

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

BLRS PROCEDURE MEMORANDUM

NUMBER: PM2009-01
SUBJECT: CATEGORICAL EXCLUSIONS AND DESIGN APPROVAL
ISSUED DATE: March 6, 2009
EFFECTIVE DATE: March 6, 2009

This memorandum replaces Chapter 19 dated January 2006 and revises Section 22-2 dated June 2006 of the Bureau of Local Roads and Streets Manual.

A process review team consisting of representatives of the Federal Highway Administration (FHWA) and the Illinois Department of Transportation (IDOT) recommended an effort to update IDOT's Categorical Exclusion (CE) policies and the FHWA/IDOT agreement where revisions are necessary for clarification, streamlining, or bringing consistency with each other and with current laws and regulations. Based on the results of this process review and the proposal to require design approval for all projects requiring a Project Development Report, revisions have been incorporated into the Bureau of Local Roads and Streets Manual.

CE Group I actions (actions that do not involve the possibility of unusual circumstances) have been updated in Chapter 19 as recommended by the process review team. Also updated in Chapter 19 is clarification regarding which CE Group I projects would require a Project Development Report (PDR) using form BLR 22211. If a PDR is not required for CE Group I actions use form BLR 19100. For CE Group II actions, use form BLR 22210 (formerly form BLR 22110).

All projects requiring a Project Development Report will now require design approval. The districts will have design approval authority for certain CE Group I projects and the Central Office will have design approval authority for all CE Group II projects.

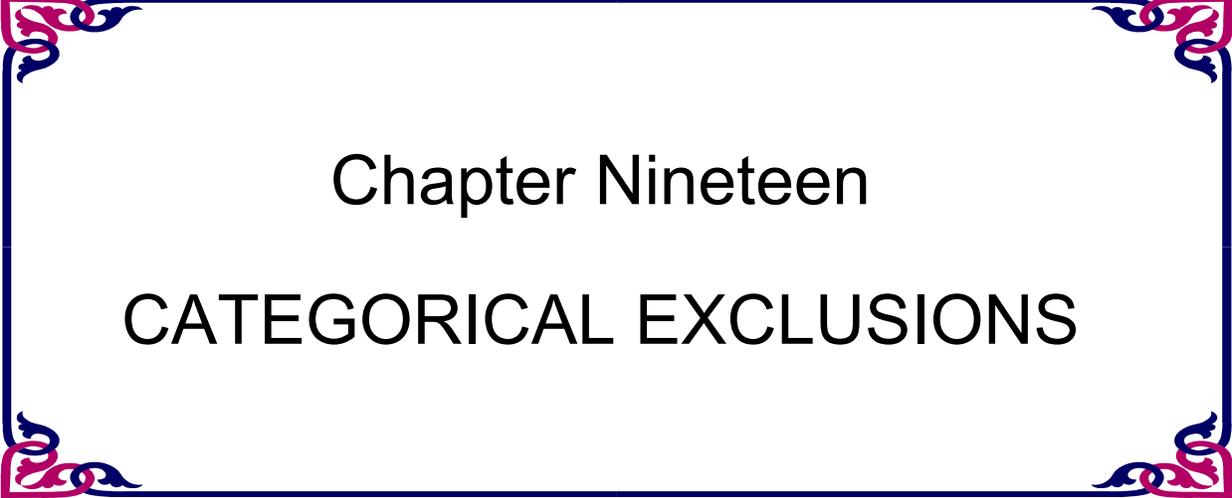
Please contact Gary Galecki at 217.785.8564 or gary.galecki@illinois.gov of this office with any questions.

A handwritten signature in cursive script that reads "Darrell Lewis".

Acting Engineer of Local Roads and Streets

GJG/kb

Attachments



Chapter Nineteen

CATEGORICAL EXCLUSIONS

BUREAU OF LOCAL ROADS AND STREETS MANUAL

Chapter Nineteen
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Chapter Nineteen

CATEGORICAL EXCLUSIONS - Federal Funds

19-1 GENERAL

Chapter 19 discusses local agency projects that may be classified as Categorical Exclusions (CE). Figure 19-1A is a pictorial representation of the decision making process to determine if a project meets the definition of a CE. The Code of Federal Regulations (CFR) in 23 CFR 771 defines “action” as any highway or transit project proposed for FHWA funding, joint and multiple use permits, changes in access control, etc., which may or may not involve a commitment of federal funds.

A Statewide Implementation Agreement, herein referred to as “CE Agreement”, has been developed in conformance with 23 CFR 771.117 to address the development and approval of CEs in a streamlined and efficient manner.

19-1.01 Definition

References: 40 CFR 1508.4 Categorical Exclusion Definition
23 CFR 771.115 Classes of Actions
23 CFR 771.117 Categorical Exclusions
Section 1 of FHWA Technical Advisory T6640.8a Categorical Exclusion

The FHWA environmental regulations (23CFR 771) define “categorical exclusions” (CEs) as “Class II” actions which meet the definition as contained in 40 CFR 1508.4, and based on past experience with similar actions, do not involve significant environmental impacts. They are actions which:

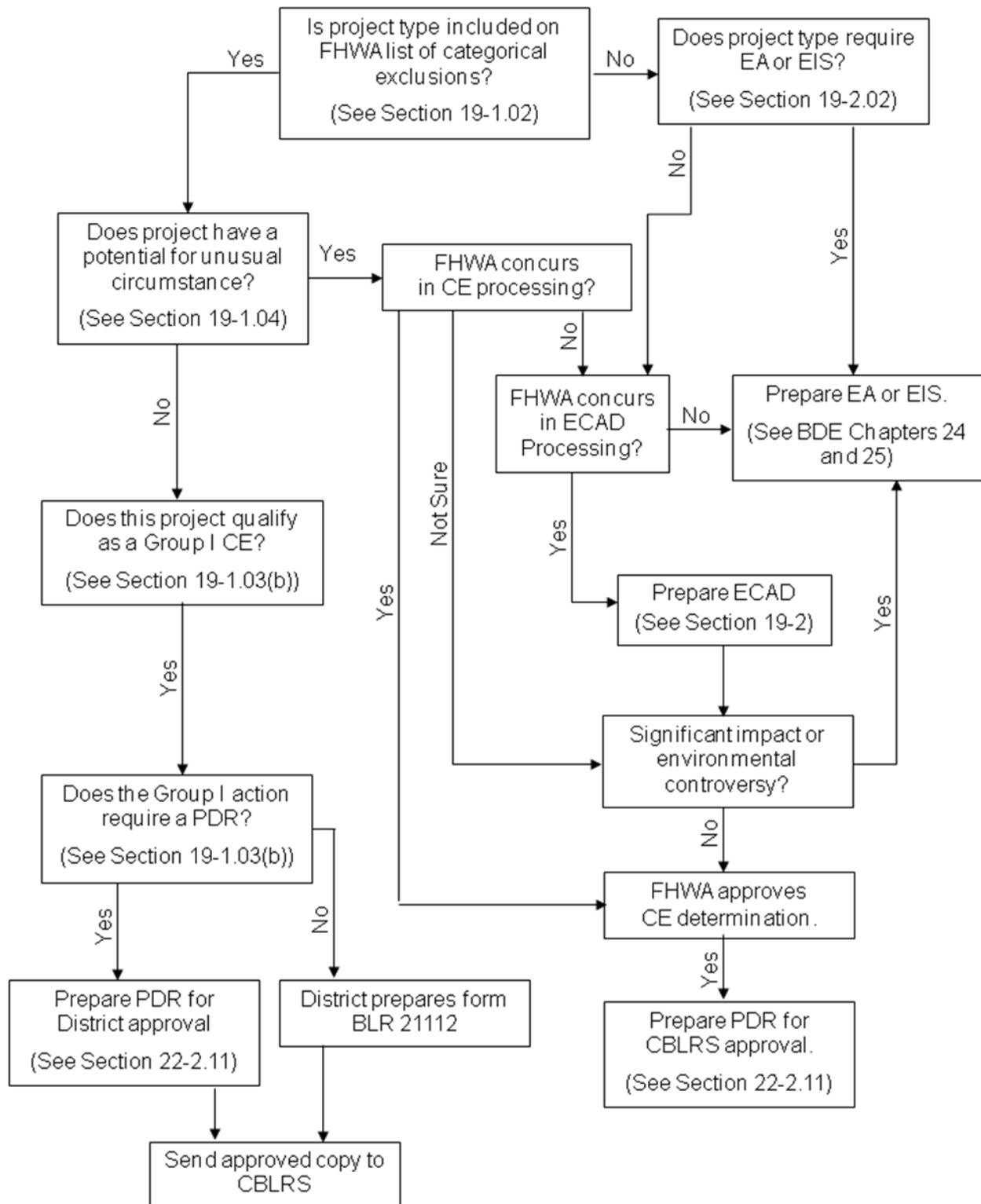
- do not induce significant impacts to planned growth or land use for the area;
- do not require the relocation of significant numbers of people;
- do not have a significant impact on any natural, cultural, recreational, historic, or other resource;
- do not involve significant air, noise, or water quality impacts;
- do not have significant impacts on travel patterns;
- do not otherwise, either individually or cumulatively, have any significant environmental impacts

Therefore, CEs are excluded from the requirement to prepare an Environmental Assessment (EA) (see Chapter 24 of the BD&E Manual) or Environmental Impact Statement (EIS) (see Chapter 25 of the BD&E Manual). The FHWA has listed examples of Class II actions in 23 CFR 771.117. Most transportation projects developed by local agencies do not have significant environmental impacts and, therefore, qualify as CEs.

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PROCESSING CE PROJECTS

Figure 19-1A

19-1.02 Applicable Federal Actions

References: 23 CFR 771.117(a) Characteristics of CE Projects
23 CFR 771.107(b) Definitions
Paragraph I.A of FHWA Technical Advisory T6640.8A, Documentation of Applicability

These procedures apply to any federal action, as defined in 771.107(b):

A highway or transit project proposed for FHWA or FTA funding. It also includes activities such as joint and multiple permits, changes in access control, etc., which may or may not involve a commitment of federal funds.

For example, a project may require an interstate access justification approval by FHWA, and the entire project would therefore be subject to all Federal requirements.

Federal actions approved as Categorical Exclusions do not require further compliance with the *National Environmental Policy Act* (NEPA) process. However, these actions may require compliance with other Federal environmental controls (e.g., Section 4(f), *Endangered Species Act*, Executive Order 11990 - Wetlands, Executive Order 11988 - Flood Plains, *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA)). See Chapter 20 for further information on special environmental studies.

19-1.03 CE Procedures

19-1.03(a) CE “Groups”

Projects that normally qualify as a Categorical Exclusion are divided into the following two groups:

1. Group I. Group I projects do not have any potential for unusual circumstances, as described in the CE Agreement between FHWA and IDOT and do not require individual approval by FHWA as CEs. Certain Group I projects do not require a Project Development Report (PDR); see Section 19-1.03(b) for determination whether or not a PDR is required.
2. Group II. Group II projects have the potential for unusual circumstances as described in the CE Agreement between FHWA and IDOT and require individual approval by FHWA as CEs. A Project Development Report is required for these projects see Section 19-1.03(c).

19-1.03(b) Group I Projects

References: 23 CFR 771.117(c) Examples of projects which normally will be a CE I

Paragraph I.A of FHWA Technical Advisory T6640.8A, Documentation of applicability for CE projects

These projects must meet the definition of a CE in 23 CFR 771.117(a), and will be considered Categorical Exclusion Group I's if they do not involve any of the factors listed in Section 19-1.04 as indicators of potential for unusual circumstances. Documentation of determination that the project is a CE Group I is required and should be included in the project files, including the date the determination was made and who is responsible for the decision. The following statement must be included:

This project will not have any significant impacts on the human environment, or involve any unusual circumstances; therefore, it is a Categorical Exclusion Group I.

This statement will be signed by the Local Agency and the IDOT Regional Engineer. It is the responsibility of the district to determine the extent of the information and documentation necessary to make the determination that it satisfies the requirements as a CE in the IDOT/FHWA CE Agreement.

It is not required that CE Group I projects be discussed at regularly scheduled FHWA/IDOT coordination meetings. However, CE Group I projects may be discussed at a coordination meeting if any agency (Local Agency, IDOT, or FHWA) deems it necessary. Appropriate/adequate documentation should be retained by the Local Agency and respective district that documents the CE Group I determination. FHWA or CBLRS may request to review CE Group I documentation at any time. While a project may qualify as a CE Group I action, other applicable federal and state requirements still must be satisfied (e.g. compliance with the National Historic Preservation Act, the Clean Air Act, etc.).

Actions that normally do not involve unusual circumstances and would qualify as CE Group I actions include those listed in 23 CFR 771.117(c) and also include the actions listed below. Some actions will require preparation of a PDR and others will not.

1. CE Group I actions that do not require a PDR are as follows:

- traffic signal modifications and installation of new signals;
- Local Agency Pavement Preservation (LAPP) projects;
- pavement resurfacing or milling and resurfacing (from face-of-curb to face-of-curb only for urban and the travel lanes only for rural);
- signing;
- pavement markings not affecting the number of through traffic lanes;
- anti-skid treatments;
- construction of sidewalks and/or ADA accessibility ramps;
- curb and/or gutter repairs;

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- historic preservation projects (except historic bridges) that do not have any potential for unusual circumstances as determined by the FHWA;
- lighting and electrical work including:
 - continuous and tower lighting,
 - tunnel lighting,
 - temporary lighting,
 - bridge lighting,
 - pedestrian lighting,
 - pumping station,
 - highway advisory radio,
 - control systems for changeable lanes,
 - traffic monitoring systems, and
 - changeable message signs
- landscaping on existing right-of-way;
- sediment and erosion control work which may also include slope repair and reconstruction within existing right-of-way;
- storm sewer installations to eliminate open ditches (which do not reduce necessary urban runoff storage/retention) within the existing right-of-way;
- impact attenuator and glare screen installations and upgrading of safety features;
- highway/railroad grade crossing improvements with no roadway approach work:
 - repair/rehabilitation of crossing proper, and
 - upgrading of crossing protection;
- the following restoration-type projects within the existing right-of-way limits:
 - retaining wall restoration,
 - fencing,
 - guardrail replacement and upgrading,
 - substantial pavement and shoulder patching/sealing, and
 - restoration of drainage structures;
- junkyard screening;
- the following bridge rehabilitation activities:
 - bridge rail replacement and upgrading,
 - bridge deck overlay and waterproofing,
 - expansion joint replacement and upgrading,
 - bearing replacement and upgrading,
 - substantial repairs to deck including partial or full-depth patches,
 - painting of all structural steel for a particular bridge,
 - stringer replacement for a portion of the superstructure, and
 - repairs to damaged rails, corroded or damaged structural steel members, and deteriorated areas of concrete elements including sidewalks, curbs, water tables, girders, and portions of the substructure above ground or water;

- approval of utility installations along or across a transportation facility;
- activities included in the highway safety plan developed pursuant to 23 USC 402;
- transfer of Federal lands pursuant to 23 USC 317 when the subsequent action is not an FHWA action;
- alterations to existing publicly owned buildings to provide for noise reduction and/or installation of noise abatement barriers; and
- emergency repairs under 23 USC 125 that do not substantially change the design of the facility, and which are initiated during or immediately after the occurrence of a declared national disaster;

For all CE Group I projects not requiring a PDR, the district shall prepare form BLR 19100 and distribute to the local agency and Central BLRS for the project files.

2. Certain CE Group I actions require the preparation of a Project Development Report (form BLR 22211). The Central BLRS has given categorical exclusion and design approval responsibility of the PDR to the districts for the following types of CE Group I projects:

- Rural widening and resurfacing projects that do not require additional right-of-way and do not change the number of lanes;
- Bicycle, pedestrian, or shared use paths that do not have any potential for unusual circumstances;
- At-grade highway/railroad grade crossing improvements that includes roadway approach work;
- Installation of parking lanes, weaving lanes, turning lanes, or climbing lanes within the existing right-of-way; and
- Other projects that are determined to be CE Group I by the FHWA at a coordination meeting.

19-1.03(c) Group II Projects

The remainder of the CE-type projects is considered Group II projects that require FHWA approval of CE determination and the preparation of a PDR (form BLR 22210) for approval by the Central BLRS.

Early in project development the district may request concurrence of FHWA and CBLRS to *process* the project as a CE; however, for Group II projects FHWA *must approve* the CE *determination after appropriate environmental analyses are completed*. Verbal or email approval from the FHWA ordinarily will be sufficient. This approval may be obtained at regularly scheduled district coordination meetings; see Section 18-5. Minutes of the meeting or a memorandum to the file, as appropriate, shall document the discussions and approval by stating:

This project will not have any significant impacts on the human environment; therefore, the FHWA approves the designation of this project as a Categorical Exclusion on [DATE].”

Sufficient information must be available to permit the FHWA/Central BLRS to make an informed decision on the significance of any environmental effects involved. For projects that require the processing of an Environmental Survey Request (See Section 20-2.02), verbal or e-mail approval may be requested only after the Local Agency has obtained the results of the Integrated Environmental Survey Process (for biological resources (e.g., threatened and endangered species, wetlands) and cultural resources (e.g., archaeological, historic)) and it has been determined there are no unusual circumstances. For projects that involve a site included on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), verbal or e-mail approval may be requested only after the Local Agency has determined how the involvement with the CERCLIS site will affect the project. Occasionally, the FHWA may request an environmental study of a particular issue area (e.g., wetlands study) prior to giving verbal or e-mail approval. When verbal approval is obtained from FHWA, minutes of the meeting or a memorandum to the file, as appropriate, shall document the discussions and approval by stating:

This project will not have any significant impacts on the human environment; therefore, the FHWA approves the designation of this project as a Categorical Exclusion on [DATE].”

The FHWA will be provided with a copy of these minutes.

Documentation of the CE approval (e-mail, coordination meeting minutes, or memorandum to file) must be included in the Project Development Report.

19-1.04 Evaluation for Unusual Circumstances

References: 23 CFR 771.117(b)
Paragraph I.B of the FHWA Technical Advisory T6640.8A

Each project proposed as a Categorical Exclusion, whether Group I or II, must be evaluated for environmental factors that may involve unusual circumstances. This may require special studies or reports to be prepared to determine if the CE classification is appropriate. In evaluating proposed CE projects for unusual circumstances, all aspects of the project must be considered, including any detours and runarounds that the project will involve. An important step in the evaluation for unusual circumstances is an on-site review, or field review, of the project area. The field review must be sufficient to identify whether there are obvious resource involvement(s) that could result in a significant impact or that will raise potential impact concerns sufficient to warrant the preparation of an ECAD, EA or EIS. For projects processed through the environmental survey processes, the survey results will identify wetlands, biological resources, and cultural resources that may require special consideration and coordination. These and other environmental issues (e.g., farmland impacts, Section 404 permit requirements, noise) must be identified and appropriately considered in the evaluation of unusual circumstances.

Unusual circumstances include: (1) significant environmental impacts; (2) substantial controversy on environmental grounds; (3) significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or (4) inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action (23 CFR 771.117(b)). If environmental studies result in the identification of a project's involvement of one of the above mentioned unusual circumstances, it may not be appropriate to classify the project as a CE.

FHWA and IDOT have agreed that activities that indicate the project could involve unusual circumstances include, but are not limited to, those that will:

1. involve impacts to Waters of the United States that would require an Individual Section 404 permit from the U.S. Army Corps of Engineers, involve stream channelization or stream relocations, or a stream listed on the National Park Service's National Rivers Inventory
2. involve a wetland requiring an individual section 404 permit or an individual water quality certification from the Illinois Environmental Protection Agency.
3. involve relocations and/ or the acquisition of more than 10 acres total for a non-linear improvement (spot improvement, e.g. bridge, intersection) or the acquisition of more than 3 acres/ mile.
4. require substantial changes in access, access control, or travel patterns;
5. require the use of a temporary road, detour or ramp closure, unless the use of such facilities satisfies the following conditions:
 - Provisions are made for access by local traffic and so posted,
 - Businesses dependent on through-traffic will not be adversely affected,
 - To the extent possible, there is no interference with any local special event or festival,
 - There is no substantial change to the environmental consequences of the action, and
 - There is no substantial controversy associated with such facilities;
6. exceed the IDNR threshold for an increase in 100-year flood water surface elevations, or have potential for a "significant encroachment" to floodplains, as defined in Executive Order 11998;
7. require preparation of a Biological Assessment for federal endangered and threatened species or their critical habitat;
8. involve State designated Nature Preserves, areas listed on the Illinois Natural Area Inventory, or Land and Water Reserves;
9. result in a "no adverse effect" or an "adverse affect" finding to a historic or archaeological resource for inclusion on the National Register of Historic Places;
10. result in a "use" of land from a Section 4(f) resource; and/or
11. have potential for controversy on environmental grounds as determined by FHWA, or inconsistency with Federal, State, or local requirements relating to the environment or planning.

19-2 ENVIRONMENTAL CLASS OF ACTION DETERMINATION (ECAD)

19-2.01 Background

IDOT's ECAD procedures have been developed as a result of the continuous evaluation of IDOT's implementation of environmental regulations. The ECAD procedures are intended to:

- maximize the use of the flexibility within the FHWA environmental regulations to identify actions eligible for CE processing; and
- ensure that the basis for the CE determination has been thoroughly evaluated and systematically documented to fully support the determination.

The ECAD procedures do not reduce the depth of environmental or engineering studies necessary to advance a project; all decisions must be supported by applicable studies and analyses. These procedures affect how the results of the studies and analyses are documented and, ultimately, the type of environmental processing that will be used to fulfill NEPA requirements.

19-2.02 Eligible Projects

The project types eligible for the ECAD procedures are those that have the potential to be processed as CEs, but require additional documentation to demonstrate the project qualifies as a CE. Potential ECAD actions include project types other than the following:

1. Type 1. Those project types specified in the FHWA environmental regulations (23 CFR 771.115(a)) as actions that normally require an Environmental Impact Statement (Class I). Examples include new access control freeways and highway projects of four or more lanes on new location.
2. Type 2. Those project types specifically listed in 23 CFR 771.117 and Section 19-1 as Categorical Exclusions.
3. Type 3. Those project types that the Illinois Division Office of FHWA has determined will normally require an Environmental Assessment (Class III, 23 CFR 771.115(c)). Examples include new interchanges, bypasses, and projects involving organized opposition or substantial controversy on environmental grounds.

The above listed project types include widening existing roadways to include additional through lanes and two-lane highways on new location.

The ECAD procedures lead to the decision on whether an eligible project should be processed as a CE or with an EA or EIS, and they provide a structure for evaluating and documenting the basis for that decision.

19-2.03 Documentation

Two forms have been developed for use in implementing the ECAD procedures — the Class of Action Determination Record (Form BDE-2314) and the Class of Action Determination Document (Form BDE-2313). The actual forms are electronic documents that are available on IDOT's website. BDE will revise the electronic forms from time to time as changes occur in the ECAD procedures and guidance. Local agencies should use the versions of the electronic forms that are consistent with the most recent procedures and guidance.

19-2.04 Procedures

To implement the ECAD procedures, follow these steps:

- Step 1. Determine Eligibility of Project Category. Early in project planning, the local agency and the district should compare the proposed project type to the categories in 1, 2, and 3 in Section 19-2.02. If the proposed project is of a type not covered by these categories, it is potentially eligible for processing as an ECAD action.

- Step 2. Conduct Environmental Field Review. For potentially eligible ECAD actions, the local agency must conduct an on-site field review of the project area to identify environmental factors that may be involved in the project. This field review is mandatory before an action may proceed under the ECAD procedures. The field review must have been conducted no more than one year before concurrence is requested on the eligibility of the project as an ECAD action. The review must be sufficient to identify whether there are obvious resource involvements that could result in a significant impact or that will raise potential impact concerns sufficient to warrant preparation of an EA. To ensure that key environmental issues are considered, the Class of Action Determination Record (discussed in Step 4) should be used for documenting the results of the field review.

- Step 3. Present Recommendation on Type of Environmental Processing. After conducting the required environmental field review, the local agency and the district may present their recommendation at a regularly scheduled project coordination meeting on whether to proceed as a regular Group II Categorical Exclusion (i.e., if the project will involve few environmental issues), under the ECAD procedures, or with an EIS or EA for the project. The local agency and the district should explain the basis for the recommendation. If the field review indicates the project involves a number of environmental issues but does not involve obvious or likely significant environmental impacts, the local agency and the district may present the project for concurrence to proceed under the ECAD procedures. The presentation of the project for concurrence should address the following items:
 - when and by whom the environmental field review was conducted;

- what, if any, documentation resources were consulted in conjunction with the field review; and
- what, briefly, were the findings of potential involvement for each environmental issue listed in the Class of Action Determination Record and the basis for the determination.

The decision of the FHWA and Central BLRS on whether or not the project should proceed under the ECAD procedures should be documented in the minutes of the coordination meeting. After a project is presented and approved for processing under the ECAD procedures, it must be completed as an ECAD project unless impacts or issues are identified that warrant preparation of an EA or EIS.

Step 4. Prepare Class of Action Determination Record. Environmental resources in the project area should be identified on an environmental inventory map and referenced in the Class of Action Determination Record. The ECAD Record should be used to summarize key findings and decisions on the presence or absence of adverse impacts on particular environmental resources and the nature of these impacts. The ECAD Record also should briefly summarize the basis for the findings and conclusions. The local agency does not need to include all the intermediate coordination steps that lead to the findings and conclusions; enter only the key results that provide closure on an issue (i.e., how it was determined an issue is or is not potentially involved and, if it is involved, what the effect will be). Key conclusions also include final results of any required coordination for compliance with other applicable laws, regulations, and agreements (e.g., the results of coordination for compliance with the State *Endangered Species Act* and historic preservation requirements).

As preparation of the ECAD Record proceeds, typographical errors or other minor mistakes discovered in previous entries should be corrected. The incorrect information that was deleted should be shown in the Record with a strikethrough and the corrected information should be underlined. If information in previous entries changes as a result of ongoing project development activities, the changes should be reflected in new entries that will supplement, rather than replace, the previous entries.

Documentation in the Class of Action Determination Record should continue until all environmental resources/issues have been sufficiently evaluated to allow determination of the action's CE status or until an impact is identified that dictates preparation of an EA or EIS. If impacts or concerns (e.g., controversy on environmental grounds) are identified which are determined to warrant the preparation of an EA or EIS, document that decision in the project files and the preparation of the Class of Action Determination Record should be terminated.

The ECAD Record may be used to present environmental information for the project at public involvement activities (see Chapter 21) provided the version of the Record to be used has been reviewed by the FHWA and Central BLRS, and any comments from

that review have been satisfied. Because the results of public involvement activities could affect the ultimate decision on the classification of an ECAD project as a Categorical Exclusion project (e.g., because of substantial controversy on environmental grounds), the final decision on the CE classification should not occur until after completion of the planning-phase of public involvement activities. In presenting an ECAD project at a public involvement activity, the local agency should indicate the anticipated environmental processing for the action (e.g., Categorical Exclusion) based on the results of environmental investigations for the project.

Instructions are provided in the following paragraphs to enter information in the Class of Action Determination Record:

Date of Field Review

Enter the most recent date of field evaluation of environmental factors. This date must be within one year prior to the initial presentation at a district coordination meeting.

Date of Initial Presentation

Enter the date on which the Record was first presented at a district coordination meeting.

Date of Latest Revision

This date will change each time the Record is updated with new information.

Potential Involvement

Enter in the “yes” or “no” columns the date on which the determination was made concerning potential involvement for each environmental resource/issue category listed. The columns should be left blank until sufficient information is obtained to make the determination of potential involvement. Each item in this column must be completed before the project is first presented at a district coordination meeting.

Analyses and Results

This column should be used to briefly explain, in plain language (i.e., avoid the use of jargon and technical terms as much as possible), entries in the “potential involvement” and “impacts present” columns. This column also should be used for entering dates and a concise summary of results that are pertinent to evaluating the environmental impacts of the proposed action. These items include the following:

- results of environmental surveys and studies of specific issues;
- final coordination contacts with resource agencies that provide closure on environmental issues; and
- results of environmental impact/mitigation analyses, including discussion of secondary and cumulative impacts, as applicable.

The initials of the author should be entered after each entry.

See Chapter 23 of the *BDE Manual* for more information on the nature of the environmental analyses and appropriate entries in this column for particular resources/issues.

Impacts Present:

Enter in the “yes” or “no” column the date on which it was determined whether the project will have an adverse impact for each of the environmental factors that had a “yes” in the “potential involvement” column. If the “potential involvement” column is marked with a “no,” the “Impacts Present” column for that issue should be left blank unless an involvement and impact are subsequently identified.

Status

Enter a “C” (for “completed”) in this column when sufficient analyses and results have been accomplished to allow a determination of the impact. Otherwise, leave the column blank.

Step 5. Present Results at District Coordination Meetings. As the local agency completes studies and analyses regarding the project’s environmental impacts and achieves closure on environmental issues, these results should be discussed with the FHWA and Central BLRS representatives at regularly scheduled district coordination meetings; see Section 18-5. At the local agency’s and the district’s discretion, these results may be discussed as each study is completed or they may wait and consolidate the discussion of several studies.

Step 6. Document Environmental Class of Action Determination. After all environmental resources/issues identified as being potentially involved are evaluated, the impacts are determined, and closure is attained for the issues involved (including consideration of the results of public involvement activities), the local agency or district is ready to request approval from the FHWA and Central BLRS representatives that the action may be classified as a CE. When a public hearing or informational meeting is required (see Chapter 21), it should be held before requesting CE concurrence in order that the results of the hearing can be considered in determining if the CE classification is appropriate. The Class of Action Determination Document should be used for the following activities:

- recording the project purpose and need;
- the project alternatives;
- the environmental consequences of the action;
- environmental commitments;
- the public involvement activities for the project; and

- the concurrence of the district, FHWA, and Central BLRS.

The local agency should complete the ECAD Document and the district should sign it before requesting concurrence from the FHWA and Central BLRS representatives. The districts should provide the FHWA and Central BLRS copies of the Class of Action Determination Document prior to the meeting at which the Document will be presented for signature. The copies should be provided as far in advance of the meeting as practical and not less than two weeks prior to the meeting date. The “Environmental Consequences” section of the Document will indicate those issue areas in the ECAD Record that were marked as a “Yes” in the impacts present column. This section will direct the reader to the parts of the ECAD Record that describe the project’s impacts and mitigation measures. The ECAD document “Conclusion” paragraph and the information on impacts and mitigation measures provide the basis for the FHWA’s determination that the action meets the Categorical Exclusion definition in 23 CFR 771/117(a).

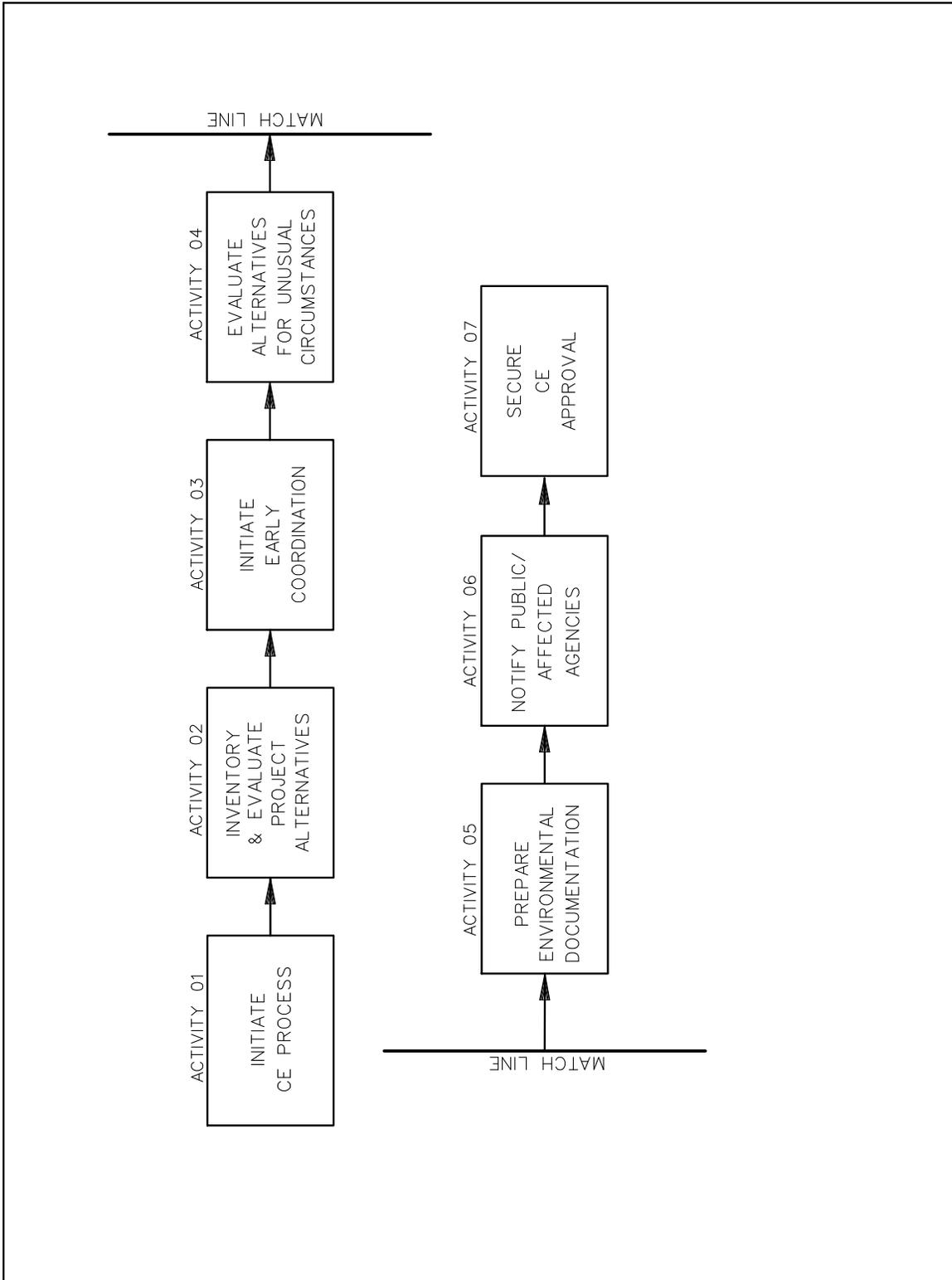
The signed Class of Action Determination Document and the associated Class of Action Determination Record should be included with the Project Development Report for the action and referenced, as appropriate, to provide the environmental discussions for the project.

See Chapter 22 of the *BDE Manual* for additional guidance of the ECAD process.

19-3 THE CE PROCESS

Figure 19-3A presents a flowchart that graphically illustrates the general process for a Categorical Exclusion action. This is followed by a brief description of each activity. The user of Figure 19-3A should consider the following:

1. Lines of Communication. The rigid application of the flowchart would lead to predetermined, precise points at which communication occurs between responsible parties. This is neither realistic nor desirable. Communication between parties must be continuous.
2. Lead Agency. Figure 19-3A assumes that the FHWA is the lead agency for FHWA-funded projects. If another Federal agency is the lead agency, other procedures may be required.
3. Application. Figure 19-3A applies to all CE projects involving local agency projects.



PROCESS FOR CATEGORICAL EXCLUSION (CE)
(FHWA Lead Agency)

Figure 19-3A

Categorical Exclusion Process

Activity Title: Initiate CE Process

Activity No.: 01

Responsible Unit: Local Agency/District

Activity Description:

For actions that will ultimately be processed with a CE, this is often known at the time of project initiation. This process (Figure 19-3A) assumes that it is known at the time of project initiation that a CE will be required.

The local agency and the district will initiate the CE by discussing the project at a district coordination meeting. The local agency and the district will also assemble project information that may include:

- planning reports or studies,
- record plans (as-builts),
- letters/correspondence on the project,
- traffic data,
- documentation on any public or private meetings,
- original surveys,
- aerial photos,
- statistical data documenting need for improvement,
- scoping data providing recommended improvement,
- appropriate information from engineering databases,
- existing right-of-way, and
- results of the preliminary field check of project location.

References:

- 40 CFR 1501.2 *Early Application of NEPA*
- 23 CFR 771.115(b) *Definition of Class II (CE) Action*
- Section 22-3.06 of the BDE Manual, *Proposed Action*
- Section 19-1 *General*

Categorical Exclusion Process

Activity Title: Inventory and Evaluate Project Alternatives

Activity No.: 02

Responsible Unit: Local Agency/District/Central BLRS/BDE/FHWA

Activity Description:

Based on the general project design concept, the local agency with technical assistance from the district, Central BLRS, BDE, and FHWA will inventory the affected environment and evaluate the project alternatives as practical at this stage of project development. The evaluation of preliminary alternatives should be sensitive to those environmental resources for which analysis of alternatives for avoidance and minimization of adverse impacts is required (e.g., wetlands, flood plains, Section 4(f) properties/historic sites, threatened and endangered species). In addition, local agencies should recognize that avoidance of environmental resources requiring special compliance procedures for impacts should be the preferred course of action. Avoidance of such resources will help to shorten project development time by avoiding the reporting and coordination necessary for compliance. The compilation of these inventories should be pursued only as necessary to provide high-quality information on the environmental impacts of the proposed action and to promote decision-making. Discussion of the proposed project with resource agencies at a district coordination meeting may be helpful in determining the optimum level of effort for the inventorying activity.

The local agency should identify the full range of the environmental inventory by evaluating environmental databases, discussing the project at a district coordination meeting, and submitting an environmental survey request, as appropriate, to the Central BLRS. Resources involved may include:

- Section 4(f) and/or 6(f) properties;
- archaeological and historical properties;
- flood plains;
- sensitive noise receptors;
- prime farmland;
- wetlands;
- threatened or endangered species habitat, nature preserves, and natural areas;
- wild and scenic rivers and Class I streams;
- status of air quality attainment;
- water quality of streams and lakes;
- special waste;
- social/economic characteristics of the population;
- visual quality factors;
- well-head protection areas;
- groundwater recharge areas; and
- other biological resources (biodiversity, riparian habitat, etc.).

After the inventory has been prepared, the local agency should perform a preliminary evaluation of the magnitude and importance of the potential environmental impacts precipitated by the proposed action. This will assist in initiating the early coordination process (Activity 03).

References:

- 40 CFR 1500.1(b) *Environmental Information for Decision-Making*
- 23 CFR 771.111 *Early Coordination and Public Involvement*
- Background Section of FHWA Technical Advisory T6640.8A *Consideration of Unusual Circumstances*
- Section 20-2 *Environmental Surveys*

Categorical Exclusion Process

Activity Title: Initiate Early Coordination

Activity No.: 03

Responsible Unit: Local Agency/BDE

Activity Description:

Coordination with governmental agencies and the public, as appropriate, is one of the most important aspects of the CE process. This coordination should begin as early as practical in project planning.

As necessary, the local agency and BDE will initiate early coordination with organizations and persons and appropriate local, State, and Federal agencies that have an interest in the project or have information or expertise concerning environmental issues that the project may involve. The purpose of this coordination will be to assist in the evaluation of alternatives and the social, economic, and environmental impacts of the proposed project and possible impact mitigation measures. One specific objective of this early coordination is to gather information from other entities that may assist in the effort to compile an inventory of the affected environment (Activity 02). This may be necessary to identify historic/archaeological sites (SHPO), natural resources (IDNR), land-use activities (local governments), etc.

If applicable, the local agency should begin developing the public involvement plan for the project at this stage; see Chapter 21.

References:

- 40 CFR 1500.1(b) *Environmental Information for Decision Making*
- 40 CFR 1500.2(d) *Public Involvement*
- 40 CFR 1500.5(b) *Interagency Cooperation*
- 40 CFR 1501.1(b) *Interagency Cooperation*
- 40 CFR 1501.6 *Cooperating Agencies*
- 23 CFR 771.111 *Early Coordination and Public Involvement*
- 23 CFR 771.119(b) *Early Coordination/Scoping*
- Question 9. of CEQ Q&A *Approvals from Other Agencies*
- Section 18-5 *Coordination*
- Chapter 21 *Public Involvement*

Categorical Exclusion Process

Activity Title: Evaluate Alternatives for Unusual Circumstances

Activity No.: 04

Responsible Unit: Local Agency/District/Central BLRS

Activity Description:

As a part of the CE process, the local agency, district, and Central BLRS must evaluate the project alternatives for any potential unusual circumstances. This will be according to 23 CFR 771.117(b). If significant impacts are likely, an EIS is required for a Federal action. If there is a question on whether or not unusual circumstances are involved, the local agency may need to perform additional studies and/or prepare an EA.

The local agency will initiate those studies necessary to determine the environmental impact of the proposed project alternatives. The depth of the studies will be as appropriate for the project consistent with its designation as a CE. The nature of the studies will include:

- coordination with affected local, State, and Federal agencies and the public; and
- an evaluation of the environmental impacts including:
 - + social/economic;
 - + agricultural;
 - + historical/archaeological;
 - + air quality;
 - + noise;
 - + energy;
 - + natural resources, threatened, and endangered species;
 - + water quality/resources;
 - + flood plains;
 - + wetlands (see Chapter 10);
 - + special waste;
 - + Section 4(f)/6(f); and
 - + other issues as applicable (e.g., Wild and Scenic Rivers, well-head protection, regulated ground-water recharge areas).

References:

- 40 CFR 1502.24 *Methodology and Scientific Accuracy*
- 23 CFR 771.117(b) *Unusual Circumstances*
- 23 CFR 771.135 *Section 4(f) Evaluations*
- Paragraph I.B. of FHWA Technical Advisory T6640.8A *Consideration of Unusual Circumstances*
- Section 19-1.03 *Evaluation for Unusual Circumstances*
- Chapter 20 *Special Environmental Studies*

Categorical Exclusion Process

Activity Title: Prepare Environmental Documentation

Activity No.: 05

Responsible Unit: Local Agency

Activity Description:

Once the local agency has completed its environmental evaluation of the project alternatives for unusual circumstances (Activity 04), the local agency will document its findings. The documentation will vary depending upon the CE processing type and whether or not a Project Development Report is required. CE processing types include the following:

1. Group I. See Section 19-1.04(b).
2. Group II. See Section 19-1.04(c).
3. ECAD. See Section 19-2

Categorical Exclusion Process

Activity Title: Notify Public/Affected Agencies

Activity No.: 06

Responsible Unit: Local Agency/BDE

Activity Description:

In Activity 03, the local agency will have made a preliminary identification of those agencies that may have an interest in the project. For proposed CE projects, the local agency and BDE will coordinate with the public and appropriate agencies to verify the decision, if applicable, that the project includes no unusual circumstances (Activity 04). Typically, the following agencies will be contacted when resource issues of concern to these agencies are involved:

- FHWA or other joint lead agency;
- US Environmental Protection Agency;
- Illinois Environmental Protection Agency;
- US Army Corps of Engineers;
- US Fish and Wildlife Service;
- Illinois Department of Natural Resources;
- State Historic Preservation Officer (Illinois Historic Preservation Agency);
- Advisory Council on Historic Preservation;
- Illinois State Clearinghouse;
- Sub-State Clearinghouse(s), Metropolitan Planning Organization(s), or other appropriate local planning agency;
- Natural Resources Conservation Service;
- Illinois Department of Agriculture;
- governmental land management agencies whose properties are affected; and/or
- other governmental agencies which have special expertise, jurisdiction by law regarding a project issue, or otherwise have an interest in the project.

References:

- 23 CFR 771.111 *Early Coordination/Public Involvement*
- Section 18-5 *Coordination*
- Chapter 21 *Public Involvement*

Categorical Exclusion Process

Activity Title: Secure CE Approval

Activity No.: 07

Responsible Unit: District

Activity Description:

For Group I projects, the CE approval may be made by the Regional Engineer provided that it is determined that the project does not involve any "potential for unusual circumstances." For Group II projects, the CE approval must be made by the FHWA. See Section 19-1.04(c).

The project must also meet the procedural requirements of any specific environmental impacts identified in the environmental studies (Activity 04). These may include, for example, a separate Section 4(f) Statement, a Section 404 permit, NPDES permit, etc.

References:

- 23 CFR 771.113(a) *Timing of Administration Activities*
- 23 CFR 771.129(c) *Re-evaluations*
- Section 22-3.15 of the *BDE Manual, Ensuring Validity of Environmental and Design Documents*
- Section 19-1.04(b) *Group I Actions*
- Section 19-1.04(c) *Group II Actions*

19-4 ENVIRONMENTAL DOCUMENTATION FOR CATEGORICAL EXCLUSIONS

19-4.01 General

Project Development Reports are not required for certain Group I projects (See Section 19-1), but are required for all Group II projects. For those projects that have Project Development Reports, they must include evidence of consideration of environmental factors as discussed elsewhere in this Chapter. Circulation of a Project Development Report to outside agencies for comment normally is not required.

19-4.02 Content

Section 22-2.11 discusses the engineering information included in Project Development Report and the overall format and content of the Report. The following provides guidance for the environmental documentation appropriate for inclusion in Project Development Report for Categorical Exclusion projects:

1. CE Determination. For projects processed under the ECAD procedures, the signed ECAD Document and the associated ECAD Record(s) should be included in the Project Development Report and retained in the project file. Where the FHWA/Central BLRS request formal written submittal of an action for concurrence in its classification as a Categorical Exclusion, the Project Development Report will include information for the specific environmental issues requested by the FHWA/Central BLRS. The information must be sufficient to permit an evaluation of whether the environmental effects will involve unusual circumstances (see Section 19-1.03) requiring preparation of an EIS or EA for Federally funded/regulated actions.

In any other cases where actions are formally submitted for CE approval, a discussion will be provided in the Project Development Report concerning those factors involved with the action indicating potential for unusual circumstances (See Section 19-1.04). The information must be adequate to permit an assessment of whether the effects of the action warrant preparation of an EIS or EA for Federally-funded/regulated actions.

2. Environmental Surveys and Mitigation Commitments. The Project Development Report should summarize the results of any necessary environmental screening, surveys, and related coordination for biological resources, wetlands, cultural resources, and special wastes. If surveys are not required, the basis for this determination should be documented. The Report should include a statement that the CERCLIS list was reviewed and should indicate whether any sites on the list are located within the project limits. In addition, either a copy of the Special Waste Screening Form or the response to the Preliminary Environmental Site Assessment should be included. Any mitigation commitments resulting from the environmental survey and coordination process should be briefly discussed. Environmental mitigation measures (e.g., wetlands, tree replacement, prairie replacement) to be implemented for the project should be described.

3. Special Reports. Where a special report(s) is prepared, the Project Development Report should contain a one-paragraph summary of the circumstances, findings, and processing status of each report along with a copy of any approval. These include reports for Section 4(f), wetlands, Section 106, special waste site investigations, etc.
4. Coordination. Section 18-5 and Section 19-3, the CE Process, discuss the coordination required for a CE action. This should be summarized in the Project Development Report. Specifically, where coordination with the Natural Resources Conservation Service and/or the Illinois Department of Agriculture is required, the PDR should include a brief summary of the results of the coordination (e.g., a copy of Form AD-1006, when required, and/or a synopsis of comments received and the related responses).
5. Permits. The PDR should indicate the permits (e.g., Section 404, Section 402, National Pollutant Discharge Elimination System (NPDES), Section 10, IDNR Office of Water Resources) required for the project.

19-4.03 Processing

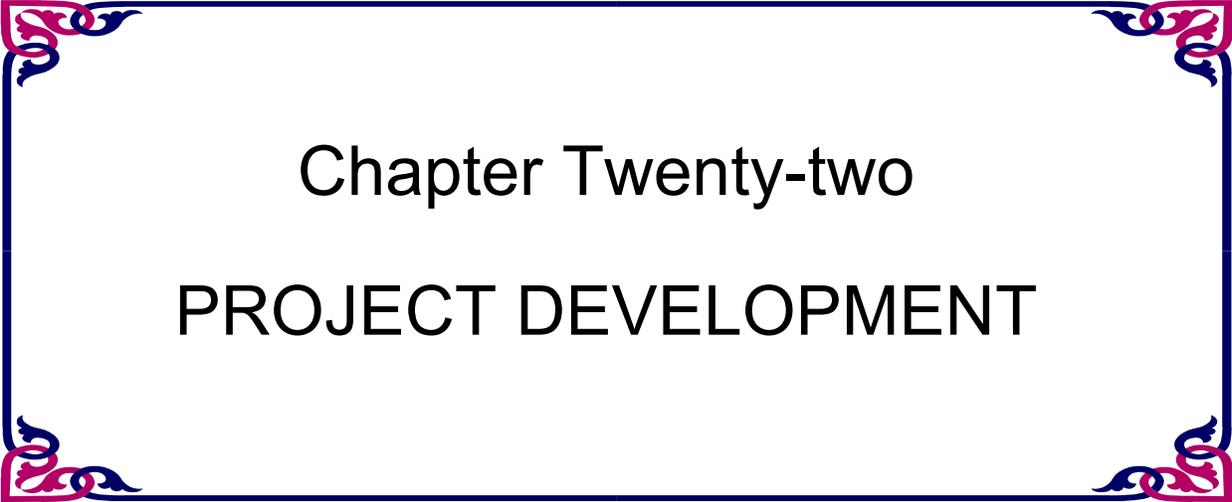
For all CE projects requiring PDRs (CE Group I projects specified in Section 19-103(b) and all CE Group II projects), the local agencies must include appropriate environmental information to document the basis for determining that the project qualifies as a CE. The district will review the PDR for CE Group I projects and the Central BLRS will review the PDR for CE Group II projects for the following environmental information:

- for CE Group II projects, the District shall ensure that all BLRS and FHWA recommendations and concerns are addressed prior to recommending Categorical Exclusion and Design Approval;
- information on the need for and results of environmental surveys;
- information indicating the environmental issues involved and why the project would not result in significant impacts on those issues (for ECAD projects, this would be the ECAD Record and ECAD Document);
- documentation of compliance with special waste procedures and other applicable requirements for specific environmental issues involved; and
- information on the need for and status of any environmental permits.

When CE Group II PDRs are submitted for design approval, the Central BLRS will advise the district of any problems or deficiencies with the environmental information and will provide recommendations, as appropriate, for correcting the problems or deficiencies.

19-5 REFERENCES

1. 40 CFR 1500-1508, *CEQ Regulations for Implementing NEPA*.
2. 23 CFR 771, *FHWA Environmental Impact and Related Procedures*.
3. FHWA Technical Advisory T6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*.
4. Chapter 22, "Environmental Documentation," *BDE Manual*, IDOT.
5. Chapter 26, "Special Environmental Analyses," *BDE Manual*, IDOT.



Chapter Twenty-two
PROJECT DEVELOPMENT

BUREAU OF LOCAL ROADS AND STREETS MANUAL

Chapter Twenty-two
PROJECT DEVELOPMENT - Federal Funds

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22-2 PROJECT STUDIES/REPORTS

Section 22-2 provides guidance for the preparation of various project studies and reports for Federal-aid local agency projects. The various reports and studies discussed in this Section are written summaries of design issues concerning a highway improvement. This Section pertains to procedural aspects involved in the completion of these studies and reports up to and including design approval. Chapters 11 and 12 of the *BDE Manual* provide additional guidance on studies and reports required for federal projects.

22-2.01 General

The development of a federal project requires the preparation of various studies and reports. This necessitates an integrated engineering analysis to determine highway improvement needs. The scope and depth of the engineering analyses for preliminary studies will vary depending on the project scope of work. These studies may be less than that required for final plans, but they should be sufficiently accurate to preclude significant design or major cost estimate revisions during final construction plan preparation. When determining the scope, extent, and accuracy needed for a specific engineering study, the effects on adjacent property owners are often a good indicator.

To properly conduct engineering analyses and to develop a functional design, diverse sources of information must be used. Data for engineering analyses may be obtained from various sources. It is important that the designer be familiar with data available from outside sources and understands how to use it correctly in engineering analyses. Also, the designer must ensure that the scope, extent, and accuracy of the data requested from other sources are commensurate with the intended use of the engineering analysis being performed.

22-2.02 Information Sources

Engineering investigations determine if the proposed highway improvement satisfies the need for safe, economical, and efficient transportation and provides other relevant benefits (e.g., traffic benefits, public services, reduction of crashes, pedestrian facilities, transit considerations). The following Sections identify informational sources that are important in establishing the need for the highway improvement.

22-2.02(a) **Functional Classification**

The Office of Planning and Programming (OPP) is responsible for functionally classifying all roads and streets. For information on functional classification, see the OPP publications *Functional Classification, Federal-aid Systems, and Urban Area Boundaries Procedural Manual* and the *Federal-aid System and Five Year Classification Maps*.

22-2.02(b) Highway Data Bank

OPP is responsible for maintaining the Illinois Roadway Information System (IRIS) and Illinois Structure Inventory System (ISIS). OPP can provide computer generated route log listings for State routes and local roads and streets. The available data is dependent on the highway system. The following major items may be available:

- administrative classification,
- physical dimensions,
- roadway characteristics,
- traffic data,
- geometric data,
- pavement cross sections, surface type, drainage, and shoulder conditions, and
- bridge inspection and appraisal data.

A complete listing of items is shown in the indices of the *IDOT Roadway Information and Procedure Manual* and the *IDOT Structure Inventory and Procedure Manual*.

22-2.02(c) Urban Transportation Planning

The urban transportation planning process discussed in Chapter 17 provides information on local governmental functions in urbanized areas of over 50,000 inhabitants. The Metropolitan Planning Organizations (MPO) administer a continuing, cooperative, and comprehensive transportation planning process that results in transportation improvement plans and programs consistent with the planned development of the urbanized areas. This process determines the transportation modal choice. In urbanized areas, the project must be consistent with local transportation planning. Major urban improvements must meet joint FHWA/FTA regulations for major highway improvements in urban areas. The urban transportation planning process also can provide other social, economic, environmental, and engineering information for preliminary studies.

22-2.02(d) Current and Projected Traffic Volumes

Under the general guidance of OPP, the districts count and classify existing traffic volumes on the State highway system and some local roads and streets. OPP also maintains data used to project future traffic volumes (e.g., annual traffic growth factors). The following traffic data may be available from the district:

- current hourly and daily traffic volumes,
- current turning movement volumes,

- traffic projections and assignments for new facilities, and
- traffic projections for future design years on existing facilities.

Similar data, developed in conjunction with the Urban Transportation Planning Process, also may be available from the MPOs. Because the design of a project greatly depends upon the projected design hourly volumes, these figures must be carefully examined and questioned before using for design purposes. Improper traffic projections can result in the construction of unnecessary or inadequate highway improvements.

22-2.02(e) Crash and Skid Reduction Analyses

During the preliminary study, identify High Accident Locations (HAL), rates, and all crash patterns (e.g., fixed objects) at various sites throughout the project. The Division of Traffic Safety regularly furnishes the district with crash information and provides crash information upon request. The following is a partial listing of available crash information:

- collision diagram printouts for roads and streets on the local system when the local agency is part of the Local Accident Reference System and for intersections with State highways. Collision diagram computer plots may also be requested for intersections;
- individual crash reports for above locations, upon request from a microfilm or imaging retrieval system;
- State highway HAL maps and computer generated listings that report supplemental data for high crash spots and roadway sections;
- wet pavement crash cluster sites for State highways (computer generated listings);
- county crash summaries;
- municipal crash summaries;
- statewide average crash rates, distributed annually, for comparison with existing project crash rates for proposed improvement justification; and/or
- summaries of Motor Vehicle Traffic Crashes and statewide average percentages by type of collision, light condition, and road surface. These percentages may be compared with project percentages from collision diagram summary sheets to help identify over-represented crash patterns.

22-2.03 Geometric Design Criteria

Part IV, Project Design, of this *Manual* presents the recommended geometric design criteria for the different types of highways. This is an important element for all preliminary studies. The following briefly summarizes the information provided in Part IV:

1. Basic Design Controls. Chapter 27 discusses the design controls that have an overall impact on the geometric design of a highway facility. As discussed in Chapter 27 and, as appropriate, the designer should evaluate the following:
 - a. Project Scope of Work. The project scope of work will determine the type of design criteria to be used. Section 27-2 defines the project scope of work for new construction, reconstruction, and 3R type projects. Chapter 32 presents the design criteria that apply to new construction/reconstruction projects. For these projects, the designer often has the liberty of designing the highway to meet the most desirable criteria. However, available finances do not always permit the reconstruction of existing highways to this level. The geometric design of projects on existing highways must be viewed from a different perspective. These projects are often initiated for reasons other than geometric design deficiencies (e.g., pavement deterioration, crashes), and they often must be designed within existing right-of-way, financial limitations, and/or environmental constraints. As a result, the design criteria for new construction and reconstruction are often not attainable without major cost and, frequently, adverse impacts. At the same time, the local agency must make cost effective and practical improvements to existing highways and streets. For these reasons, the separate geometric design guidelines for 3R projects on existing highways are provided in Chapter 33.
 - b. Functional Classification. Section 27-3 discusses the application of the functional classification system in Illinois for geometric design applications. All highway improvements must be compatible with the functional classification of the highway under design. A highway's functional classification is an important factor in determining which design policies and criteria to use.
 - c. Design Speed. This is a critical highway design element and is therefore selected before initiating any studies. Section 27-5.02 discusses the overall philosophy in design speed selection. Chapters 32 and 33 present specific numerical criteria for project design speed based on functional classification, highway type, urban/rural location, and project scope of work.
 - d. Traffic Volume Analysis. Section 27-6 provides definitions for highway capacity terms, selection of the design year, and design hourly volume for highway capacity analyses. It references the *Highway Capacity Manual* for detailed highway capacity techniques.
2. Sight Distances. Chapter 28 presents the criteria for sight distances based on design speed. Stopping sight distance (SSD) is a determining factor in an acceptable highway design, especially for vertical alignment. Other sight distances which may be applicable include intersection sight distance and passing sight distance.
3. Horizontal Alignment. Chapter 29 discusses horizontal alignment for new construction/reconstruction projects (e.g., minimum radii, superelevation, horizontal sight distance).

4. Vertical Alignment. Chapter 30 discusses maximum and minimum grades, vertical alignment, and vertical clearances for new construction/ reconstruction projects.
5. Cross Section Elements. Chapter 31 presents the general criteria for cross section elements, and Chapters 32 and 33 present specific numerical criteria for cross sections based on the highway type, design speed, traffic volumes, urban/rural location, and project scope of work. The designer must review the cross section criteria in these Chapters and determine the most appropriate design for the given conditions. The selected roadway cross section should be based on the type of operations and maximum allowable design speed, and will be a factor in determining the right-of-way needs of a highway facility. The proposed typical section should identify:
 - the number and width of travel lanes,
 - the selection of an urban (curbed) or rural section,
 - the shoulder width, if applicable,
 - the gutter width, if applicable,
 - cross slopes,
 - the type and width of median,
 - parking lanes, if applicable,
 - sidewalks and bike lanes/paths, if applicable,
 - side slope configuration (i.e., fill slopes, cut slopes, roadside ditches), and
 - type of pavement.
6. Intersections. Chapter 34 presents IDOT's criteria for the design of intersections.
7. Roadside Safety. Chapter 35 presents the criteria for roadside safety, including clear zones, barrier warrants, barrier design and layout, impact attenuators, and glare screens. Most of the information in Chapter 35 is applicable to the detailed design completed during the development of the final plans.

22-2.04 Environmental Issues

During project development, it is important for the designer to understand the environmental issues that may impact the project. Environmental reviews can be a significant portion of project development and project schedules can be greatly affected. For detailed information on environmental procedures, see Chapters 10, 18, 19, and 20.

22-2.05 Highway Capacity Studies

22-2.05(a) General

The desired level of service (LOS) (e.g., mobility and freedom from delay and congestion) for a highway is determined by its functional classification and urban/rural location. The tables of geometric design criteria in Chapter 32 present the recommended minimum LOS criteria for each functional class.

22-2.05(b) Responsibility

For local agency projects, the local agency or its consultant is responsible for conducting the capacity analysis. The District Geometric Engineer may be available as a resource to the local agency to assist in capacity analyses. The results are reviewed by the district before submission to the Central BLRS.

22-2.05(c) Roadway Mainline Analysis

The following presents the simplified procedure for conducting a capacity analysis for the roadway mainline:

1. Select the design year; see Section 27-6.02.
2. Determine the DHV; see Section 27-6.03.
3. Select the level of service; see Chapter 32 or Chapter 33.
4. Document the proposed roadway geometric design (e.g., lane width, number and width of approach lanes at intersections).
5. Using the *Highway Capacity Manual*, analyze the capacity of the roadway element for the proposed design:
 - determine the maximum flow rate under ideal conditions,
 - adjust the maximum flow rate for prevailing roadway, traffic, and traffic conditions, and
 - calculate the service flow rate for the selected level of service.
6. Compare the calculated service flow rate to DHV. If DHV is less than or equal to the service flow rate, the proposed design will meet the objectives of the capacity analysis. If DHV exceeds the service flow rate, the proposed design may need further evaluation. The designer should either adjust the roadway design or adjust one of the capacity elements (e.g., the selected design year, level of service goal).

22-2.05(d) Intersection Design Studies

An intersection design study (IDS) is a graphic representation of a proposed treatment for the development or improvement of an intersection facility. It is based on an analysis of traffic needs and an evaluation of physical and economic elements at the intersection site. Section 10-2.02 provides guidelines for when IDS should be prepared. Chapter 14 of the *BDE Manual* provides guidelines for the preparation of IDS and the data that is required to be documented. Chapter 34 provides the design criteria for intersections.

IDS's for federally funded projects will be submitted to the district for review. For intersections with State highways, the District Geometric Engineer will review the design to the extent appropriate and, if necessary, will obtain any approvals of exceptions to the geometric policies affecting the State highway from BDE before concurring with the design. The district may also submit a preliminary copy of IDS to the Central BLRS.

22-2.06 Bridge Condition/Hydraulic Reports**22-2.06(a) Bridge Condition Report**

The Bridge Condition Report (BCR) summarizes the findings of the investigation of a bridge and its components. It is used to establish the scope of work on the extent of repair, replacement (partial or total), widening or other improvements. BCR allows the local agency and IDOT to determine the most cost effective method of correcting the reported structural, geometric, or hydraulic deficiencies, and for restoring a bridge to a structurally adequate and functionally serviceable condition.

An abbreviated BCR may be used for structure replacements.

An in-depth BCR is required for all structures that are to remain. This report must include color photos. The following items are necessary in an in-depth report:

1. Introduction. The introduction should provide the reason for the report.
2. Administrative and Geographical Information. The report should include detailed administrative and geographical information (e.g., facility carried, feature crossed, age of bridge).
3. Inspection Information. Include what type of inspection was performed (e.g., visual, testing type, equipment), results of inspection, degree of impairment to structure, and any structural deficiencies. Precast prestressed deck beams should be sounded and scaled as part of the inspection.
4. Description. The report should include a description of the physical condition of the bridge and the deficiencies that require correction.

5. Verification. The ability and capacity of the existing structure for reuse should be verified and documented. This should at least include a statement that the structure is adequate for the required and stated design load. In addition, for structures to remain over waterways, BCR should verify the adequacy of the structure for scour.
6. Recommendations. Note all recommended repairs and any methods of repair.
7. Justification. Provide justification for any proposed work.
8. Photos. Include color photos of deficient areas.
9. Master Structure Report (S-107). This report is output from the Structure Information Management System (SIMS). The current Report S-107 should also be included with BCR.

For structures on 3R and resurfacing only projects that do not require any rehabilitation, provide a description of the structures as described in the Master Structure Report. These structures should be in good condition. A formal BCR then will not be required for these structures.

When the scope of the anticipated rehabilitation work is limited to bridge deck and minor structural repairs without need for a widening or replacement, only the preparation of a Bridge Condition Report for Deck Repair is required. Because the geometrics of the structure will not be altered, this type of work usually will not require a Type, Size, and Location (TS&L) submittal as discussed in Section 10-2.03(b).

Submit BCR to the district. The district will forward BCR to the Local Bridge Unit in the Bureau of Bridges and Structures for review and approval. BCR must be approved prior to or with the approval of the Preliminary Bridge Design and Hydraulic Report.

22-2.06(b) Preliminary Bridge Design and Hydraulic Report

The Preliminary Bridge Design and Hydraulic Report (PBDHR) contain the necessary information for use by IDOT personnel in reviewing the preliminary bridge design and processing the hydraulic reports for local agency bridge and culvert construction projects. See Section 10-2.03(b) for guidance on preparing PBDHR.

22-2.07 Hydraulic (Drainage) Studies

The roadway alignment is dependent on the interrelationships of several variables, including suitable stream crossing locations. The gradeline is directly influenced by high water elevations at stream crossings, and the depth of roadway ditch flow for surface drainage. Hydraulic structure sizes and storm sewer systems may significantly affect project cost estimates. For these and other reasons associated with drainage controls, a drainage study containing

preliminary hydrologic and hydraulic analyses should be prepared where highway drainage and/or structures will significantly affect the design or cost of a project.

Where hydraulic structure sizes can affect the selection of alignments or grades, the local agency should perform a detailed hydraulic analysis. Rehabilitations that have no history of flooding or high water problems may be handled with detailed hydraulic computations to be completed in the design phase. Rehabilitations that have experienced hydraulic problems (e.g., severe scour, inundation, debris) will require a detailed hydraulic analysis during the preliminary study phase, as results may influence the scope of work.

Assessment of flood damage potential during location studies will include inspection of IDNR Office of Water Resources Regulatory Flood Plain Maps, Federal Insurance Administration Flood Hazard Boundary Maps, and/or Flood Insurance Rate Maps to determine if a proposed flood plain encroachment or hydraulic modification is within a special flood hazard area. Section 20-7 discusses the requirements that apply to federally funded and regulated projects when the project will involve a flood plain encroachment. Compliance with local agency flood regulations should also be discussed. Proposals to mitigate adverse effects and to resolve conflicts may also be described.

In addition to recommended improvements to hydraulic structures, the local agency should analyze and describe other proposed hydraulic improvements or modifications (e.g., unavoidable channel changes; the conversion of open ditches to storm sewer systems, including suitability of outfalls; pumping stations; detention facilities; highway embankments, including those parallel to stream flow; other flood plain encroachments). Analyses should include planning for future land use changes and development that could influence runoff rates and rural/urban cross section selections. Discuss the effects of restricted outlets, existing storm sewer capacities, and drainage constrictions (upstream or downstream) on highway drainage systems, particularly in rapidly developing urban areas.

A summary of the hydraulic design for each project will be prepared and submitted to the district for review. See Chapter 36 for culvert designs and Chapter 38 for storm sewer designs. The hydraulic design summary should include the following:

- the set of plans or a sketch showing the outline of the proposed drainage system for storm sewers, culverts, ditches, etc., and
- design computations that include criteria and procedures used, assumptions made with verification of those assumptions, and a listing of design variances.

For additional guidance on hydraulic and drainage design issues, see Chapter 38 of this *Manual*, the *IDOT Drainage Manual*, and the *IDOT Water Quality Manual*.

22-2.08 Geotechnical Reports/Pavement Design

The purpose for a Geotechnical Report is to provide insight into area geology, pedology, and other engineering factors to be used by the designer. If soil stability problems are anticipated, a preliminary Geotechnical Report should be prepared during the preliminary study phase. Information on the geotechnical reports can be found in *IDOT Geotechnical Manual*. While a final pavement design is usually not needed until plan preparation, a determination of pavement type and approximate thickness may be needed during the preliminary study phase. Chapter 37 discusses pavement design procedures and when a Geotechnical Report is required.

22-2.09 Commitments

22-2.09(a) Definitions

The following definitions apply:

1. **Commitment**. A commitment is a documented obligation or promise made by a properly authorized representative of the local agency for carrying out a specific action or actions affecting the planning, design, land acquisition, construction, or operation of a highway project that involves special consideration and action. Note that statements in the Project Development Report and/or environmental reports to the effect that adverse impacts to wetlands or other sensitive resources will be avoided, minimized, or mitigated, will create an obligation to take specific actions (e.g., to follow-up on avoiding, minimizing, and mitigating impact) and should therefore be treated as commitments.
2. **Commitment List**. This is a cumulative list of commitments that states the date, a brief description of the commitment, who made the commitment, and when it was completed. This list is initiated during the Phase I study, included in the plan submittal, discussed at the pre-construction meeting, and checked during the final inspection of the project.
3. **Commitment File**. This is a file created by the local agency and maintained by both the local agency and district for each project. The file should include a commitment list, information on the nature of each commitment, the date when the commitment was made, the parties affected, permits or environmental clearances, and documentation showing that the commitment has been fulfilled. A commitment file must be kept for all Federal and State-funded local projects. These commitments may include:
 - funding arrangements between FHWA, IDOT, local agencies, and/or developers, which may include construction costs, signal maintenance, lighting agreements, etc.;
 - notification requirements to IDOT, public agencies, owners, local officials, etc., prior to construction;
 - requests for verification of the area to be disturbed by the project;

- commitments to owners, IDOT, and/or other public agencies for plant replacement, removal, or retainage (e.g., trees, shrubs, wetland plants);
- environmental commitments to IDOT, other public agencies, and/or other groups (e.g., wetland replacement, hazardous material removal);
- relocation, removal, or replacement agreements/requests for existing buildings;
- drainage agreements, including detention areas, culvert locations, ditch construction, etc.;
- relocation, rebuilding, addition, or removal agreements/requests for private and commercial entrances;
- special construction requests (e.g., timing of construction, type of construction, limits of construction);
- existing sign removal and replacement; and/or
- any other special agreements made between the local agency and land owners during right-of-way negotiations.

22-2.09(b) Procedures

The local agency is responsible for maintaining the commitment file and ensuring that these commitments are incorporated into the final plans and agreements. The following procedures will apply:

1. Recording Comments. Commitments can occur early in the design (e.g., Environmental Survey Request, Project Development Report) through construction. The designer will need to carefully review all minutes of meetings, transcripts of public hearings, and the project study files to ensure all commitments have been listed. If there are any questions, the designer should contact the author of the Project Development Report. During plan development, the designer will also add to the file any commitments made to property owners or others affected by the project.

When applicable, note the commitments in the project agreements and contract documents. The local agency is responsible for providing the district with a copy of their commitment file at the same time as the rest of the project file is submitted.

2. Discussion of Commitment Information. On federal projects, commitments should be discussed at the bi-monthly coordination meeting with FHWA (see Section 22-1.02), to ensure that all affected parties are aware of the nature and scope of the commitments.

When a preconstruction conference is held, commitments should be discussed to ensure awareness and understanding of any special considerations affecting construction, and to emphasize the importance of follow through as construction proceeds. Other parties affected by the commitments may be invited to attend the preconstruction conference.

3. Commitment Change. If it is discovered during project development, implementation, or maintenance that a change is required to a previous commitment or a commitment cannot be met, the designer must immediately notify the district and/or Central BLRS so that appropriate action can be taken. Failure to provide the appropriate notification and review may result in project delays. All affected parties should be considered prior to making the final decision on the previous commitment.

The designer is responsible for updating the commitment file and providing documentation on the coordination with the affected parties and the ultimate decision on the proposed change.

4. Closeout. It is the local agency's responsibility to ensure and document that all commitments have been fulfilled. The local agency will provide the district with a copy of the commitment list at the final inspection after the project is completed. The district will forward a copy of the finalized commitment list to the Central BLRS.

22-2.10 Design Variances

In general, the designer is responsible for making a reasonable effort to meet the design criteria presented in this *Manual*. However, recognizing that this will not always be practical or cost effective, Section 27-7 discusses the process to evaluate and approve variances to the geometric design criteria. The process described in Section 27-7 applies to all local agency new construction, reconstruction, and 3R type projects using federal funds.

Form BLR 22120 is used to document the justification and approval of variances that are necessary for the completion of the project. Complete the form in its entirety for all local agency federal projects.

The information in the form may be presented at district project coordination meetings. Coordination meetings are discussed in Section 22-1.02. The minutes of the coordination meeting would serve as the documentation of the approval. Requests for variances may also be submitted in writing to the district. A written response to the request will then be sent to the local agency.

22-2.11 Project Development Report

22-2.11(a) General

A Project Development Report (PDR) is prepared to ensure environmental issues and design features are consistent with federal, State, and local goals and objectives. PDR is required for all federally funded projects that qualify for a Group II Categorical Exclusion (CE) and for certain projects classified as CE Group I; see Chapter 19. Use form BLR 22210 for CE Group II PDRs. Use form BLR 22211 for CE Group I PDRs. Use form BLR 33410 for LAPP projects.

22-2.11(b) Contents

The following information should be included in PDR, when applicable:

1. Location. Include a narrative description of the project location along with a location map.
2. Description of Existing Conditions. Describe the existing facility (e.g., alignment, typical sections, bridges, railroad crossings, utilities) within the improvement. For existing railroad crossings, PDR should document the number of trains per day, the existing warning devices, and the geometrics at the crossing. Also, describe the contiguous sections.
3. Design Traffic Data. Include current ADT, design ADT, DHV when applicable, and the percent trucks.
4. Purpose/Need for Project. Discuss the purpose and need for the project.
5. Design Guidelines. Indicate whether the project is being designed using urban or rural design guidelines for new construction/reconstruction or the 3R guidelines. Include the functional classification, the design speed, and the regulatory speed.
6. Description of Proposed Improvement. Include the following in the description of the proposed improvement:
 - a. Roadway. The description should include a discussion of side slopes and the widths of through lanes, turning lanes, traffic control, non-motorized user facilities, parking lanes, and shoulders. Discuss any alignment changes and intersection improvements. Attach typical sections, plan and profile sheets, and intersection design studies, when appropriate.
 - b. Structures. The degree of proposed bridge descriptions contained in PDR will depend on the type of improvement. A bridge rehabilitation project will need to discuss more individual bridge elements needing improvement and possible alternatives for widening under traffic, but not specifics (e.g., beam types). A structure on new location might only require enough details necessary to set approximate roadway profiles, assess hydraulic impacts including streambed environment, and develop a cost estimate. The recommended scope of work should address the approximate dimensions of the replacement structure envisioned, but not so precisely that configuration refinements resulting from subsequent hydraulic, soils, or structural-economic studies are restricted. This is necessary to determine approximate right-of-way requirements, assess environmental impacts, consider necessary hydraulic and flood plain effects, and to make a reasonable cost estimate. Chapter 36 provides guidance on the design of bridges and structures.

- c. Hydraulics (Drainage). PDR should contain a summary of the preliminary hydrologic and hydraulic analyses where highway drainage and/or structures will significantly affect the design or cost of a project. Rehabilitations that have no history of flooding or high water problems may be handled with brief statements of past performance in PDR with detailed hydraulic computations to be completed in the design phase. Discuss the effects of restricted outlets, existing storm sewer capacities, and drainage constrictions (upstream or downstream) on highway drainage systems, particularly in rapidly developing urban areas. For additional guidance on hydraulic and drainage design issues, see Chapter 38 of this *Manual*, the *IDOT Drainage Manual*, and the *IDOT Water Quality Manual*.
- d. Miscellaneous Highway Features. PDR should reflect, as appropriate, other elements as follows:
 - i. Utilities. Describe any proposed modifications, changes, or multiple uses of right-of-way. Prior to beginning of work, a written agreement must be made between the local agency and each utility, defining the work responsibilities and estimate of cost. See Section 5-8 for guidance on preparing utility agreements and Section 10-4 for guidance on utility coordination.
 - ii. Railroads. PDR must determine if crossings will be at-grade or grade-separated. This will be a collaborative effort between the local agency, IDOT, the affected railroad, and the Illinois Commerce Commission. In most cases for at-grade crossings, it will be appropriate in the preliminary stage to specifically determine the type and proposed location of warning devices at the crossing (e.g., automatic gates, flashing signals) and width of crossing surface. The Central BLRS will review and approve the plans, specifications, and estimates without prices for all railroad crossing improvements. Section 10-2.01(f) provides additional information on the coordination with railroads. Chapter 40 provides guidelines on the design of highway/railroad crossings.
 - iii. Lighting. Section 41-7 provides guidelines for highway lighting and illumination. In PDR, describe proposed illumination levels including uniformity ratios and glare levels.
 - iv. Erosion and Sediment Control. Evaluate the need for erosion and sediment control measures. This may require additional right-of-way to accommodate erosion and sediment control implementation. See Section 41-10 for guidelines on the design and implementation of erosion and sediment control.
 - v. Hazardous Mailbox Supports. During the preparation of PDR, the local agency should address the problem of hazardous mailbox supports. Document the existence of potentially hazardous mailbox supports and their locations in PDR. Removal and replacement of mailboxes can be a

sensitive issue and should be reviewed with the local postal authorities and the postal patron. The following evaluation process is required on federal projects and may be used on other projects:

- Survey. Conduct an on site survey to determine whether there are any hazardous mailbox supports within the clear zone of the project. Document these locations in PDR. If there are no hazardous supports on the project, note this in PDR.
- Notification. If a mailbox box support is determined to be hazardous, the local agency is responsible for notifying the postal patron by certified mail that their mailbox may be potential hazard. The letter should discuss the following issues:
 - o type of hazard and the potential adverse safety effects,
 - o potential personal liability to the property owner,
 - o statement of the appropriate mailbox design issues (presented in Section 41-8),
 - o the recommended appropriate safety design,
 - o local agency's request to change the support to an acceptable design, and
 - o local agency's request to meet with the owner to ascertain the property's owner's decision.
- Documentation. Ensure the following is documented in the project files:
 - o copies of all certified letters,
 - o meeting results,
 - o any subsequent verbal or written responses, and
 - o documentation of the local agency's effort to remove the hazardous mailbox.

Summarize all decisions relative to the owner's decision, either agreeing or disagreeing to remove the hazardous support, in PDR.

- Notification by Postmaster. If no response is received from a postal patron who has a hazardous mailbox support, or if the owner indicates that he/she does not wish to change the support, the local agency may contact the local postmaster and ask for the postmaster's help in getting the mailbox support removed. If the local postmaster is agreeable, the local postmaster has the authority to notify the patron in writing of the safety hazard of an existing support. Postal regulations require that box supports must bend or break away when struck by a vehicle and that supports are now readily available for purchase. The local postmaster can give the owner 30 days notice, and if compliance

is not achieved, the postmaster has the authority to suspend mail delivery to the box.

- Project Field Reviews/Construction Phase. If a hazardous mailbox support is constructed or discovered after design approval, use the above procedures and add the appropriate documentation to the files and reports.

Section 41-8 contains additional information concerning hazardous mailbox supports.

- vi. Truck and Parking Restrictions. List any truck or parking restrictions or parking removal in PDR.
- vii. Mail Delivery. Indicate any mail delivery from a traffic lane.
- viii. Airports. PDR must indicate that the project will have no effect on airport operations. Section 10-6 discusses airport coordination.
- ix. Traffic Control. Many traffic engineering elements are addressed during detailed design in the final plans (e.g., selection and location of traffic signs and pavement markings). However, as appropriate for the project scope of work, PDR should discuss proposed traffic control, especially at intersections, and include justification of those traffic engineering elements (e.g., traffic signal and multi-way stop warrants). Chapter 39 provides guidance on several traffic engineering issues.
- x. Sidewalks and Pedestrians. Describe the reasons for providing, or not providing sidewalks, and the coordination needed with local governmental units. See Section 41-6 for a discussion on sidewalks and ADA compliance. PDR must contain a discussion on satisfying ADA requirements including, if applicable, the selection of accessible routes for disabled individuals.
- xi. Bicycle Facilities. Identify the travel needs of bicyclists in PDR. Chapter 42 provides guidelines for the placement and design of bicycle facilities.
- xii. ADA. Section 41-6 discusses implementation of the *Americans with Disabilities Act (ADA)*. PDR must contain a discussion on satisfying ADA requirements including, if applicable, the selection of accessible routes for disabled individuals. Any intersection design study (see Section 10-2.02) prepared during the preliminary study must indicate the location of the curb-cut ramps to be provided. PDR must discuss any request for a design exception from policies on accommodating disabled individuals and the justification for the request. The request must discuss the impact on the access route.

- xiii. Geotechnical Considerations. Conduct preliminary studies in cooperation with soils specialists and geologists when these elements influence the location and/or design of a proposed improvement. Additionally, the location of foundations for structures or high embankments may be an important item in the highway location. See the *IDOT Geotechnical Manual* for information on geotechnical considerations.
 - xiv. Agreements. PDR should document the need for any agreements with the State, other local agencies, consultants, railroads, and/or utility companies. Chapter 5 provides guidance on the preparation of these agreements.
 - xv. Maintenance Considerations. The designer should develop PDR in cooperation with bridge and highway maintenance personnel who are responsible for the highway section under design. Section 25-2 provides additional guidance on maintenance issues.
7. Design Variances. List all design variances along with any approvals. Include form BLR 22120. See Section 27-7 for additional information.
 8. Cost Estimate. Prepare a cost estimate for the project including construction, utility adjustment, land acquisition, and engineering costs. For major projects requiring more than one construction contract, provide cost estimates for individual usable segments. Section 11-6 discusses the required information needed to document project costs.
 9. Crash Analyses. PDR should include, as appropriate, the following crash analyses to assist in demonstrating the need for a highway improvement:
 - a. Spot Map. Provide a crash spot map as basic crash information in PDR. As applicable, include a comparison of the calculated project crash rates with the statewide average crash rates for the same class of highway. Collision diagram summary sheet percentages also may be compared with statewide averages.
 - b. High-Crash/Crash Pattern Analyses. During the preliminary study, identify High Accident Locations (HAL), rates, and all crash patterns (e.g., fixed objects) at various sites throughout the project. Additionally, include schematic collision diagrams, results of field checks, crash analyses, and recommended countermeasures for these items, or provide a statement that no high crash locations or other crash patterns that exist along the proposed improvement.
 - c. Wet-Pavement Crashes. Identify and analyze any wet pavement crash clusters in accordance with the *Procedures for Identifying, Analyzing, and Improving Wet Pavement Accident Locations Within Rehabilitation/Resurfacing Projects*. These procedures are discussed in the *Illinois Safety Improvement Processes Manual* available from the IDOT Bureau of Operations. Include friction numbers, if available, in the analysis of critical wet pavement crash locations combined with the recommended traffic, existing geometric features, grooving, reprofiling,

and/or high friction resurfacing countermeasure alternative. Specify a high-friction resurfacing type and mix design to be used during the development of the final plans.

- d. Time Period. Analyze the traffic crash data available for the most recent 3 years and update the data accordingly.
10. Right-of-Way Requirements. Describe the right-of-way acquisition including the existing land use, the total area required for permanent right-of-way, permanent easements, and temporary easements, the number of property owners affected, and anticipated effects on the remaining properties. Discuss any displacements to persons, businesses, and farms.
11. Environmental Issues. Discuss any involvement with environmental issues. Include the results of any environmental surveys. Include any signoffs and copies of other pertinent coordination. Discuss proposed mitigation measures and indicate any permit requirements.
12. Traffic Control and Alternative Routes During Construction. Include in PDR a discussion on the development of a conceptual plan to accommodate traffic during construction. If the highway is to be kept open to traffic during construction or if detours or runarounds are involved, indicate this in PDR. Discuss all feasible alternatives for handling traffic during construction and methods to eliminate or minimize pedestrian considerations. For additional guidance on traffic control devices during construction, see Chapter 39.

When deciding on alternative routes during a road closure, several factors should be considered. Some of these factors include the type of pavement and ability for the alternative route to handle the additional load, the impact that the additional ADT would have on the traffic control at intersections and railroad crossings, the effect of larger vehicles have on the turning radii at intersections, and the coordination with the agencies having jurisdiction of the alternative routes. If a marked detour is provided during a road closure, all agencies having jurisdiction of the detour route must approve the detour signing.

Before closing a road during construction, any affected emergency services, school districts, and post offices should be notified. It is recommended that these agencies be contacted prior to submitting the Project Development Report, and documentation of the contacts be included in the report.

13. Public Involvement. Summarize public involvement activities. Discuss any opposition to the project and how public hearing requirements are being fulfilled. Attach any property owner comments or signoffs.
14. Other Coordination. Attach minutes of the early involvement coordination meetings and applicable coordination letter with other agencies, utility companies, and railroads, as appropriate.

22-2.11(c) Project Development Report Review

Preliminary reviews of PDR may be accomplished by periodic trips to the district by representatives from BLRS and FHWA, when appropriate. A PDR prepared in accordance with current policies and reviewed at district coordination meetings by representatives from BLRS and FHWA, when appropriate, in most cases may be used for public involvement activities without advance submission to the Central BLRS. However, submit a PDR containing significant design deviations to the Central BLRS for approval of the variances before using it at any public involvement activities.

22-2.12 Design Reports

A design report will be required for all projects that require a separate environmental documentor for which an ECAD was prepared. The purpose of a design study is to investigate all plausible alignments within the approved corridor. Public involvement activities and environmental studies are conducted concurrently with the design study.

The report must discuss the alternatives considered, but not studied, with an in depth explanation of why these alternatives were eliminated. For the final alternatives under consideration, include major design details and discuss the social, economic, and environmental advantages and disadvantages of these alternatives. The environmental impacts do not need to be discussed in detail in the design report, but should be summarized. Additionally, summarize the result of public involvement activities. The report must identify the recommended design alternative and the reason for its selection.

Additional guidance concerning design studies and reports are provided in Chapters 11 and 12 of the *BDE Manual*.

22-2.13 Approvals**22-2.13(a) Categorical Exclusion Approval**

The following approval process is required:

1. Categorical Exclusion Group I Projects. For CE Group I projects, CE Approval is given by the district after the environmental coordination and any public involvement activity have been completed and the project has been determined to have no unusual circumstances.
2. Categorical Exclusion Group II Projects. For CE Group II projects, CE Approval is required by the FHWA. After the final PDR has been reviewed, environmental coordination and public involvement activities have determined there are no unusual circumstances, and there is an agreement on any mitigation measures, the Central

BLRS will contact the FHWA with a request for CE Approval. The request for CE Approval to the FHWA may be made at a coordination meeting, through e-mail, or other method of contact. Documentation of the CE Approval will be included in the PDR.

22-2.13(b) Design Approval

All projects that require the preparation of a PDR or a design report will require design approval.

. For all CE Group I projects, design approval by the district will be required. For all CE Group II projects, design approval will be given by the Central BLRS after environmental and public hearing requirements have been completed and the project has been determined to have no unusual circumstances. For projects classified as Categorical Exclusions and where no public hearing or opportunity for public hearing is required, design approval can be given after the CE Approval.

If a formal public hearing is held or offered, the local agency is responsible for publishing a notice that the design has been approved in a local newspaper within 10 days after receiving notice of the approval. The notice should include a narrative description of the location and/or design, as submitted. Where practical, the inclusion of a map or sketch of that location or design is desirable. In the notice, indicate that maps or sketches, as well as other information concerning the design, are publicly available for review in the local agency's offices.

22-2.13(c) Direct Approval

The Central BLRS Project Development Engineers have the authority to conduct some official actions in the districts and at coordination meetings. Specifically, these actions will consist of evaluating and approving, when satisfactory, requests for Categorical Exclusion determinations and design approvals for certain projects. Direct approvals are means of expediting the processing phases.

Consider the following before requesting direct approval:

- A request for design approval has been published.
- The local agency has submitted PDR (Form BLR 22210) or other design report.
- Projects that involve other than minor geometric revisions are not normally eligible for direct approval. Some projects with design deviations may still qualify for direct approval if prior concurrence for design deviations has been obtained from the Central BLRS.

22-2.14 Addenda to Project Development and Design Reports

All changes during the preparation of final plans or construction that affect the design features of an approved project must be submitted in the same manner as the first approval.

22-2.15 Reports for Local Agency Projects Involving a State Highway

The following procedures for processing and approval of Design Reports, Project Development Reports, and other related documents will apply for local agency projects involving a State highway.

22-2.15(a) State Highway System

The following applies with regard to jurisdictional transfers:

1. No Jurisdictional Transfer. Discuss all projects at district coordination meetings before finalizing and submitting any reports. Reports prepared by the local agency or their consultant should be submitted to the Central BLRS for review, approval, or information. When the need for a design exception is discovered at the local coordination meeting on routes under State jurisdiction, the Central BLRS will coordinate and discuss this information with BDE prior to approval action. If a local agency is preparing the report for a State highway on the National Highway System (NHS), BDE will review the highway geometrics and cross section design during the development of preliminary alternatives. Once the geometrics and cross section designs are agreed to, the Central BLRS will review the report and process it accordingly.
2. Jurisdictional Transfer to a Local Agency. Submit PDR to the Central BLRS for review and approval. When the State is providing matching funds, the Central BLRS will coordinate the design requirements with BDE prior to approval. It is imperative that these projects be discussed at the district coordination meetings. This will allow BDE and the Central BLRS to become aware of proposed design features and costs and to determine if the project is still the same as originally discussed during programming meetings.

22-2.15(b) Combined Systems

For projects that have substantial work on both highway systems, and the local agencies and their consultants prepare reports, process PDR through the district to the Central BLRS. The Central BLRS will coordinate any design requirements with BDE.

22-2.15(c) Modified Procedures

Where special or unusual situations arise during project development, modified review and processing procedures may be necessary. In such cases, the local agency, district, Central BLRS, and BDE should agree on the modified procedures to use.

22-2.16 Interstate Access Studies

BDE and FHWA must approve all proposed new access points to the Interstate system and all proposed changes in interchange configurations, even if the number of access points does not change. For changes to access for non-Interstate fully access controlled facilities, BDE must approve any changes to access. This applies to any change regardless of the funding source.

FHWA revised access approval constitutes a federal action and, as such, NEPA procedures must be followed. Compliance with NEPA procedures should proceed concurrently with the analyses to determine engineering acceptability and feasibility.

An Access Justification Report must be prepared to confirm the future safety and traffic operations along the Interstate corridor. The required contents of this document can be found in Chapter 37 of the *BDE Manual*. The report is submitted to BDE for review and approval by IDOT and, when required, by FHWA.