimate based on previous project experience.
  - ii. Add a 25% contingency to your ROW estimate.
  - iii. Provided written justification for your estimate.
- c. Right of Way Acquisition cost estimate, including preparation of the ROW cost estimate, appraisals, appraisal review, and acquisition.
  - i. When NDOT performs the above tasks, use the following costs:

Preparation of ROW cost estimate \$1,200

Appraisal \$1,200 per tract
Appraisal review \$1,200 per tract
Acquisition \$1,000 per tract

# 9. Utilities

- a. Utilities relocations cost estimate. Use previous experience or use 3-5% of the construction costs as a guideline for determining the utility estimate.
- b. The following link is to a handbook from the Diggers Hotline of Nebraska. This handbook has information containing the One Call Law and the operations of Diggers Hotline of Nebraska.

http://www.ne-diggers.com/Documents/Nebraska One Call Handbook.pdf

c. Information obtained from the Diggers Hotline may be helpful in determining cost estimates for the project's utility work.

#### 10. Construction

- a. Use previous experience, average bid prices, or the following table to determine construction costs.
- b. Include 4% contingencies in your construction estimate to cover change orders and cost overruns.
- c. NDOT's average bid prices are available at:

http://www.transportation.nebraska.gov/letting/bid-item-history-info.htm

d. If using the table below, add 3% per year beyond 2013 for inflation.

**Table 1: 2013 Estimated Construction Costs** 

Type of Improvement	Cost
Reconstruction, 9"x30' PCC	\$1,020,000 per mile
Resurfacing, Class 1 Mill, Place 4"x24' AC	\$270,000 per mile
Maintenance Resurfacing, Mill 1.5", Place 2"x24' AC	\$140,000 per mile
Trails	\$350,000 per mile
Bridge Replacement	\$100 per square foot

**Note:** The costs listed in this table are merely guidelines and are not exact values. Not all project costs are included.

#### 11. CE Phase

#### a. CE

i. NDOT recommends using 12% of the construction cost estimate. Include 3% contingencies in the construction engineering estimate.

#### b. RC

- i. Use this line ONLY if the LPA plans to perform RC duties and request reimbursement for RC expenses with Federal funds.
- ii. NDOT recommends using 2% of the construction cost estimate.

# c. NDOT

- i. When LPA performs the RC duties, NDOT's State representative cost is to be capped at one percent (1%) of the construction estimate with a minimum of \$5000, plus \$2,500 for State Audit Expenses.
- ii. Example: If construction costs are \$400,000, NDOT's cost estimate would be 1% of \$400,000 equaling \$4,000 which is less than \$5,000. In this case NDOT's cost estimate would be \$7,500 (\$5,000 plus \$2,500).
- iii. Example: If construction costs are \$1,000,000, NDOT's cost estimate would be 1% of \$1,000,000 equaling \$10,000. In this case NDOT's cost estimate would be \$12,500 (\$10,000 + \$2,500).
- d. When NDOT performs the RC duties, lines b. and c. can be left blank.

## 12. Total

a. Total cost estimate for each column.

#### 13. Other Considerations

- a. If YES comply with the following:
  - i. The affected property owners will be provided just compensation for their property as required by the Federal and State Constitutions and reiterated in the Uniform Act.
  - ii. The ROW acquisition costs will be paid by the LPA and shall not be included in the assessment to the property owner(s).
  - iii. The assessment will not be arbitrarily imposed on selected property owners in the special improvement district in response to their demand for just compensation of that the assessment will be implemented in a way that differs from the way other like assessments have been imposed under similar circumstances.
  - iv. Attach a map of the assessment district city policy on special assessments and any other documentation to support the district.
- b. Indicate if the project is currently on the One & Six-Year Plan.
- c. Indicate if the LPA has a signed ADA Policy and a signed Title VI Nondiscrimination Agreement.

#### 14. Design Details

- a. Provide as much detail as possible for each of the following:
  - i. (a) Surface Width (i.e. Existing: 4 ft. Sidewalk, Proposed: 6" x 10' Trail)
  - ii. (b) Surface Type (i.e. Existing: Concrete, Proposed: Asphalt)
  - iii. (c) Shoulder Width
  - iv. (d) Shoulder Type (earth, asphalt, etc.)

#### 15. Existing Structures

- a. If there are any existing bridge-size structures on the project site, provide structure information.
  - i. Structure Number
  - ii. Feature structure crosses (i.e. stream, roadway, railroad, etc.)
  - iii. Type of structure (i.e. Wood, Steel, Concrete)
  - iv. Length of the structure
  - v. Width of the structure
  - vi. Sufficiency Rating of the structure
  - vii. Proposed treatment provide description of changes to the existing structure

## 16. Schedule Considerations

(Attach explanations and supporting documentation to the NDOT 530. This information will be used to establish the schedule and to identify tasks required to execute the project.)

# a. ROW Acquisition (including easements)

- i. Check YES if there will be ROW acquisitions, including easements.
- ii. Provide number of tracts to be acquired

# b. Relocation of People or Businesses

- i. Check YES if there will be relocation of residential property or both.
- ii. Indicate in the next column the number of tracts to be acquired

# c. Utility Relocation or Adjustment

- Check YES if there will be utilities to be relocated or adjusted. Use the information provided by the On-Call
- ii. Indicate in the next column the types of utilities

## d. Railroad Involvement

- i. Check YES if the project involves modification of existing crossing/signals, construction of new crossing/signals or the acquisition of railroad ROW/easement
- ii. Indicate in the next column the type of involvement

# e. New Horizontal Alignment

i. Check YES if the project will have new horizontal alignment of a roadway or trail.

## f. Design Relaxation or Exception Required

i. Check YES if design relaxation of standards or an exception to standards is anticipated.

# g. NDOT Permit to Occupy

i. Check YES if the project will require a permit to occupy State ROW.

## h. Has ROW already been acquired?

i. Check YES if ROW for the project has already been acquired.

## i. PE Procurement

i. Check how the PE services will be procured.

# j. CE Procurement

i. Check how the CE services will be procured.

- k. Anticipated NEPA Level (for scheduling purposes only)
  - i. PA
  - ii. PCE
  - iii. CE Include short description of each. To follow.
  - iv. EA
  - v. EIS

# I. Project Scheduling Template

i. To be filled out by NDOT (for scheduling purposes only)

#### 17. Traffic Data

- a. Provide the current Average Daily Traffic (ADT), Design Year ADT, and the percentage of trucks for the project.
  - i. Design Year for a new construction project is 20 years from the letting date.
  - ii. Design Year for a rehabilitation project is 10 years from the letting date.
- b. Once the project is in Design and working days are established, the traffic volumes will be calculated for the proper design year.

# 18. Additional Remarks or Comments by LPA

- a. Provide any additional remarks or comments pertinent to this project.
- b. Explain costs which are higher than typical. Examples would be relocation of a large gas pipeline which causes a high utilities estimate or relocation of a house which causes a high ROW cost.
- c. Revised NDOT 530's shall include a description of changes within this section. The LPA shall explain what has changed since the original/previous programming request.

# 19. Signatures

- a. The individual authorized by the LPA governing body must sign and date the NDOT 530 in the appropriate signature line. This individual can be the Responsible Charge, Mayor, City Administrator, County Board Chair, etc.
- b. If the project does not have a Responsible Charge, contact the Quality Management Section for assistance in locating an RC.
- c. If the Responsible Charge is not a full-time employee of the LPA sponsoring the project, contact the Quality Management Section about completing an Interlocal Agreement.