



Environmental Handbook

Preparing an Environmental Assessment

This Handbook conveys TxDOT's primary expectations on how an EA must be prepared and the appropriate level of content and analysis.

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1.0 Introduction

The Texas Department of Transportation (TxDOT) relies on TxDOT districts and local governments to prepare environmental assessments (EAs) for transportation projects. Those entities, in turn, rely on consultants and other environmental practitioners to assist with this work. The purpose of this Handbook is to convey TxDOT's primary expectations of how an EA must be prepared and the appropriate level of content and analysis, with the ultimate goal being a high level of consistency and quality and short review times.

The intended audiences of this Handbook are the districts and local governments who prepare EAs, and the consultants and other environmental practitioners who assist them. This Handbook covers the most important aspects of EA preparation. However, keep in mind that it is not possible to answer in a single guidance document every question and address every possible issue that may arise. Also, the information in this Handbook is not intended to revise or replace any statute, rule or Federal Highway Administration (FHWA) policy that may apply. Specifically, the National Environmental Policy Act (NEPA),¹ the Council on Environmental Quality's (CEQ's) rules,² FHWA's environmental review rules,³ and TxDOT's environmental review rules⁴ take precedence over this Handbook in the event of a conflict.

This Handbook applies to any project for which an EA will be prepared for TxDOT's approval either under TxDOT's environmental review rules, or under the NEPA assignment memorandum of understanding (MOU) with FHWA. Projects for which an EA is prepared under the NEPA assignment MOU are referred to throughout this Handbook as "FHWA projects." This Handbook is not applicable to a project with a lead federal agency other than FHWA.

2.0 Purpose of an Environmental Assessment

The primary purpose of an EA is to help TxDOT determine whether or not an environmental impact statement (EIS) is needed. Therefore, an EA is prepared when a project cannot be processed as a categorical exclusion (CE) and does not clearly require the preparation of an EIS or when an EA would assist in determining the need for an EIS.⁵ The end result of an EA is either a finding of no significant impact (FONSI) or a recommendation that an EIS must be prepared.

3.0 Overview of TxDOT's Process for Preparing an EA

The following is a broad overview of TxDOT's process for developing an EA. This process is designed to comply with Transportation Code Chapter 201, Subchapter I-1, enacted in 2011. Subchapter I-1 established requirements for project scoping, administrative completeness review, technical review, and review deadlines for different categories of projects, among other requirements.

¹ 42 USC 4321, et seq.

² 40 CFR Parts 1500-1508

³ 23 CFR Part 771

⁴ 43 TAC Chapter 2

⁵ See 23 CFR 771.119(a)

3.1 Roles of Project Sponsor and Department Delegate

Every project has a “project sponsor” and a “department delegate.” The project sponsor is the entity responsible for preparing the EA and performing related activities. Its responsibilities include performing all appropriate analyses, drafting the EA, preparing all required documentation, conducting public involvement, ensuring that any required coordination with resource agencies is completed, managing the project schedule, and ensuring the project file is sufficient and complete.

For most projects, the project sponsor is the TxDOT district in which the project is located. However, it is possible for some local governments to be designated as the project sponsor. The types of local governments who may be designated as the project sponsor are municipalities, counties, groups of adjoining counties, regional tollway authorities, regional mobility authorities, local government corporations, and transportation corporations. Private entities may not be project sponsors.

Each project also has a department delegate, which is the entity that approves the project scope (discussed below), performs various reviews of the EA and its component parts, and ultimately approves the EA on behalf of TxDOT. For EAs, the department delegate is TxDOT’s Environmental Affairs Division (ENV).

3.2 Scoping

Project environmental review work begins with scoping (note that this type of scoping is different from the scoping that is required at the commencement of an EIS under federal law). Scoping is a process in which the project sponsor and ENV agree on the classification of the project (i.e., CE, EA, or EIS) and the project work plan. The work plan essentially consists of a list of Activities that must be completed as part of the environmental review process for the project. Scoping is done in ECOS using the information entered into the WPD Section I – Project Definition and WPD Section II – Work Plan Development screens. The project scope or “project work plan” is documented on the WPD Section III – Project Work Plan screen. For more information on the scoping/project work plan development process, see **ENV’s Environmental Guide: Volume 1 Process**.

3.3 ENV Director Approval of Timeline Greater than 1 Year

For FHWA projects, if the notice of availability of the final EA (if one is required) or notice of availability of the FONSI (if no notice of the final EA is required)⁶ will be issued more than 1 year after the first acceptance of the project work plan in ECOS – i.e., the “Project Start Date” on WPD III (or if a classification memo signed by the Environmental Affairs Division Director is required to classify the project as an EA, more than 1 year after the date on which the Environmental Affairs Division Director signs the classification memo), then the Director of the Environmental Affairs Division must approve a new deadline for the notice of availability of the final EA (if one is required) or notice of availability of the FONSI (if no notice of the final EA is required) in an email. If the Director of the Environmental Affairs Division approves a new deadline, district environmental staff must add a note to the “Comments” field of the “Perform Draft EA Preparation” or “Perform Final EA Preparation” Activity (as applicable) noting the new deadline for the notice of availability of the final EA (if one is required) or notice of availability of the FONSI (if no notice of the final EA is required), and upload the email under the “Perform Draft EA Preparation” or “Perform Final EA Preparation” Activity in ECOS, depending on whether the email was issued prior to the draft EA or the final EA.

⁶ 40 CFR 1501.10(b)(4)(i).

3.4 Contractor Disclosure Statement Email for an FHWA project

If the project is an FHWA project, then the contractor must submit a disclosure statement email to TxDOT specifying that the contractor has no financial or other interest in the outcome of the EA or EIS. The contractor must use **ENV's Template – Contractor Disclosure Statement Email for an FHWA Project Requiring an Environmental Assessment or Environmental Impact Statement** to prepare an email, addressed to the Director of the Environmental Affairs Division, copying the ENV and district core team members. Note that an expectation of subsequent engineering and design work does not prohibit the contractor from preparing the EA for TxDOT's review and use. See 23 USC 112(f), allowing a contractor to prepare an environmental document and perform subsequent engineering and design work if TxDOT conducts a review that assesses the objectivity of the environmental document. The ENV core team member uploads the email or letter containing the contractor disclosure statement under the "Perform Draft EA Preparation" Activity in ECOS.

3.5 Classification

FHWA's rules, at 23 CFR 771.115(a), identify four project types that normally require an EIS: (1) a new controlled access freeway, (2) a highway project of four or more lanes on a new location, (3) construction or extension of a fixed transit facility that will not be located within an existing transportation right-of-way (ROW), and (4) new construction or extension of a separate roadway for buses or high occupancy vehicles not located within an existing highway facility. When an EA is proposed for a project that would normally require an EIS under this rule, the project sponsor must prepare a written justification for preparing an EA and ENV must formally concur that the project can proceed as an EA.

For more information on these two scenarios, see the instructions for the "Obtain Project Classification Approval" Activity in **ENV's Environmental Guide: Volume 2 Activity Instructions**.

3.6 Public Meeting(s)

Public meetings are intended to present information to, and/or solicit feedback from, the general public. The decision to hold a public meeting must be based on the project's type, complexity, and level of public concern. There is no requirement to hold a public meeting on an EA-level project, but project sponsors often find it helpful to hold a meeting relatively early in the process.

There is no specific time frame for conducting public meetings, except that they are generally conducted prior to the public hearing/opportunity for public hearing phase discussed below.

For more information about public meetings and the associated documentation requirements, refer to **ENV's Environmental Handbook on Public Involvement**.

3.7 Technical Documentation

Technical documentation, which may be checklists, forms, etc., may be required by the instructions for various Activities (see **ENV's Environmental Guide Volume 2: Activity Instructions**). Specific examples would include a traffic noise analysis report, a cumulative impacts analysis, or a historic resources survey. Information about how to prepare technical documentation for specific subject areas can be found in **ENV's Environmental Compliance Toolkits**. ENV's Toolkits provide a specific format for technical documentation (e.g., the Documentation Standard for a Hot-Spot Analysis Technical Report). The instructions for various Activities in **ENV's Environmental Guide Volume 2: Activity Instructions** specify any internal review procedures for technical documentation. Technical documentation must be completed (and reviewed, if required by the Activity Instructions), prior to submittal of the draft EA for review by ENV.

3.8 Agency Coordination

TCEQ MOU

Under the department's MOU with the Texas Commission on Environmental Quality (TCEQ), EAs are always coordinated with TCEQ by providing TCEQ with a combined notice of availability of the draft EA and notice of public hearing/opportunity for public hearing. When the project sponsor is ready to proceed to the Notice of Availability and Public Hearing/Opportunity for Public Hearing stage (see Section 3.8 below), the project sponsor emails the combined notice of public hearing/notice of availability (NOA) of the draft EA, or combined notice of opportunity for public hearing/notice of availability (NOA) of the draft EA to TCEQ at the following email address: NEPA@tceq.texas.gov (when the Documentation of Public Hearing or Documentation of Public Hearing Opportunity is prepared, include this email in the "Notices" section of the documentation).

TPWD MOU

Also, under the department's MOU with the Texas Parks and Wildlife Department (TPWD), EAs are always coordinated with TPWD by providing TCEQ with a combined notice of availability of the draft EA and notice of public hearing/opportunity for public hearing. For more information about how to do this, see the instructions in **ENV's Guidance: TPWD Coordination Under the 2021 Memorandum of Understanding**. (When the Documentation of Public Hearing or Documentation of Public Hearing Opportunity is prepared, include the email to TPWD in the "Notices" section of the documentation).

Coordination with other agencies

It may be appropriate to also coordinate the project with other resource agencies and governmental bodies, either because it is legally required (e.g., Section 7 consultation with the United States Fish and Wildlife Service (USFWS) under the Endangered Species Act), or because the entity has been identified as having an interest in the project in accordance with 43 TAC 2.83(c). Any coordination conducted with outside entities will be summarized in the draft EA (see discussion of Section 6.0 of the EA below).

"Participating agencies"

For FHWA projects, CEQ's rules require TxDOT to involve the public; State, Tribal, and local governments; and relevant agencies, to the extent practicable, in preparing an EA.⁷ TxDOT complies with this requirement by ensuring that such entities receive notice of combined notice of availability of draft EA and opportunity for public hearing, or combined notice of availability of draft EA and public hearing. This assures that such entities have an opportunity to review and comment on the draft EA before it is finalized. TxDOT considers all input provided by such entities in connection with this opportunity to be involved in the preparation of the EA. Any agency that provides input on the draft EA is considered a "participating agency" under CEQ's rules.⁸ It is not necessary to formally invite or designate any agency as a "participating agency" as is done for EIS projects during the EIS scoping process. For EAs, it is sufficient to provide interested agencies with notice of the draft EA and consider them as "participating" if they choose to provide input.

"Cooperating agencies"

If the project will require another Federal agency to issue a NEPA approval for the project in connection with a permit or real estate agreement or for some other reason, then TxDOT should invite the other

⁷ 40 CFR 1501.5(f).

⁸ 40 CFR 1501.8(cc).

Federal agency to be a “cooperating agency.” This can be done informally by email. If the other Federal agency agrees to be a cooperating agency, then TxDOT should informally share drafts of the EA with the cooperating agency prior to public review so that TxDOT and the cooperating agency can work out any issues ahead of public review. This should make it easier for the cooperating agency to ultimately adopt the EA instead of having to prepare its own EA for the project.

If a cooperating agency is identified, TxDOT must notify the cooperating of the schedule for the environmental review.⁹ This can be done informally by email. The schedule must include the following milestones:¹⁰

- Decision to prepare an EA (i.e., acceptance of the project work plan in ECOS)
- Issuance of draft EA
- Public comment period on draft EA
- Issuance of final EA and FONSI (or decision to prepare an EIS instead)
- Any other environmental permits that must be obtained for the project (i.e., Section 404 permit, Section 9 permit, etc.)

Special instructions regarding the need for a Section 404 individual standard permit from the USACE

If it is reasonably foreseeable that the project will need an individual standard permit under Section 404 of the Clean Water Act, it is important that the draft EA be coordinated with the U.S. Army Corps of Engineers (USACE), preferably before it is released for public review. If an individual standard permit will be needed, it will be necessary for the USACE to ultimately agree with the determination in Section 5.9.1 of the EA that there is no “practicable”¹¹ alternative to the discharge of dredged or fill material that would have a less adverse impact on the aquatic ecosystem. Therefore, it is important that any USACE concerns regarding the discussion of this topic in Section 5.9.1 of the EA be addressed to the USACE’s satisfaction before the final EA is released (and preferably before the draft EA is released). Additionally, addressing any USACE concerns regarding the rest of the EA to the USACE’s satisfaction will allow the USACE to use or “adopt” TxDOT’s EA to comply with NEPA (instead of preparing its own EA) when the USACE prepares to ultimately issue the individual standard permit. For these reasons, if the need for an individual standard permit is reasonably foreseeable, district environmental staff should seek the USACE’s written concurrence with both the discussion of “no practicable alternative” in Section 5.9.1 and the content of the rest of the EA before issuing the final EA (and preferably, before releasing the draft EA for public review). ENV recommends that district environmental staff reach out to USACE Regulatory staff while the draft EA is being prepared to discuss the project and share drafts of the EA. This should be an informal, collaborative process between the district and the USACE.

3.9 Draft EA and Approval for Circulation

After all technical documentation required by **ENV’s Environmental Guide Volume 2: Activity Instructions** has been completed and reviewed (as applicable), the draft EA is submitted to ENV for approval for circulation. The draft EA must include the required content as set forth in Section 5 of this

⁹ 40 CFR 1501.8(b)(6) and 1501.10.

¹⁰ 40 CFR 1501.10(c) and (f).

¹¹ An alternative is “practicable” if it is “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” 40 CFR 230.10(a)(2)

Handbook, including a statement on the intent to hold a public hearing or to afford the opportunity for a public hearing. The draft EA will be approved for public review after it is determined administratively complete and has been reviewed for readiness (i.e. technical review). The review process for the draft EA is explained in the instructions for the “Perform Draft EA Preparation” Activity in **ENV’s Environmental Guide Volume 2: Activity Instructions**.

3.10 Notice of Availability and Public Hearing/Opportunity for Public Hearing

Once ENV approves the draft EA for public review, the project sponsor issues a notice of availability (NOA) and either schedules a public hearing or affords the opportunity for a public hearing. The NOA and the notice of public hearing or opportunity for a public hearing are combined into a single notice.

TxDOT’s requirements for issuing an NOA and noticing, conducting, and documenting a public hearing or affording an opportunity for public hearing, are set forth in **ENV’s Environmental Handbook on Public Involvement**. That Handbook also explains how to determine whether a public hearing or an opportunity for public hearing is needed.

Note that it is also possible that a hearing will be required under Transportation Code 203.021 (regarding projects that bypass a municipality or county), or Texas Parks and Wildlife Code Chapter 26 (regarding the taking of public land designated and used as a park, recreation area, wildlife refuge, historic site, or scientific area). A hearing held on a project under TxDOT’s environmental review process may also satisfy the hearing requirement in those statutes. If these circumstances exist, consultation with ENV is recommended to ensure that the hearing is properly noticed and held to satisfy both TxDOT’s environmental review rules and the respective statutory requirements.

3.11 Final EA and FONSI

After the opportunity for public hearing/public hearing phase, the project sponsor must revise the EA as appropriate to address any public comments and reflect the status of any additional agency coordination. If the EA concludes that there will be no significant impacts on the environment, ENV then prepares a written FONSI for ENV approval and issuance. Refer to Section 6 of this Handbook for more information about preparation and issuance of a FONSI. The review process for the final EA and FONSI is explained in the instructions for the “Perform Final EA Preparation” Activity in **ENV’s Environmental Guide Volume 2: Activity Instructions**.

3.12 Section 139(I)

For an FHWA project, ENV will publish a Section 139(I) notice in the Federal Register. Section 139(I) refers to a federal statute, 23 USC 139(I), which sets a 150-day statute of limitations period on challenging the EA/FONSI in court, provided that a notice is properly published. Under the terms of TxDOT’s NEPA assignment MOU with FHWA, any Section 139(I) notice must undergo legal sufficiency review before publication. The process for preparing and issuing the Section 139(I) notice is explained in the instructions for the “Perform 139(I) Notice of Limitation on Claims for Judicial Review” Activity in **ENV’s Environmental Guide Volume 2: Activity Instructions**.

4.0 EA Style and Length

An EA must not be longer than 75 pages (not including citations or appendices).¹² An EA must be written in a concise, straightforward, clear style. Repetitive descriptions of the project or other subjects must be avoided. For many of the individual subheadings in an EA, it may be appropriate to cover the respective issue in a paragraph or two.

The body of the EA must contain enough information so that the reader can understand the details of the project and the associated impacts on each affected resource. As explained in more detail below, the EA must contain a list of all technical documentation (e.g., checklists, forms, etc.) prepared as part of the environmental review, and explain how and where the technical documentation may be inspected and copied upon request (usually the TxDOT district or area office).

Whenever the preparer of the EA refers to or relies on information from some external source, the external source must be immediately referenced in the body of the text or in a footnote so that the relevance of the material being cited is clear to the reader.¹³ Additionally, there will be a comprehensive list of all references cited throughout the EA in Section 10.0.

5.0 Required Content

Each EA must follow the outline set forth in **ENV's Environmental Assessment (EA) Outline** (available on **ENV's NEPA and Project Development Toolkit**). Below is an overview of the required content for each section of the EA.

It is permissible to add subheadings under the headings and subheadings set forth below to break-up large sections of text and improve readability. However, do not make any changes to the required headings and subheadings themselves, or the order in which they appear. Also, do not add new sections or additional information beyond what is called-for by the instructions below without first discussing with TxDOT's Environmental Affairs Division (ENV).

Cover Sheet

The cover sheet for the EA must be prepared using **ENV's Environmental Assessment (EA) Cover Page** provided (available on **ENV's NEPA and Project Development Toolkit**). For an FHWA project, the cover sheet must contain the following language:

"The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT."

Note that this language is included on the template cover page provided by ENV on the toolkit reference above. If the project does not involve FHWA funding or approval, this language must be removed from the cover sheet.

¹² 42 USC 4336a(e)(2).

¹³ 40 CFR 1501.12.

Table of Contents

The EA must have a table of contents.

List of Acronyms

The EA must have a list of acronyms used in the EA (e.g., FHWA, NEPA, etc.), with corresponding full names of the agencies, statutes, or phrases for which acronyms are used.

Introduction (EA Section 1.0)

This section of the EA must concisely state who is proposing to do what and where. Additionally, it must explain that the purpose of the EA is to study the potential environmental consequences of the proposed project and determine whether such consequences warrant preparation of an EIS. Explain whether the EA is prepared to comply with just TxDOT's environmental review rules (for a state project), or whether it is prepared to comply with both TxDOT's environmental review rules and NEPA (for an FHWA project). For the draft EA, explain that the EA will be made available for public review and that following the comment period TxDOT will consider any comments submitted. For the final EA, explain that the EA was made available for public review and that TxDOT considered any comments received (if any were submitted). For both the draft and final EA, explain that if TxDOT determines that there are no significant adverse effects, it will prepare and sign a FONSI, which will be made available to the public.

Include this statement in the Introduction:¹⁴

"TxDOT has conducted an independent evaluation of all parts of this EA that were prepared by a contractor(s) and has determined that this EA meets the standards under NEPA, regulations in 40 CFR Subchapter A, and FHWA's and TxDOT's NEPA procedures."

Project Description (EA Section 2.0)

This section of the EA must consist of two components: (1) Existing Facility and (2) Proposed Facility. There is no need to insert text under the "Section 2.0" heading.

Existing Facility (EA Section 2.1)

Describe the existing facility that will be modified by the project. Include details such as the number of existing lanes, whether the roadway is divided, the width of existing lanes, the shoulder width, and the total ROW width. Include a description of any bicycle or pedestrian facilities and linkages to transit stops and corridors, detention ponds or other facilities related to the roadway. Include references to a typical section drawing or drawings and photos of the existing facility, which must be included in Appendices B and D to the EA.

Proposed Facility (EA Section 2.2)

Describe the proposed project (i.e., the preferred alternative). Include the same types of details used to describe the existing facility (e.g., bicycle or pedestrian facilities and linkages to transit stops and corridors, detention ponds, etc.). Identify the project limits and use distances from reference points, as applicable, to describe the project. Make sure that the project limits encompass the entire length of the

¹⁴ 40 CFR 1506.5(a) and (b)(2).

project in which construction will take place, including transition zones. If the project will require an interstate access justification request to be approved by FHWA, include a statement to that effect.

Include references to a project map or maps, schematics showing the proposed facility, and a typical section drawing or drawings, all of which must be included in Appendices A, C and D to the EA. Include the estimated total project cost and expected sources of funding (i.e., federal, state, local, and/or private). If the project is currently described in planning documents as not having any federal funding, but the environmental review is being done to federal standards in order to preserve the possible use of federal funding, then include an explanation to that effect.

Important note: The source of funding (federal or state-only) must be consistent throughout the entire EA. So if the project is being cleared to federal standards, then apply the assumption that there will be federal funding throughout all sections of the EA.

Logical Termini and Independent Utility (EA Section 2.3)

This section of the EA must cover all of the items identified below:

- Describe how the project limits are logical. For an FHWA project only, the following introductory language must be included:

“Federal regulations require that federally funded transportation projects have logical termini. 23 CFR 771.111(f)(1). Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts.”

For an FHWA or state project, state the proposed project limits and indicate why they were chosen (e.g., major traffic generation points, major crossroads, population center) and provide support (e.g., if these are major traffic generation points, cite the technical documentation such as traffic studies and ADT). If there are transition zones on the ends of the project, explain why they are needed and logical.

- Explain how the proposed project has independent utility. For an FHWA project only, the following introductory language must be included:

“Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area. 23 CFR 771.111(f)(2). This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built.”

For an FHWA or state project, state why the proposed project can stand on its own without the implementation of other traffic improvements (e.g., the project provides congestion relief between two major traffic generation points by adding a lane in each direction, which satisfies the project's need, and this would be true even if no other roads were built nearby). Explain why the proposed project is not an irretrievable commitment of federal funds - this may be as simple as stating that, because the project stands alone, it cannot and does not irretrievably commit federal funds for other future transportation projects.

- Explain how the proposed project does not restrict consideration of alternatives. For an FHWA project only, the following introductory language must be included:

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“Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements. 23 CFR 771.111(f)(3). This means that a project must not dictate or restrict any future roadway alternatives.”

For an FHWA or state project, state why the proposed project would not restrict the consideration of alternatives for other foreseeable transportation improvements.

Planning Consistency (EA Section 2.4)

Explain how the project is consistent with applicable transportation plans and programs (e.g., the metropolitan transportation plan and the state-wide transportation improvement program). Specifically identify the plan and program that list the project.

Purpose and Need (EA Section 3.0)

This section of the EA must consist of three components: (1) Need, (2) Supporting Facts and/or Data, and (3) Purpose. There is no need to insert text under the “Section 3.0” heading.

Need (EA Section 3.1)

The required content for this section of the EA is set forth in **ENV’s Guidance on Preparing a Purpose and Need Statement**.

Supporting Facts and/or Data (EA Section 3.2)

The required content for this section of the EA is set forth in **ENV’s Guidance on Preparing a Purpose and Need Statement**.

Purpose (EA Section 3.3)

The required content for this section of the EA is set forth in **ENV’s Guidance on Preparing a Purpose and Need Statement**.

Alternatives (EA Section 4.0)

This section of the EA must consist of three components: (1) Build Alternative(s), (2) No-Build Alternative, and (3) Preliminary Alternatives Considered but Eliminated from Further Consideration, each of which is discussed separately below.

If, prior to preparation of the EA, a planning study was conducted, then this section of the EA should discuss that planning study. If that planning study meets the requirements of 23 CFR §450.212(b) (relating to statewide and non-metropolitan transportation planning and programming) or 23 CFR §450.318(b) (relating to metropolitan transportation planning and programming), then the conclusions from that study relating to the preliminary screening of alternatives and elimination of unreasonable alternatives may be carried forward into this section of the EA by reference. It is very important to only incorporate by reference a planning study if it actually meets the requirements of the above-cited regulations. TxDOT and local governments often undertake studies that do not meet these requirements, which is fine, however, they can only be incorporated by reference if the studies actually meet the regulatory requirements. If the planning study does not meet the requirements of the above-cited regulations, then any important analysis from the planning study must be repeated in the body of the EA in order to be relied upon in the EA.

Special instructions regarding the need for a Section 404 individual standard permit from the USACE: If it is reasonably foreseeable that the project will need an individual standard permit under Section 404 of the Clean Water Act, then it will be necessary to demonstrate in Section 5.9.1 of the EA

that there is no “practicable”¹⁵ alternative to the discharge of dredged or fill material that would have a less adverse impact on the aquatic ecosystem (see 40 CFR 230.10(a)). Keep this requirement in mind when identifying the build alternative and rejecting other preliminary alternatives for the project in Section 4.1 and 4.3 below.

Build Alternative(s) (EA Section 4.1)

In a sentence or two, explain how the build alternative described in Section 2.2 of the EA is expected to meet the purpose and need for the project.

For most EAs, there will be only one build alternative. However, for controversial or complex projects, or if more than one reasonable and feasible build alternative has been identified, then the EA should evaluate more than one build alternative. If more than one build alternative is evaluated, then describe each build alternative using the same level of detail.

If more than one build alternative is identified, it is permissible to select a single build alternative as the preferred alternative, subject to public review and comment. If this is the case, explain why the preferred alternative was selected. This explanation may be based on a variety of factors. Each build alternative discussed in this section will be evaluated throughout the EA using the same level of detail, however, the preferred alternative may be developed to a higher level of detail to (1) facilitate the development of mitigation measures or (2) facilitate concurrent compliance with other applicable laws.¹⁶ If more than one build alternative will be evaluated throughout the EA, but one of them is preferred and developed to a higher level of detail, the EA must explain that the preferred alternative is being developed to a higher level of detail to (1) facilitate the development of mitigation measures or (2) facilitate concurrent compliance with other applicable laws, but that the development of such higher level of detail will not prevent TxDOT from making an impartial decision as to whether to accept another build alternative that is being considered in the EA.

No-Build Alternative (EA Section 4.2)

The EA must also identify and evaluate the no-build alternative. Explain the expected consequences of the no-build alternative. This will normally include an explanation of how the purpose and need would not be met by the no-build alternative, and a statement that the build alternative is, therefore, the preferred alternative. Explain that the no-build alternative is evaluated throughout the EA for comparison purposes.

Preliminary Alternatives Considered but Eliminated from Further Consideration (EA Section 4.3)

The EA must briefly describe *any* alternatives to the preferred alternative that were considered or proposed, but eliminated from further consideration. For example, if a different alignment or lane configuration would have lesser environmental impacts, but is infeasible or unreasonable for some reason, the rejected alignment or configuration and its reason(s) for rejection must be briefly described in this section. Include *any* preliminary alternatives that were eliminated from further consideration, no matter how briefly they were considered. For another example, if it was decided early-on that it would be better to widen to the east side of the road instead of the west side of the road because there are more houses that would be impacted on the west side of the road, explain that decision here. If an alternative

¹⁵ An alternative is “practicable” if it is “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” 40 CFR 230.10(a)(2)

¹⁶ 23 U.S.C. 139(f)(4)(D).

was considered and eliminated as part of a planning study, this section of the EA must still explain why it was eliminated. Rejected alternatives are not further evaluated in the EA.

Affected Environment and Environmental Consequences (EA Section 5.0)

Section 5.0 must contain a bulleted list of all technical documentation (e.g., checklists, forms, etc.) that was prepared, as follows:

“In support of this EA, the following technical documentation was prepared:

- *Surface Water Analysis Form*
- *Traffic Noise Analysis Report*
- *Species Analysis Form*
- *Species Analysis Spreadsheet*
- *Community Impact Assessment Technical Report Form”*

The list above is just an example from a hypothetical project. The actual list for any given project will depend on project-specific factors.

This list must include all of the various forms, checklists, reports, or other documents that were uploaded to specific Activities in accordance with **ENV’s Environmental Guide Volume 2: Activity Instructions**. Explain how and where the technical documentation may be inspected and copied upon request (usually the TxDOT district or area office).

Sections 5.1 through 5.17 of the EA will contain discussions of specific resource areas. Below are specific instructions for each of those 17 subheadings. For each resource area, remember to address each alternative that is being considered, including the no-build alternative. Also, for each resource area, refer to any of the technical documentation (e.g., checklists, forms, etc.) listed Section 5.0 that support the conclusions for that resource area.

Right-of-Way Property Acquisition (EA Section 5.1)

This section of the EA must identify the acreage and location of any additional ROW or easements that would be needed, with references to schematics included in Appendix C to the EA. If there are anticipated residential, commercial, or other displacements, include an explanation that anticipated residential, commercial, or other displacements are discussed in Section 5.5.2, “Displacements,” below. For FHWA projects, explain that ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970. State that accommodations for persons with limited English proficiency will be made during the right-of-way acquisition process.

If ROW was acquired for the project in advance of the FONSI, disclose the advance acquisition, and explain that it did not influence the environmental review or selection of alternatives.

Land Use (EA Section 5.2)

This section of the EA must describe the impacts on land use. For example, characterize the existing land use in the area (e.g., residential, commercial, industrial, vacant, etc.), and explain whether and how such use is expected to change as a result of the project (e.g., conversion from existing land use to highway ROW). Note that any induced growth impacts are addressed not in this section, but in Section 5.15, Induced Growth, as discussed below.

Farmlands (EA Section 5.3)

This section of the EA must describe the impacts to farmlands.

Also, explain whether the Farmland Protection Policy Act (FPPA) applies. If the FPPA applies, then explain the results of the Farmland Conservation Impact Rating analysis and any coordination with the Natural Resources Conservation Service.

If the Farmland Protection Policy Act (FPPA) does not apply, then state,

“The Farmland Protection Policy Act (FPPA) does not apply.”

For more information on complying with the FPPA, refer to **ENV’s Environmental Handbook on the Farmland Protection Policy Act**.

Utility Relocation (EA Section 5.4)

If it is not reasonably foreseeable that utilities will have to be relocated, then this entire section of the EA must consist of the following single statement:

“It is not anticipated that any utilities will have to be relocated as a result of this project.”

If it is reasonably foreseeable that utilities will have to be relocated, then this section of the EA must begin with the following statement:

“It is reasonably foreseeable that utilities will have to be relocated as a result of this project. [If any details are known about the type, location, and depth of utilities that will need to be relocated, then insert details here.] The impacts resulting from removal of any utilities from within existing highway right-of-way (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) have been considered as part of the overall project footprint impacts within this environmental assessment.”

Oftentimes, it is not known at the environmental review stage where utilities will be relocated, as these details may not be available until final design, or later. If this is the case, then conclude this section of the EA with the following statement:

“It has not yet been determined whether the displaced utilities will be re-installed within the highway right-of-way, or to a location outside the highway right-of-way. However, the potential impacts resulting from re-installation of the displaced utilities within the highway right-of-way have been considered as part of the overall project footprint impacts (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) within this environmental assessment. To the extent that the owner of any displaced utility determines to re-install the displaced utility at a location outside of highway right-of-way, such location will be determined by the owner of the utility subject to the rules and policies governing the utility relocation process. Additionally, the owner of the utility will be responsible for acquiring any easements outside the highway right-of-way and ensuring that the design and construction meet all regulatory and environmental compliance requirements. See 43 TAC 21.37(a)(9), (g)(1)), and (g)(4); 43 TAC 21.38(e)(2).”

If it is known at the environmental review stage that utilities will be re-installed within the highway right-of-way, then conclude this section of the EA with the following statement instead:

“It is expected that the displaced utilities will be re-installed within the highway right-of-way. [If any details are known about the expected type, location and depth of re-installation, then insert details here.] The potential impacts resulting from re-installation of the displaced utilities within

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the highway right-of-way have been considered as part of the overall project footprint impacts (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) within this environmental assessment.

If it is known at the environmental review stage that utilities will be re-installed to a location outside of highway right-of-way, then conclude this section of the EA with the following statement instead:

“It is expected that the displaced utilities will be re-installed outside of the highway right-of-way. [If any details are known about the expected type, location and depth of re-installation, then insert details here.] Such location will be determined by the owner of the utility subject to the rules and policies governing the utility relocation process. Additionally, the owner of the utility will be responsible for acquiring any easements outside the highway right-of-way and ensuring that the design and construction meet all regulatory and environmental compliance requirements. See 43 TAC 21.37(a)(9), (g)(1), and (g)(4); 43 TAC 21.38(e)(2).”

Community Impacts (EA Section 5.5)

Community impacts are addressed under the various subheadings below. Under each of the subheadings below, the preparer will summarize the most relevant information from specific sections of **ENV’s Community Impact Assessment Technical Report form**. It is not necessary to repeat all of the information from each section of the form, as the form will be incorporated by reference into the EA and available for public review as indicated in Section 5.0 of the EA. The subsections below should contain only the most relevant and useful conclusions from the various sections of the form.

There is no need to insert text under the “Section 5.5” heading.

Community Study Area (EA Section 5.5.1)

This section of the EA must summarize the most relevant information and conclusions from Section B of **ENV’s Community Impact Assessment Technical Report form**.

Displacements (EA Section 5.5.2)

This section of the EA must summarize the most relevant information and conclusions from Section E of **ENV’s Community Impact Assessment Technical Report form**.

Specifically, this section of the EA must identify any residential, commercial, or other developments (e.g., places of worship, community centers, schools, etc.) that would be potentially displaced (subject to final design considerations). This may be done using a map and/or table. For residential displacements, include sufficient information to disclose which residential structures will potentially be displaced, but do not include the name of the owner or resident. For commercial displacements, include the name and type of the business that will potentially be displaced.

Explain that relocation assistance will be provided for all displacements. For FHWA projects, explain that ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

Access and Travel Patterns (EA Section 5.5.3)

This section of the EA must summarize the most relevant information and conclusions from Section F of **ENV’s Community Impact Assessment Technical Report form**.

Specifically, this section of the EA must describe the potential changes to or loss of existing access, creation of new access, or permanent changes in travel patterns associated with the project.

This section of the EA must also describe the impacts on bicycle and pedestrian facilities, including linkages to transit stops and corridors. Explain whether the project will comply with **TxDOT's Bicycle Accommodation Design Guidance** (for FHWA projects, also explain that **TxDOT's Bicycle Accommodation Design Guidance** implements USDOT and FHWA policy regarding bicycle and pedestrian accommodations). If bicycle and pedestrian facilities are not proposed, or if the project will not comply with **TxDOT's Bicycle Accommodation Design Guidance**, explain why.

Community Cohesion (EA Section 5.5.4)

This section of the EA must summarize the most relevant information and conclusions from Section G of **ENV's Community Impact Assessment Technical Report form**.

Specifically, this section of the EA must describe the impacts on community cohesion associated with the project.

Limited English Proficiency (EA Section 5.5.5)

This section of the EA must summarize the most relevant information and conclusions from Section H of **ENV's Community Impact Assessment Technical Report form**. While the research conducted for the community study area can help identify LEP populations and potential translation/interpretation needs, the following statement should be included regardless of the results of this analysis:

"If a request is received, TxDOT will make every reasonable effort to accommodate persons with special communication or mobility needs."

Also, include a reference to Section 7.0 of the EA, "Public Involvement," for more information about public involvement conducted for the project.

Visual/Aesthetic Impacts (EA Section 5.6)

This section of the EA must describe visual or aesthetic project impacts. For projects with grade separation or other vertical structures, describe how the project would affect sight lines in the area, including any views that would be blocked. Include a description of any lighting that will be installed, if known, and how it may change the aesthetics of the area. Also describe any existing landscaping, decorative, or other features that may be impacted, and describe aesthetic treatments that would be included with the project to address the aesthetics of the area.

Cultural Resources (EA Section 5.7)

For an FHWA project, this Section 5.7 of the EA must consist of the following statement:

"Evaluation of impacts to cultural resources has been conducted under Section 106 of the National Historic Preservation Act in accordance with the Programmatic Agreement among FHWA, TxDOT, the Texas State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings."

For a state project, this Section 5.7 of the EA must consist of the following statement:

"Evaluation of impacts to cultural resources has been conducted in accordance with TxDOT's Memorandum of Understanding (MOU) with the Texas Historical Commission."

This section of the EA must also consist of the following two components: (1) Archeology and (2) Historic Properties, each of which is discussed separately below.

Archeology (EA Section 5.7.1)

If the project is on **ENV's List of Projects that Do Not Require Review or Coordination for Archeological Compliance**, then this section of the EA must state,

“Existing agreements for compliance with applicable cultural resources laws define this project as a type that has no potential to affect archeological sites that require additional consideration during project planning. No consultation with the Texas Historical Commission/Texas State Historic Preservation Officer (THC/TSHPO) or other group is required.”

If the project is not on **ENV's List of Projects that Do Not Require Review or Coordination for Archeological Compliance**, then this section of the EA must summarize any archeological review that was performed, the results of any such review, and any anticipated impacts to archeological resources. For example, if a finding of no effect on archeological historic properties was made, then the EA must reference that finding and date that it was made. Also, summarize any coordination with the SHPO/THC, federally-recognized Indian tribes and other entities, including any consultation under Section 106 of the NHPA or the Texas Antiquities Code, which must be included in Appendix F of the EA. For information regarding review of impacts to archeological sites, refer to **ENV's Environmental Handbook on Archeological Sites and Cemeteries**. Additionally, address any impact on cemeteries, which are discussed in the same ENV handbook.

Historic Properties (EA Section 5.7.2)

If the project is on **ENV's List of Projects that Do Not Require Review or Coordination for Non-Archeological Historic Properties**, then this section of the EA must state,

“Existing agreements for compliance with applicable cultural resources laws define this project as a type that has no potential to affect non-archeological historic properties that require additional consideration during project planning. No consultation with the Texas Historical Commission/Texas State Historic Preservation Officer (THC/TSHPO) or other group is required.”

If the project is not on **ENV's List of Projects that Do Not Require Review or Coordination for Non-Archeological Historic Properties**, then this section of the EA must summarize any review performed for impacts to historically significant non-archeological resources, such as structures listed or eligible for listing on the National Register of Historic Places and designated as Recorded Texas Historic Landmarks, the results of any such review, and any impacts to historically significant non-archeological resources. For example, a finding of no effect on non-archeological historically significant resources was made, then the EA must reference that finding and the date that it was made. Also, summarize any coordination with the SHPO/THC and other entities, including any consultation under Section 106 of the NHPA or the Texas Antiquities Code, which must be included in Appendix F of the EA. For information regarding review of impacts to non-archeological historically significant resources, refer to **ENV's Historic Resources Toolkit**.

Protected Lands (EA Section 5.8)

This section of the EA covers three different statutes regarding protection of certain types of lands: Section 4(f) of the U.S. Department of Transportation Act (DOT), Section 6(f) of the Land and Water Conservation Fund (LWCF) Act, and Parks and Wildlife Code (PWC) Chapter 26.

Section 4(f)

Section 4(f) applies only to FHWA projects, and protects publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, and any land from an historic site of national, state, or local significance.

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If it was determined that no Section 4(f) resources are present within the project area, then this section of the EA must include the following affirmative statement:

“There are no Section 4(f) properties present in the project area.”

If there are Section 4(f) properties present in the project area, then additional analyses must be performed and determinations made before the project may proceed, as explained in ENV’s Section 4(f) handbook cited above. Such analyses and determinations must be documented in the EA. While it is permissible to document the details of the analyses in a referenced analysis, this section of the EA must set forth the key determinations required by statute and rule.

Unlike technical documentation on other subjects, any checklist, coordination exchanges or other documentation demonstrating compliance with Section 4(f) must be included as Appendix G to the EA. Also, any individual Section 4(f) determination (excluding exceptions, programmatic, and *de minimis*) must undergo legal sufficiency review by an attorney in TxDOT’s General Counsel Division before being finalized.

Section 6(f)

Section 6(f) protects parks and recreation areas improved by Land and Water Conservation Funds. For more information regarding Section 6(f), refer to **ENV’s Environmental Handbook for Section 6(f) Land and Water Conservation Fund Act Compliance**.

If it was determined that no Section 6(f) resources are present within the project area, then this section of the EA must include the following affirmative statement:

“There are no Section 6(f) properties present in the project area.”

If there are Section 6(f) properties present in the project area, and there will be a “conversion” of any such properties to a non-outdoor public recreation use, then this section of the EA must explain the conversion, including details such as the following:

- the owner of the area that will be converted,
- graphical depiction of the exact boundaries of the 6(f) property and the exact boundaries of the area that will be converted,
- the size of the area that will be converted,
- the outdoor recreation uses of the area that will be converted,
- the impact of the project on the remaining part of the Section 6(f) property,
- the proposed replacement property including the location, boundaries, size, and outdoor recreation uses, and
- any environmental impacts associated with acquisition of the proposed replacement property by the owner of the Section 6(f) property.

Also, include an explanation that the NPS cannot formally approve the conversion until after environmental clearance of the project, but that TxDOT and the owner of the Section 6(f) property have discussed the suitability of the proposed replacement property with TPWD and NPS (as applicable). Be sure to include the TPWD Section 6(f) contact and the National Park Service contact in the list of entities with whom the EA is being coordinated. It is also advisable to confirm with the NPS that inclusion of the conversion and proposed replacement in the EA being prepared for the overall transportation project is

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acceptable, as opposed to doing an entirely separate EA for the conversion and proposed replacement property.

Chapter 26

Texas state law contains a statute that is analogous to Section 4(f), Chapter 26 of the Parks and Wildlife Code. Chapter 26 applies to any project that requires the use or taking of any public land designated and used prior to the arrangement of the project as a park, recreation area, scientific area, wildlife refuge, or historic site.

If it was determined that there are no Chapter 26 properties within the project area, then this section of the EA must include the following affirmative statement:

“There are no Chapter 26 properties present in the project area.”

If Chapter 26 applies to a project, this section of the EA must also explain in writing the procedures followed to comply with Chapter 26, including when and how a Chapter 26 hearing was held, and state the determinations required by the statute.

Water Resources (EA Section 5.9)

Potential impacts to water resources are addressed under the various subheadings below. There is no need to insert text under the “Section 5.9” heading.

Clean Water Act Section 404 (EA Section 5.9.1)

If the project will not require any authorization under Section 404, then this section of the EA must consist of the following statement:

“This project will not involve any regulated activity in any jurisdictional waters and therefore does not require a United States Army Corps of Engineers (USACE) “dredge and fill” permit under Section 404 of the Clean Water Act.”

If the project will require authorization under Section 404, then this section of the EA must include the statement and table below:

“This project will involve regulated activity in jurisdictional waters and therefore will require authorization under Section 404. The following table shows the waters that are anticipated to be jurisdictional waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 404 by a non-reporting nationwide permit (i.e., no pre-construction notification required), or if it is anticipated that a nationwide permit with pre-construction notification, individual standard permit, letter of permission, or regional general permit will be required.”

Name of water feature	Type of water feature	Location of water feature	Covered by non-reporting nationwide permit under Section 404?	Nationwide permit with pre-construction notification, individual standard permit, letter of permission, or regional general permit required under Section 404?
			Y/N	Y/N

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			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N

For “Type of water feature,” indicate one of the following types: perennial stream, intermittent stream, ephemeral stream, drainage ditch, palustrine emergent, estuarine emergent, palustrine scrub-shrub, palustrine forested, playa lake, open water, pond/impoundment, other stream, other wetland, or other non-stream, non-wetland waterbody. The “Location of water feature” can be either a written description, or a reference to resource-specific map in Appendix E.

Explain the status of any needed permit, and the results of any coordination with USACE thus far and any resulting commitments. Reference any written coordination exchanges, which must be included in Appendix F to the EA.

“No practicable alternative” analysis for an individual standard permit - If it is reasonably foreseeable that the project will require an individual standard permit under Section 404, then this section of the EA must also demonstrate compliance with EPA’s Section 404(b)(1) Guidelines, which are codified at 40 CFR Part 230. These guidelines allow the discharge of dredged or fill material only if there is no practicable alternative that would have less adverse effects on the aquatic ecosystem. An alternative is practicable if it is “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”¹⁷ The Guidelines allow for rejection of alternatives that may be practicable, but that have other significant adverse environmental consequences.¹⁸ If the need for an individual standard permit is reasonably foreseeable, discuss whether there is any practicable alternative that would have less adverse effects on the aquatic ecosystem, and if not, why any alternative that would have less adverse effects on the aquatic ecosystem is not “practicable” or would have other significant adverse environmental consequences. The USACE will not be able to issue the individual standard permit for the project unless it agrees with the discussion in this section of the EA regarding whether there is any practicable alternative to the discharge of dredged or fill material that would have a less adverse impact on the aquatic ecosystem. Additionally, addressing any USACE concerns regarding the rest of the EA to the USACE’s satisfaction will allow the USACE to use or “adopt” TxDOT’s EA to comply with NEPA (instead of preparing its own EA) when the USACE prepares to ultimately issue the individual standard permit. Therefore, as explained above in Section 3.8 of this Handbook regarding Agency Coordination, if the need for an individual standard permit is reasonably foreseeable, district environmental staff should seek the USACE’s written concurrence with both the discussion of “no practicable alternative” in this Section 5.9.1 and the content of the rest of the EA before issuing the final EA (and preferably, before releasing the draft EA for public review). ENV recommends that district environmental staff reach out to USACE Regulatory staff while the draft EA is being prepared to discuss the project and share drafts of the EA. This should be an informal, collaborative process between the district and the USACE.

¹⁷ 40 CFR 230.10(a)(2)

¹⁸ 40 CFR 230.10(a)

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If authorization under Section 404 will be required, but it is not reasonably foreseeable that the project will require an individual standard permit under Section 404, then this section of the EA must include the following statement:

“The need for an individual standard permit under Section 404 is not anticipated. If it is later determined that an individual standard permit under Section 404 is needed, compliance with EPA’s Section 404(b)(1) Guidelines will be confirmed prior to submittal of the individual standard permit application.”

Compliance with Section 14 of the Rivers and Harbors Act (commonly referred to as Section 408 because it is codified in USC Title 33, Chapter 9, Subchapter I, Section 408) applies to any TxDOT activity that involves alterations to, or temporarily or permanently occupies or uses, any USACE federally authorized civil works project (e.g., sea walls, bulkheads, reservoirs, levees, wharfs, or other federal civil works projects, or associated federal land [fee simple] or easements). If Section 408 applies to the project, state that compliance with Section 408 will be confirmed prior to construction of the project.

Clean Water Act Section 401 (EA Section 5.9.2)

If the project will require a permit from the USACE under Section 404 of the federal Clean Water Act, then this section of the EA must consist of the following statement:

“For projects that require a NWP under Section 404 that is covered by TCEQ’s blanket 401 water quality certification, regardless of whether the NWP is non-reporting, or requires the submission of a PCN, TxDOT complies with Section 401 of the Clean Water Act by implementing Texas Commission on Environmental Quality (TCEQ) conditions for NWPs. For projects that require authorization under a NWP under Section 404 that is not covered by TCEQ’s blanket 401 water quality certification, or under an Individual Standard Permit, Letter of Permission, or Regional General Permit under Section 404, TxDOT will coordinate the Section 401 water quality certification with TCEQ. TCEQ will either approve or deny the Section 401 water quality certification, or issue a waiver. The TCEQ Section 401 water quality certification decision must be submitted to the USACE before use of the NWP can be confirmed, or an Individual Standard Permit, Letter of Permission, or Regional General Permit decision can be made.”

If the project will not require a permit from the USACE under Section 404 of the federal Clean Water Act, then this section of the EA must consist of the following statement:

“Section 401 does not apply to this project because no permit from the USACE under Section 404 of the federal Clean Water Act is required.”

Executive Order 11990 Wetlands (EA Section 5.9.3)

For an FHWA project, this section of the EA must explain how the project complies with Executive Order 11990, Protection of Wetlands. Executive Order 11990 prohibits new construction in wetlands unless (1) there is no practicable alternative to such construction, and (2) the project includes all practicable measures to minimize harm to wetlands. The EA must affirmatively make each of these determinations and provide reasoned justification for each. For the first determination, the EA may refer back to the explanation provided for the Section 404(b)(1) Guidelines. Note that, in making both determinations, economic, environmental and other pertinent factors may be taken into consideration.

For a state project, simply state that Executive Order 11990 does not apply.

Rivers and Harbors Act (EA Section 5.9.4)

This section of the EA must explain whether the project will require a permit, bridge lighting authorization, or exemption from the United States Coast Guard under Section 9 of the Rivers and Harbors Act, which

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outlines the requirements for approval to construct dams, dikes, bridges, or causeways in or over a navigable waterway. If so, identify the specific impact or impacts that will require authorization. Also, explain the specific type of permit, the status of that permit, the results of any coordination with the USCG thus far and any resulting commitments. Reference any written coordination exchanges, which must be included in Appendix F to the EA.

This section of the EA must also explain whether the project will require authorization from the USACE under Section 10 of the Rivers and Harbors Act, which outlines the requirements for approval to construct smaller structures in a navigable waterway. If so, then this section of the EA must include the statement and table below:

“This project will involve regulated activity in a navigable waterway and therefore will require authorization under Section 10 of the Rivers and Harbors Act. The following table shows the waters that are anticipated to be navigable waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 10 by a non-reporting nationwide permit (i.e., no pre-construction notification required), or if it is anticipated that a nationwide permit with pre-construction notification, individual standard permit under both Section 404 and Section 10, individual permit under Section 10, letter of permission, or regional general permit will be required.”

Name of water feature	Type of water feature	Location of water feature	Covered by non-reporting nationwide permit under Section 10?	Nationwide permit with pre-construction notification, individual standard permit under both Section 404 and Section 10, individual permit under Section 10, letter of permission, or regional general permit required under Section 10?
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N
			Y/N	Y/N

For “Type of water feature,” indicate one of the following types: perennial stream, lake, or open water. The “Location of water feature” can be either a written description, or a reference to a resource-specific map in Appendix E.

Explain the status of any needed permit, and the results of any coordination with USCG or USACE thus far and any resulting commitments. Reference any written coordination exchanges, which must be included in Appendix F to the EA.

Clean Water Act Section 303(d) (EA Section 5.9.5)

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This section of the EA must explain whether the project is located within five linear miles (not stream miles) of, is within the watershed of, and drains to, an impaired assessment unit under Section 303(d) of the federal Clean Water Act (include a reference to the date of the Section 303(d) list consulted). If not, there is no further discussion needed in this section of the EA. If so, this section of the EA must include the table below with the information filled-in for any impaired assessment units within five miles of the project and within the same watershed as the project:

Watershed	Segment name	Segment number	Assessment unit number

Additionally, if the project is located within five miles and within the same watershed of an impaired assessment unit, include the following statement:

“To date, TCEQ has not identified (through either a total maximum daily load (TMDL) or the review of projects under the TCEQ MOU) a need to implement control measures beyond those required by the construction general permit (CGP) on road construction projects. Therefore, compliance with the project’s CGP, along with coordination under the TCEQ MOU for certain transportation projects, collectively meets the need to address impaired waters during the environmental review process. As required by the CGP, the project and associated activities will be implemented, operated, and maintained using best management practices to control the discharge of pollutants from the project site.”

Clean Water Act Section 402 (EA Section 5.9.6)

Section 402 of the Clean Water Act sets forth the National Pollutant Discharge Elimination System (NPDES) program, which, in Texas, is administered by TCEQ under the Texas Pollutant Discharge Elimination System (TPDES) program. TCEQ has issued a TPDES General Permit for Construction Storm Water Discharges.

This section of the EA must consist of the following statement:

“Since TPDES Construction General Permit (CGP) authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. The Project Development Process Manual and the Plans, Specifications, and Estimates (PS&E) Preparation Manual require a storm water pollution prevention plan (SWP3) be included in the plans of all projects that disturb one or more acres. The Construction Contract Administration Manual requires that the appropriate CGP authorization documents (notice of intent or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ and the municipal separate storm sewer system (MS4) operator. It also requires that projects be inspected to ensure compliance with the CGP.

The PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the “Required Specification Checklists” require the current version of Special Provision 506 on all projects that

need authorization under the CGP. These documents require the project contractor to comply with the CGP and SWP3, and to complete the appropriate authorization documents.”

Floodplains (EA Section 5.9.7)

State whether the project would occur within a floodplain. If specific location studies are available, summarize the specific location studies.¹⁹

If the project is not federally funded, then this section of the EA will also include the following statement:

“This project is not federally funded and therefore is not subject to Executive Order 11988, Floodplain Management.”

If the project is federally funded but will not involve construction in the floodplain, then this section of the EA will also include the following statement:

“This project is federally funded and therefore is subject to Executive Order 11988, Floodplain Management, and will not involve construction in the floodplain.”

If the project is federally funded and will involve construction in the floodplain, but will not involve a significant encroachment in the floodplain, then this section of the EA will also include the following statement:

“This project is federally funded and therefore is subject to Executive Order 11988, Floodplain Management. However, the project will not involve a significant encroachment in the floodplain.”

If the project is federally funded and will involve a significant encroachment in the floodplain, then this section of the EA will also include the following statement:

“This project is federally funded and therefore is subject to Executive Order 11988, Floodplain Management, and will involve a significant encroachment in the floodplain. Explanation of how the project will comply with Executive Order 11988 is provided below.”

If the last statement above is applicable, then this section of the EA will also include explanations of the following, which must be consistent with the explanations from the Surface Water Analysis Form:

- Explanation of how the project has been designed or modified, or will be designed or modified, to minimize potential harm to or within the floodplain²⁰
- Reasons why the proposed action must be located in the floodplain²¹
- Alternatives considered and why they were not practicable (i.e., capable of being done within reasonable natural, social, or economic constraints)²²
- Statement that the project will comply with the standards in the TxDOT Hydraulic Design Manual.²³

Wild and Scenic Rivers (EA Section 5.9.8)

Texas has just one river segment that is designated as wild or scenic under the federal Wild and Scenic Rivers Act. It is the segment of the Rio Grande on the U.S. side of the river, from river mile 842.3 above

¹⁹ 23 CFR 650.111(e).

²⁰ EO 11988, Section 2.(a)(2).

²¹ 23 CFR 650.113(a)(1).

²² 23 CFR 650.105(k), 650.113(a)(2).

²³ 23 CFR 650.113(a)(3).

Mariscal Canyon, downstream to river mile 651.1 at the Terrell-Val Verde County line. For any project that will potentially impact this segment of the Rio Grande, this section of the EA must explain how the project will comply with the Wild and Scenic Rivers Act.

If the project does not trigger compliance with the Wild and Scenic Rivers Act, then this section of the EA must include the following statement:

“The Wild and Scenic Rivers Act does not apply.”

Coastal Barrier Resources (EA Section 5.9.9)

If the project is an FHWA project; and will take place in whole or in part within Jefferson, Chambers, Galveston, Brazoria, Matagorda, Calhoun, Aransas, Nueces, Kleberg, Kenedy, Willacy or Cameron County; and will take place within a designated Coastal Barrier Resources Act (CBRA) map unit (that is not an otherwise protected area with a “P” designation), then this section of the EA must demonstrate compliance with the federal Coastal Barrier Resources Act of 1982 (CBRA).

The CBRA was enacted in 1982 to discourage development in certain coastal areas that are vulnerable to hurricane damage and that are host to valuable natural resources. The act designated certain undeveloped coastal areas as part of the Coastal Barrier Resources System (CBRS), and made those areas ineligible for most new federal expenditures and financial assistance. There are, however, two types of exceptions that may allow an FHWA maintenance, replacement, reconstruction, or repair project to proceed even within the CBRS. They are the “essential link exception,” and the “CBRA consistent exception.” Coordination with USFWS is required prior to determining that a project is covered by one of these exceptions. This section of the EA must refer to the written coordination exchanges, which must be included in Appendix F to the EA.

If the project does not trigger compliance with the CBRA by meeting all of the conditions listed above, then this section of the EA must contain one of the following two negative declarations, depending on which is applicable:

“The Coastal Barrier Resources Act (CBRA) does not apply.”

or

“There are no further actions required under the Coastal Barrier Resources Act (CBRA) because the CBRA does not apply to transportation projects within an otherwise protected area with a “P” designation.”

For more information about determining and demonstrating compliance with the CBRA, refer to **ENV’s Environmental Handbook on Coastal Barrier Resources Act**.

Coastal Zone Management (EA Section 5.9.10)

If the project is within the Texas Coastal Management Program (CMP) coastal zone management boundary, 31 TAC 29.30 requires one of two consistency determinations, as identified below. The appropriate finding statement and any resulting commitments must be included in the EA.

If the project is located within the Texas CMP coastal zone management boundary but would avoid and not have a direct and significant adverse effect on a coastal natural resource area (CNRA), the following finding statement must be included in the EA:

“The Texas Department of Transportation reviewed this proposed action for consistency with the Texas Coastal Management Program (Texas CMP) goals and policies in accordance with the regulations of the Coastal Coordination Advisory Council and determined that the proposed

action will not have a direct and significant adverse effect on the coastal natural resource areas (CNRA) identified in the applicable policies (31 TAC 29.30(b)(2)).

If the project is located within the Texas CMP coastal zone management boundary and would have a direct and significant adverse effect on a CNRA, but the project is otherwise consistent with Texas CMP goals and policies, the following finding statement must be included in the EA:

“The Texas Department of Transportation reviewed this proposed action for consistency with the Texas Coastal Management Program (Texas CMP) goals and policies in accordance with the regulations of the Coastal Coordination Advisory Council and determined that the proposed action is consistent with the applicable CMP goals and policies (31 TAC 26.31(a)).”

If the project is not located within the Texas CMP, then this section of the EA must consist of the following statement,

“The project is not located within the Texas Coastal Management Plan (TCMP) boundary. Therefore, a consistency determination is not required.”

Edwards Aquifer (EA Section 5.9.11)

If the project will be constructed over the recharge, contributing, or transition zones of the Edwards Aquifer (which are located in portions of Medina, Bexar, Comal, Kinney, Uvalde, Hays, Travis and Williamson Counties), then this section of the EA must explain whether the project is subject to regulation under TCEQ’s Edwards Aquifer rules. If subject to the rules, include an explanation of whether the project is subject to the rules governing the recharge zone,²⁴ the rules governing the contributing zone,²⁵ or both. Also, include a discussion of the primary actions that will be taken to comply with the Edwards Aquifer rules, including which type of application/exception is required (WPAP Application, CZP Application, Recharge and Transition Zone Exception Request, Contributing Zone Exception Request, or Aboveground Storage Tank Facility Plan Application). Additionally, in accordance with the TCEQ MOU, provide the location of the project within the Edwards Aquifer, and include a statement that the project and associated activities undertaken by TxDOT are to be implemented, operated, and maintained in a manner that complies with the Edwards Aquifer rules and any applicable TCEQ guidance documents in effect to implement the rules.

If the project is not subject to regulation under TCEQ’s Edwards Aquifer rules, then this section of the EA must include the following statement:

“The TCEQ Edwards Aquifer Rules do not apply.”

Additionally, for FHWA projects, explain whether coordination with EPA Region 6 is triggered under the Memorandum of Understanding between the Environmental Protection Agency Region 6 and the Texas Department of Transportation Regarding EPA’s Review of Projects Potentially Affecting the Edwards Aquifer. If so, explain that EPA Region 6 will be (draft EA) or was (final EA) provided with the notice of availability of the draft EA and an electronic copy of the draft EA as required by that MOU. If not, then this section of the EA must include the following statement:

“The EPA Edwards Aquifer MOU does not apply”

International Boundary and Water Commission (EA Section 5.9.12)

²⁴ 30 TAC Chapter 213, Subchapter A

²⁵ 30 TAC Chapter 213, Subchapter B

A license is required from the United States Section of the International Boundary and Water Commission (USIBWC) for any proposed activities crossing or encroaching upon the floodplains of USIBWC flood control projects or right-of-way. If the project will require a license from the USIBWC, this section must explain why such a license is needed, and confirm that the project will not proceed without obtaining such license. If not, then this section of the EA must consist of the following statement:

“This project does not cross or encroach upon the floodway of the International Boundary Water Commission (IBWC) right-of-way or an IBWC flood control project.”

Drinking Water Systems (EA Section 5.9.13)

This section of the EA must consist of the following statement:

“In accordance with TxDOT’s Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), any drinking water wells would need to be properly removed and disposed of during construction of the project.”

Biological Resources (EA Section 5.10)

Potential impacts to biological resources are addressed under the various subheadings below. There is no need to insert text under the “Section 5.10” heading.

Impacts to Vegetation (EA Section 5.10.1)

This section of the EA must describe project impacts to vegetation. Include descriptions of any unusual vegetation features identified during field investigations, and any noteworthy trees that will be removed or trimmed as part of the project.

Executive Orders 13112 and 13751 on Invasive Species (EA Section 5.10.2)

If the project is an FHWA project, this section of the EA must consist of the following statement:

“This project is subject to and will comply with federal Executive Order 13112 on Invasive Species (as amended by Executive Order 13751 on Safeguarding the Nation From the Impacts of Invasive Species). The department implements this Executive Order on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.”

If the project is not an FHWA project, this section of the EA must consist of the following statement:

“This project is not subject to Executive Order 13112 (as amended by Executive Order 13751 on Safeguarding the Nation From the Impacts of Invasive Species) because it is not a federally funded undertaking. Landscaping will be conducted in accordance with the department’s Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.”

For an off-system project undertaken by a local government, if the local government will not follow TxDOT’s Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual, then omit the second sentence from the above statements.

Executive Memorandum on Environmentally and Economically Beneficial Landscaping (EA Section 5.10.3)

If the project is an FHWA project, this section of the EA must consist of the following statement:

“This project is subject to and will comply with the federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, effective April 26, 1994. The

department implements this Executive Memorandum on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.”

If the project is not an FHWA project, this section of the EA must consist of the following statement:

“This project is not subject to this Executive Memorandum because it is not a federally funded undertaking. Landscaping will be conducted in accordance with the department’s Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.”

For an off-system project undertaken by a local government, if the local government will not follow TxDOT’s Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual, then omit the second sentence from the above statements.

Impacts to Wildlife (EA Section 5.10.4)

This section of the EA must describe project impacts to wildlife or habitat. This section does not contain effect calls for state or federally listed species, which are addressed in Section 5.11.11 below.

Migratory Bird Protections (EA Section 5.10.5)

This section of the EA must consist of the following statement:

“This project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas Parks and Wildlife Code Title 5, Subtitle B, Chapter 64, Birds. It is the department’s policy to avoid removal and destruction of active bird nests except through federal or state approved options. In addition, it is the department’s policy to, where appropriate and practicable:

- *use measures to prevent or discourage birds from building nests on man-made structures within portions of the project area planned for construction, and*
- *schedule vegetation clearing activities outside the typical nesting season.*

Additional preemptive and preventative measures that may be applied, where appropriate and practicable, are described in TxDOT’s Guidance – Avoiding Migratory Birds and Handling Potential Violations.”

For more information, refer to **ENV’s Environmental Handbook on Ecological Resources** and **ENV’s Guidance: Complying with Laws Protecting Birds and Managing Potential Violations**.

Fish and Wildlife Coordination Act (EA Section 5.10.6)

If the project is anticipated to require an individual standard permit issued by the USACE, then this section of the EA must consist of the following statement:

“The project is anticipated to require an individual standard permit issued by the USACE. Compliance with the Fish and Wildlife Coordination Act will be accomplished through the individual standard permit application process.”

If the project is anticipated to require use of a nationwide permit issued by the USACE, then this section of the EA must consist of the following statement:

“The project is anticipated to require a nationwide permit issued by the USACE. Compliance with the Fish and Wildlife Coordination Act will be accomplished by complying with the terms and conditions of the nationwide permit.”

If the project would not require any permits issued by the USACE, then this section of the EA must consist of the following statement:

“The Fish and Wildlife Coordination Act does not apply to this project.”

For more information, refer to **ENV’s Environmental Handbook on Ecological Resources**.

Bald and Golden Eagle Protection Act of 2007 (EA Section 5.10.7)

If the project is not within 660 feet of an active or inactive Bald or Golden Eagle nest, then this section of the EA must consist of the following statement:

“This project is not within 660 feet of an active or inactive Bald or Golden Eagle nest. Therefore, no coordination with USFWS is required.”

If the project is within 660 feet of an active or inactive Bald or Golden Eagle nest, but construction activities within 660 feet will not occur during the nesting season, and the project will adhere to the National Bald Eagle Management Guidelines of 2007, then this section of the EA must consist of the following statement:

“This project is within 660 feet of an active or inactive Bald or Golden Eagle nest; however, construction activities within 660 feet will not occur during the nesting season, and the project will adhere to the National Bald Eagle Management Guidelines of 2007. Therefore, no coordination with USFWS is required.”

If the project is within 660 feet of an active or inactive Bald or Golden Eagle nest, and construction within 660 feet will occur during nesting season or the project will not adhere to the National Bald Eagle Management Guidelines of 2007, then this section of the EA must include the following statement:

“This project is within 660 feet of an active or inactive Bald or Golden Eagle nest, and construction within 660 feet will occur during the nesting season or the project will not adhere to the National Bald Eagle Management Guidelines of 2007. Therefore, coordination with USFWS to obtain a Non-Purposeful Take Permit is required.”

If the third statement above is applicable, then this section of the EA must also discuss the status of coordination with USFWS to obtain a Non-Purposeful Take Permit, and refer to any written coordination exchanges, which must be included in Appendix F to the EA. This section must also identify any voluntary conservation measures or other commitments resulting from BGEPA coordination.

For more information, refer to **ENV’s Environmental Handbook on Ecological Resources**.

Magnuson-Stevens Fishery Conservation Management Act (EA Section 5.10.8)

If the project is an FHWA project and is located within essential fish habitat, then this section of the EA must explain whether the project may have an adverse effect on essential fish habitat. If not, this section of the EA must explain the basis for that determination, and must explain that no consultation with the NMFS under the Magnuson-Stevens Fishery Conservation Management Act is required.

If the project is an FHWA project and is located within essential fish habitat, and the project may have an adverse effect on essential fish habitat, then this section of the EA must explain that consultation with the NMFS is required, and must explain the status of that consultation (consultation must be completed before the final EA). Include a reference to consultation exchanges, which must be included in Appendix F of the EA. This section must also identify any voluntary conservation measures or other commitments resulting from NMFS coordination.

If the project is not an FHWA project or is not located within essential fish habitat, then this section of the EA must consist of the following statement:

“The Essential Fish Habitat (EFH)/Magnuson-Stevens Fishery Conservation and Management Act (MSA) does not apply.”

For more information, refer to **ENV’s Environmental Handbook on Ecological Resources**.

Marine Mammal Protection Act (EA Section 5.10.9)

If the project is located within or over tidally influenced waters, then this section of the EA must acknowledge the Marine Mammal Protection Act and explain whether the project has the potential to cause an incidental take of marine mammals. If so, then explain that an incidental take permit from USFWS (for manatees) and/or NMFS (for other marine mammals) is required, and the status of that permit. Include a reference to coordination exchanges with USFWS and/or NMFS, which must be included in Appendix F of the EA. This section must also identify any voluntary conservation measures or other commitments resulting from USFWS/NMFS coordination.

If the project is not located within or over tidally influenced waters, then this section of the EA must consist of the following statement:

“The project area does not contain suitable habitat for marine mammals.”

For more information, refer to **ENV’s Environmental Handbook on Ecological Resources**.

Threatened, Endangered, and Candidate Species (EA Section 5.10.10)

This section of the EA must explain that an analysis of the project’s potential impacts on state and federally listed threatened, endangered, and candidate species was performed, and must reference the Species Analysis Form and Species Analysis Spreadsheet that was prepared for the project.

For federally listed species, identify any species for which it was determined that the project may affect the species (or for a state-funded project, any species for which it was determined that the project would cause a take of the species). Explain that for all other federal listed species that may occur in the project area, it was determined that the project will have no effect on them (or for a state-funded project, no take). For a federally funded project, if it was determined that the project may affect one or more federally listed species, explain that section 7 consultation is required and the status of such consultation (consultation must be completed before the final EA). Include a reference to consultation exchanges with USFWS, which must be included in Appendix F of the EA. This section must also identify any voluntary conservation measures or other commitments resulting from section 7 coordination.

For state-listed species, identify any species for which it was determined that the project may impact the species. Explain that for all other state-listed species that may occur in the project area, it was determined that the project will have no impact on them.

For more information, refer to **ENV’s Environmental Handbook: Endangered Species Act**.

Air Quality (EA Section 5.11)

The air quality analysis in an EA is based on specific regulatory requirements, and must address four components: (1) transportation conformity including, potentially, a hot-spot analysis; (2) carbon monoxide traffic air quality analysis (CO TAQA); (3) mobile source air toxics (MSAT); (4) Congestion Management Process (CMP); and (5) Construction Emissions. ENV maintains **Guidance for Preparing Air Quality Statements**. For each of these five components, this **Guidance** provides specific statements (including negative declarations, as applicable) that must be copied verbatim into this section of the EA, based on project specific factors.

If a hot-spot analysis was required (El Paso projects only), explain how the public involvement requirements for hot-spot analyses were satisfied.

Hazardous Materials (EA Section 5.12)

This section of the EA must consist of a summary of the hazardous materials investigation and conclusions prepared in accordance with **ENV's Hazardous Materials in Project Development – Environmental Documentation**. Include references to any separate technical reports regarding hazardous materials, and specifically, the **Hazardous Materials Initial Site Assessment (ISA) form**, which is required for most EA projects.

Traffic Noise (EA Section 5.13)

This section of the EA must explain the results of the noise analysis. At a minimum, this section of the EA must contain the standard language provided in **ENV's Standard Language for Documenting Traffic Noise Analysis**. For more information about how traffic noise is evaluated for TxDOT projects, refer to **ENV's Traffic Noise Policy Implementation Guidance**.

Induced Growth (EA Section 5.14)

If **ENV's Induced Growth Indirect Impacts Decision Tree** indicates that a more detailed six-step induced growth analysis is not required (because no substantial induced growth impacts are anticipated), then this section of the EA must explain that no substantial induced growth impacts are anticipated and how that determination was made (i.e., explain the path through the decision tree).

If **ENV's Induced Growth Indirect Impacts Decision Tree** indicates that a more detailed six-step induced growth analysis is required, then this section of the EA must either contain the entire six-step induced growth analysis prepared in accordance with **ENV's Guidance: Induced Growth Analysis**, or if such analysis was prepared as a separate document, a summary of that analysis.

Cumulative Impacts (EA Section 5.15)

If **ENV's Cumulative Impacts Decision Tree** indicates that a more detailed five-step cumulative impacts analysis is not required (because no substantial cumulative impacts are anticipated), then this section of the EA must explain that no substantial cumulative impacts are anticipated and how that determination was made (i.e., explain the path through the decision tree).

If **ENV's Cumulative Impacts Decision Tree** indicates that a more detailed five-step cumulative analysis is required, then this section of the EA must either contain the entire five-step cumulative impacts analysis prepared in accordance with **ENV's Guidance: Cumulative Impacts Analysis Guidelines**, or if such analysis was prepared as a separate document, a summary of that analysis.

Construction Phase Impacts (EA Section 5.16)

This section of the EA must identify and explain any impacts associated with construction activities. This includes light pollution; impacts associated with physical construction activity, temporary lane, road or bridge closures (including detours); and other traffic disruptions. Include the expected duration of any construction impacts, and explain any BMPs or other strategies that will be used to mitigate such impacts. Also include this standard language regarding noise associated with the construction of the project:

“Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more

tolerable. None of the receptors is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.”

Greenhouse Gas Emissions and Climate Change (EA Section 5.17)

This section of the EA must be included if the public hearing (or deadline for responding to the opportunity for public hearing) will occur on or after August 1, 2021. If the public hearing (or deadline for responding to the opportunity for public hearing) will occur before August 1, 2021, then this section of the EA may be included at the preparer’s discretion. If included, this section of the EA must consist of the following statement:

TxDOT has prepared a Statewide On-Road Greenhouse Gas and Climate Change Technical Report (TxDOT 2025) <insert web address>. To prepare this report, TxDOT conducted on-road greenhouse gas (GHG) emissions analyses for Texas, assessed future Texas climate scenarios or projections and how that might impact the on-road transportation system, and summarized TxDOT strategies and programs that result in GHG reduction and transportation system resiliency and preservation. A summary of key issues in this technical report is provided below. Please refer to the technical report for more details.

The Earth has gone through many natural changes in climate over time. However, since the industrial revolution began in the 1700s, atmospheric concentration of greenhouse gas (GHG) emissions have continued to climb, primarily due to humans burning fossil fuel (e.g., coal, natural gas, gasoline, oil and/or diesel) to generate electricity, heat and cool buildings, and power industrial processes, vehicles, and equipment. According to the Intergovernmental Panel on Climate Change (IPCC), this increase in GHG emissions is projected to contribute to future changes in climate.²⁶

Statewide On-road GHG (EA Section 5.17.1)

This section of the EA must be included if the public hearing (or deadline for responding to the opportunity for public hearing) will occur on or after August 1, 2021. If the public hearing (or deadline for responding to the opportunity for public hearing) will occur before August 1, 2021, then this section of the EA may be included at the preparer’s discretion. If included, this section of the EA must consist of the following statement:

*TxDOT contracted the Texas A&M Transportation Institute to complete GHG analyses for the statewide on-road transportation system using the EPA’s Motor Vehicle Emissions Simulator (MOVES4 version). **Figure 5.17.1-1** shows three future on-road GHG emission analysis scenarios and vehicle miles of travel (VMT) for the Texas on-road transportation system. In the base-year 2019 (prior to COVID pandemic), the estimated on-road Texas CO₂e emissions was 161 million metric tons (MMT). By 2050, the estimated CO₂e emissions range from 135 MMT to*

²⁶ Intergovernmental Panel on Climate Change, Sixth Assessment Report (2023), <https://www.ipcc.ch/assessment-report/ar6/>.

Preparing an Environmental Assessment

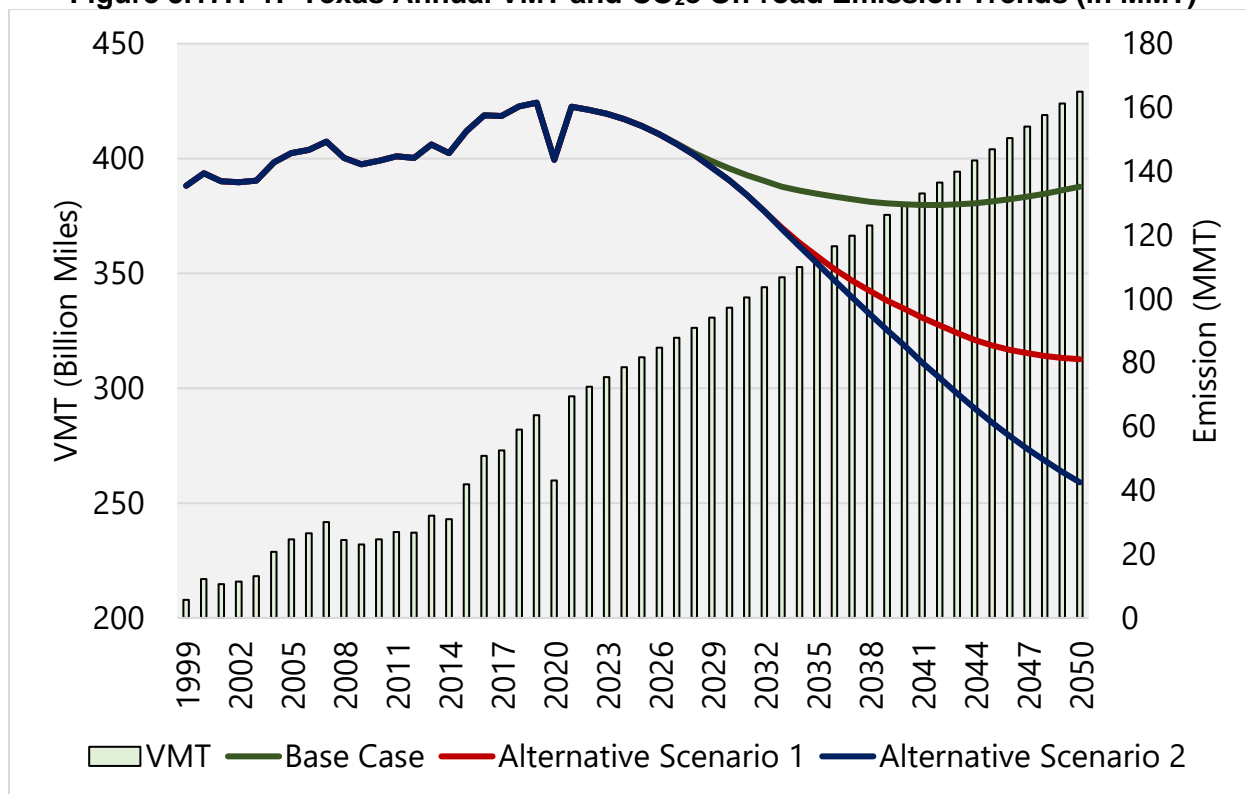
42 MMT. If the EPA 2024 vehicle rules²⁷ are a reasonable projection for future vehicle technological advances, emissions would be approximately 42 MMT. If technology changes more rapidly than the EPA 2024 vehicle rules, then 2050 emissions would likely be lower than 42 MMT. If technology changes more slowly than the EPA 2024 vehicle rules, then emissions are projected to be in the range of 42 MMT to 80 MMT. The Base Case provides a worse-case emission estimate; however, based on CAA history and emission trends²⁸ and the 2024 EPA vehicle rules, technology is likely to advance beyond vehicle model year 2026 that is captured in the MOVES4 Base Case. The VMT forecasts used in each emissions scenario are the same. Future emissions could be different if VMT projections and actual VMT differ, such as:

- Population greater than projections tend to increase VMT and GHG emissions, while population less than projections tend to decrease VMT and GHG emissions; and
- Greater use than projected in transit, active transportation, or trip avoidance options tend to reduce GHG emissions, while less use than projected in these travel options tend to increase emissions.

²⁷ EPA Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles: Final Rule, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model>); and EPA Final Standards to Reduce Greenhouse Gas Emissions from Heavy-Duty for Model Year 2027 and Beyond, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-standards-heavy-duty>.

²⁸ EPA Air Pollutant Emissions Trends Data (2024), <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.

Figure 5.17.1-1: Texas Annual VMT and CO₂e On-road Emission Trends (in MMT)



Source data: TTI 2024 emissions analysis.

See the Technical Report for more detail.

Mitigation Measures (EA Section 5.17.2)

This section of the EA must be included if the public hearing (or deadline for responding to the opportunity for public hearing) will occur on or after August 1, 2021. If the public hearing (or deadline for responding to the opportunity for public hearing) will occur before August 1, 2021, then this section of the EA may be included at the preparer’s discretion. If included, this section of the EA must consist of the following statement:

Strategies that reduce on-road GHG emissions fall under three major categories:

- *Vehicle and fuel technological advances including but not limited to market forces or changes to vehicle and fuel standards;*
- *Traffic System Management (TSM) reduces emissions by improving the operational characteristics of the transportation network to improve traffic flow and reduce congestion (e.g., traffic light timing, pre-staged wrecker service to efficiently clear accidents, and/or traveler information systems); and*
- *Travel Demand Management (TDM) provides reductions in VMT by encouraging the use of alternative modes and shared trips (e.g., telework, transit, rideshare, high occupancy vehicle lanes, scooters, and bicycle and pedestrian facilities). TDM requires personal choice decisions.*

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Over the next 10 years of projected funds in the 2024 TxDOT UTP, it is estimated that more than 33 cents of every dollar either directly or indirectly result in GHG emission reduction and/or support transportation system resilience and preservation.²⁹ TxDOT has ten programs and strategies that directly or indirectly reduce GHG emissions, and eleven programs, strategies and plans that directly or indirectly support system resiliency and preservation. According to national and international climate experts, the GHG reduction actions within TxDOT control only provide for nominal reductions that could collectively with other states result in meaningful co-benefits; most transportation GHG reduction will occur through various vehicle and fuel technological advances.³⁰ TxDOT does not control vehicle and fuel technology. See the Technical Report for more detail.

Additionally, if it's included, this section of the EA may also include any project-related GHG measures, especially if a high level of public concern has been raised. Examples include: TDM/TSM activities (such as bike/ped facilities, transit, ITS, signal timing improvements) solar lights or more energy efficient lights, the use of warm mix asphalt, recycled materials in construction such as recycled asphalt pavement (RAP), recycled asphalt shingles (RAS) or coal combustion byproducts in place of limestone.

TxDOT and a Changing Climate (EA Section 5.17.3)

This section of the EA must be included if the public hearing (or deadline for responding to the opportunity for public hearing) will occur on or after August 1, 2021. If the public hearing (or deadline for responding to the opportunity for public hearing) will occur before August 1, 2021, then this section of the EA may be included at the preparer's discretion. If included, this section of the EA must consist of the following statement:

By 2100, the National Oceanic and Atmospheric Administration State Climate Summary and United States Geological Survey National Climate Change Viewer data project Texas will be warmer, drier, subject to increased intensity of extreme weather events, experience additional sea level rise, and experience higher storm surge. Implications for the Texas transportation system would be temporary closures due to extreme weather events, increased flooding and inundation potential, roadway rutting, buckling, cracking, and increased risk of power outages that could affect traffic signals and intelligent transportation systems (ITS). Warmer and drier conditions may lead to longer wildfire seasons and increased wildfire potential that may result in temporary road closures due to fire, smoke, or limited visibility conditions.

TxDOT is working on the Statewide Resiliency Plan. This Plan will build on existing TxDOT strategies that address future climate scenarios in accordance with TxDOT and FHWA planning, design, asset management, maintenance, emergency response, and operational policies and

²⁹ TxDOT 2024 Unified Transportation Program, <https://www.txdot.gov/projects/planning/utp.html>.

³⁰ IPCC Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the IPCC, https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf; USGCRP, Fifth National Climate Assessment (2023), https://nca2023.globalchange.gov/downloads/NCA5_2023_FullReport.pdf; USDOE, USDOT, USEPA, USHUD U.S. National Blueprint for Transportation Decarbonization: A Joint Strategy to Transform Transportation, page 5, (2023) <https://www.energy.gov/sites/default/files/2023-01/the-us-national-blueprint-for-transportation-decarbonization.pdf>.

guidance. The flexibility in these TxDOT activities and programs for the Texas traveling public and the Texas transportation system help TxDOT consider and plan for, adapt to, and be more resilient to risks to the transportation system. TxDOT will continue to partner with various state and federal agencies on data needs (e.g., TWDB on inland flooding and hydraulic data) and resilience measures to improve design and operation of the Texas transportation system. TxDOT will continue to collaborate with transportation partners and the public on our efforts to address system resiliency.

Agency Coordination (EA Section 6.0)

This section of the EA must indicate any agency coordination conducted for the project, including coordination with TCEQ, TPWD or THC under TxDOT's respective MOUs with those agencies, or any other coordination or consultation with any agency, governmental body or other entity. Note that, for some types of coordination (e.g., early coordination with TPWD under the TxDOT-TPWD MOU), there will have been coordination exchanges at the draft EA stage; whereas for other types of coordination (e.g., the second round of coordination with TPWD under the TxDOT-TPWD MOU and coordination with TCEQ under the TxDOT-TCEQ MOU), the coordination exchanges will not be available until the final EA stage. Include references to written coordination exchanges, which must be included in Appendix F to the EA. For any agency to which the department only provided a combined notice of availability of the draft EA/notice of public hearing or opportunity for public hearing, and for which the department received no response, it is not necessary to provide a copy of the notice in Appendix F, as it will be included in the Opportunity for Public Hearing or Public Hearing Documentation.

This section of the EA must also contain this statement:

"In accordance with the MOU between TxDOT and TPWD, TPWD has provided a set of recommended BMPs in a document titled, "Beneficial Management Practices – Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources," which is available on TxDOT's Natural Resources Toolkit at <https://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits/natural-resources.html>.

The MOU provides that application of specific BMPs to individual projects will be determined by TxDOT at its discretion. The TPWD-recommended BMPs that will be applied to this project are indicated in the Form – Documentation of Texas Parks and Wildlife Department Best Management Practices prepared for the project, which is included in Appendix F."

This section of the EA must also list any cooperating agencies (see Section 3.8 of this Handbook for more information about cooperating agencies).

Public Involvement (EA Section 7.0)

This section of the EA must briefly summarize any public involvement activities conducted for the project, and the results of any such activities, including any changes to the project that were made as a result of public involvement. Explain how and when the combined notice of availability of the draft EA/notice of public hearing or opportunity for public hearing was provided. If one or more public meetings were held, generally describe them and any public concerns or issues raised. If a notice of opportunity for public hearing was provided, explain whether any responses were received. (Note that public meetings and opportunities for public hearing have their own documentation requirements, which are set forth in **ENV's Environmental Handbook on Public Involvement**.)

If a hearing was held, explain where and when the hearing was held and summarize any public input received. Explain where the Public Meeting/Public Hearing Documentation may be inspected and copied upon request (usually the TxDOT district or area office).

The comment/response matrix from the notice of availability of draft EA/public hearing or notice of availability of draft EA/opportunity for public hearing must be included as Appendix H to the EA and this Section 7.0 must contain a reference to the matrix in Appendix H.

Also, if any hearing was held under Transportation Code 203.021 (regarding projects that bypass a municipality or county), or Texas Parks and Wildlife Code Chapter 26 (regarding the taking of public land designated and used as a park, recreation area, wildlife refuge, historic site, or scientific area), explain where and when the hearing was held and any public input received or determinations made. Additionally, if the project adds bicycle lanes, and was covered in a local hearing held under 43 TAC 25.55, explain where and when the hearing was held, and any public input specific to the project that was received.

If the project involves added capacity or construction of a highway on a new location, explain that a notice of impending construction will be provided to owners of adjoining property and affected local governments and public officials. Also explain that the notice may be provided via a sign or signs posted in the ROW, mailed notice, printed notice distributed by hand, notice via website when the recipient has previously been informed of the relevant website address, or other means. This notice must be provided after the environmental decision (i.e., FONSI or recommendation to prepare an EIS), but before earthmoving or other activities requiring the use of heavy equipment begin.

If the project is an FHWA project that is one of the four types of projects for which an EIS is normally prepared according to 23 CFR 771.115(a), explain that a notice of availability of the final EA will be issued, and that a FONSI will not be signed until 30 days after the notice availability of the final EA.

Post-Environmental Clearance Activities and Design/Construction Commitments (EA Section 8.0)

This section of the EA is comprised of two sections, Post-Environmental Clearance Activities (Section 8.1) and Design/Construction Commitments (Section 8.2). The post-environmental clearance activities and design/construction commitments in Sections 8.1 and 8.2 of the EA will normally have been described in context, and usually in greater detail, under the respective resource categories in Section 5. It is not necessary to repeat any of the context or detailed descriptions in Sections 8.1 and 8.2. Rather, Sections 8.1 and 8.2 must consist of a cumulative list of all post-environmental clearance activities and design/construction commitments.

Post-Environmental Clearance Activities (EA Section 8.1)

This section of the EA must succinctly list any unresolved environmental activities for which the project sponsor will be responsible such as conducting surveys that could not be done prior to issuance of a FONSI, obtaining environmental permits (e.g., Section 404 permits), or performing compensatory mitigation. Separately number each post-environmental clearance activity.

Design/Construction Commitments (EA Section 8.2)

This section of the EA must succinctly list any project-specific avoidance measures or special instructions that will need to be taken into account in the design and/or construction of the project as a result of the department's environmental review of the project. This includes any voluntary conservation measures or other commitments related to impacts on any resource. Separately number each design/construction

commitment. It is not necessary to list design or construction commitments that are universally applied to TxDOT projects. Only list those design or construction commitments that are identified as needed due to environmental considerations specific to this project.

This section of the EA must also contain this statement:

“As indicated above in Section 6.0, the TPWD-recommended BMPs that will be applied to this project are indicated in the Form – Documentation of Texas Parks and Wildlife Department Best Management Practices prepared for the project, which is included in Appendix F.”

Monitoring and Compliance Plan for Mitigation (EA Section 8.3)

This section of the EA must contain a monitoring and compliance plan for any mitigation described in Sections 8.1 or 8.2.³¹ The purpose of the monitoring and compliance plan is to provide assurance that the mitigation will actually be implemented. The below language meets this requirement for typical mitigation commitments on a TxDOT project (i.e., noise walls, TPWD BMPs, etc.):

“The mitigation described in Sections 8.1 and 8.2 above will be implemented by one or more TxDOT contractors. TxDOT will be responsible for monitoring the mitigation described in Sections 8.1 and 8.2. The mitigation will be implemented and completed prior to or during construction of the project. Compliance will be determined by adherence to the wording of the mitigation commitments in Sections 8.1 and 8.2. TxDOT may avail itself of any contractual or other remedy allowable by law should a contractor charged with implementing mitigation commitments fail to fulfill such commitments. The mitigation will be funded through a combination of federal funding under the Federal Aid Highway Program and State of Texas funding.”

Revise this language as needed to account for any project-specific situations, including any of the following if they apply:

- Revise accordingly if any mitigation will be implemented by an entity other than a TxDOT contractor (e.g., a local government’s contractor).
- Revise accordingly if any mitigation will be monitored by an entity other than TxDOT (e.g., a local government).
- Revise accordingly to indicate any monitoring information that will be made publicly available.
- Revise accordingly to indicate any other consequences of non-compliance.
- Revise accordingly if the mitigation will be funded differently than as described above.
- Revise accordingly to account for any other notable details about how project-specific mitigation will be monitored.

³¹ 40 CFR 1505.3(c) and (d).

Conclusion (EA Section 9.0)

If the project would not result in a significant impact on the human or natural environment, then this section of the EA will consist of the following statement:

“Implementation of the proposed project would not result in a significant impact on the human or natural environment. Therefore, a finding of no significant impact is recommended.”

If the project would result in a significant impact on the human or natural environment, then this section of the EA will consist of the following statement:

“Implementation of the proposed project would result in a significant impact on the human or natural environment. Therefore, preparation of an environmental impact statement is recommended.”

Mitigation and commitments described in the EA, such as noise walls and avoidance of migratory bird nests, may be taken into account in determining whether impacts are significant.

References (EA Section 10.0)

Provide a list of any references used to support any statement in the EA. Include full citations for each reference, including title, author, and date.

For each reference, provide a web address that can be used to access the material, or provide instructions for how the public can otherwise access the material (e.g., making the material available for inspection and copying at the TxDOT district office).

Names and Qualifications of Persons Preparing the EA or Conducting an Independent Evaluation of the EA (EA Section 11.0)

List the names and qualifications of all persons who prepared the EA (i.e., the consultants who prepared the EA) or who conducted an independent evaluation of the EA (i.e., all the district and ENV staff who reviewed the EA).³² Provide each person’s name, job title, employer, and their years of experience and/or educational level and subject. It is not necessary to list preparers of supporting material or identify which persons prepared or reviewed which parts of the EA.

Appendices (EA Section 12.0)

For each of the appendices below, include a cover page with the title of the appendix and a list of the appendix contents if more than one document is contained in the appendix.

Appendix A – Project Location Map

Appendix A must contain a project location map indicating the project limits in relation to other area roads.

Appendix B –Project Photos

Appendix B must contain ground-level photographs of representative sections of the existing facility and locations of the proposed facility. Also include photographs of any important environmental features such as wetlands, historic sites, etc. All photographs must be labeled with the date of the photograph, a

³² 40 CFR 1506.5(c)(3).

description of the location from which the photograph was taken, and the direction the photographer was facing.

Appendix C – Schematics

Appendix C must contain overhead schematics showing the existing and proposed facilities against the backdrop of aerial photographs. The schematics must show all physical aspects of the proposed facility including existing and proposed ROW boundaries, edge of pavement, lanes, and if known, detention ponds.

Appendix D – Typical Sections

Appendix D must contain figures depicting typical sections of both the existing roadway and the proposed roadway. If the project will be built in phases, include figures depicting typical sections for each phase. If there will be multiple configurations throughout the project (e.g. frontage roads in one section but none in another, turn lanes in specific sections, etc.), provide figures depicting typical sections for each configuration.

Appendix E – Resource-specific Maps

Appendix E must contain any maps showing environmental constraints such as historic structures, cemeteries, wetlands, parks or other existing features that are relevant to the environmental evaluation of the project, to the extent such maps have been prepared. It is also recommended to include a map showing the location of noise receivers and any proposed noise barriers. The maps in Appendix E must be depicted on aerial photographs with an overlay of the project schematic if possible. For visual clarity, multiple sets of maps may be provided for different types or categories of resources (e.g., human-made vs. natural features).

Maps showing the locations of archeological sites or listed species must not be included in the interest of protecting those resources.

Appendix F – Resource Agency Coordination

Appendix F must contain all letters and other correspondence (with attachments) sent to or from any resource agency regarding the environmental review of the project. For any agency to which the department only provided a combined notice of availability of the draft EA/notice of public hearing or opportunity for public hearing, and for which the department received no response, it is not necessary to provide a copy of the notice in Appendix F, as it will be included in the Opportunity for Public Hearing or Public Hearing Documentation.

If there is a cooperating agency for the project, it is not necessary to include in Appendix F every email between TxDOT and the cooperating agency as there is likely to be many that are non-decisional. The preparer should use discretion in determining which key exchanges should be included in Appendix F.

Appendix F must also contain the “Form – Documentation of Texas Parks and Wildlife Department Best Management Practices” prepared for the project.

Appendix G – Section 4(f) Documentation (if applicable)

Appendix G must contain all documentation related to any Section 4(f) determination, including any Section 4(f)-related correspondence and any documentation prepared to document compliance with Section 4(f).

Appendix H – Comment and Response Matrix from the Notice of Availability of Draft EA/Public Hearing or Notice of Availability of Draft EA/Opportunity for Public Hearing

Appendix H must include the comment and response matrix from the notice of availability of draft EA/public hearing or notice of availability of draft EA/opportunity for public hearing.

6.0 Finding of No Significant Impact

If the EA concludes that the project will have no significant impacts, then a FONSI document must be prepared using the Finding of No Significant Impact for State or FHWA Project which is available on **ENV's NEPA and Project Development Toolkit**. The only individuals authorized to sign a FONSI are the ENV Director, Deputy Director, or Project Delivery Management Section Director.

After ENV issues the FONSI, the project sponsor issues an NOA of the FONSI. TxDOT's requirements for issuing an NOA are set forth in **ENV's Environmental Handbook on Public Involvement**.

For an FHWA project, if the project is of one of the four types that normally require an EIS under 23 CFR 771.115(a), then the final EA must be made available for public review for a minimum of 30 days prior to final issuance of the FONSI, and the public availability must be announced by a notice similar to a public hearing notice.³³ For more information about this requirement, see **ENV's Environmental Handbook on Public Involvement**.

³³ See 23 CFR 771.119(h).

7.0 Abbreviations and Acronyms

BMP	Best Management Practice
CBRA	Coastal Barrier Resources Act of 1982
CBRS	Coastal Barrier Resources System
CE	Categorical Exclusion
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMP	Congestion Management Process
CNRA	Coastal Natural Resource Area
CO TAQA	Carbon Monoxide Traffic Air Quality Analysis
EA	Environmental Assessment
EIS	Environmental Impact Statement
ENV	Texas Department of Transportation's Environmental Affairs Division
ENV-CRM	Texas Department of Transportation's Cultural Resources Management Section
FONSI	Finding of No Significant Impact
FHWA	Federal Highway Administration
FPPA	Federal Farmland Protection Policy Act of 1981
IBWC	International Boundary and Water Commission
ISA	Initial Site Assessment
LEP	Limited English Proficiency
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NOA	Notice of Availability
PS&E	Plans, Specifications, and Estimates
ROW	Right-of-Way
SHPO	State Historic Preservation Officer
SWP3	Storm Water Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
TMDL	Total Maximum Daily Load

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TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USIBWC	United States Section, International Boundary and Water Commission

Appendix A Document Revision History

The following table shows the revision history for this guidance document.

Revision History	
Effective Date Month, Year	Reason for and Description of Change
February 2025	<p>Version 31 was released.</p> <ul style="list-style-type: none"> • Updated the date of the statewide greenhouse gas report from 2024 to 2025 in Section 5.17. • Revised a phrase in the summary of the statewide greenhouse gas analysis to reflect that TxDOT is still working on the Statewide Resiliency Plan (Section 5.17.3).
February 2025	<p>Version 30 was released.</p> <ul style="list-style-type: none"> • Removed environmental justice-related instructions in accordance with Executive Order titled “Ending Illegal Discrimination and Restoring Merit-Based Opportunity” (January 21, 2025).
November 2024	<p>Version 29 was released.</p> <ul style="list-style-type: none"> • Updated Section 5.10.2, “Executive Order 13112 on Invasive Species” to refer to Executive Order 13112 “as amended by Executive Order 13751 on Safeguarding the Nation From the Impacts of Invasive Species.” • Updated Section 5.17, “Greenhouse Gas and Climate Change,” to reflect the data and conclusions from the recently approved 2024 statewide GHG and climate change technical report.
September 2024	<p>Version 28 was released.</p> <ul style="list-style-type: none"> • In accordance with CEQ Phase 2 rulemaking, the following changes were made: <ul style="list-style-type: none"> ○ Required “monitoring and compliance plan for mitigation.” ○ Slightly adjusted the end date for the 1-year timeline. ○ Added an instruction that whenever the EA/EIS preparer refers to or relies on information from some external source, the external source must be immediately referenced in the body of the text or in a footnote so that the relevance of the material being cited is clear to the reader. ○ Added boilerplate statement to EA Handbook (Introduction) and EIS Handbook (Summary) about how TxDOT performed an independent evaluation of those parts of this document that were prepared by a contractor(s) and has determined that the document meets NEPA standards, regulations, etc.

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	<ul style="list-style-type: none"> ○ Required contractor to state “no” financial or other interest in the outcome of the action (instead of just disclosing “any” financial or other interest). ○ Designated commenters on draft EAs as “participating agencies” and require invitation of federal agencies that will need to issue NEPA approval (i.e., USACE and USCG) as “cooperating agencies.” ○ Added instruction that if there are “cooperating agencies,” then informally notify the cooperating agencies of the project schedule.
June 2024	<p>Version 27 was released.</p> <ul style="list-style-type: none"> ● Added instruction to include a statement about how TxDOT will make every reasonable effort to accommodate persons with special or mobility needs to Section 5.5.5, “Limited English Proficiency.”
April 2024	<p>Version 26 was released.</p> <ul style="list-style-type: none"> ● Added new subheadings under the “Community Impacts” section of the EA (EA Section 5.5) for “Community Study Area and Demographics” (EA Section 5.5.1), “Displacements” (EA Section 5.5.2), “Access and Travel Patterns (EA Section 5.5.3), “Community Cohesion” (EA Section 5.5.4), “Limited English Proficiency” (EA Section 5.5.5), “Environmental Justice” (EA Section 5.5.6) and “Avoidance, Minimization, and Mitigation for Environmental Justice” (EA Section 5.5.6.a); and add new instructions for each of those subsections. ● Reduced the “Right-of-Way/Displacements” section of the EA (EA Section 5.1) to be just “Right-of-Way Property Acquisition” (EA Section 5.1) as displacements are better addressed as its own new “Displacements” subheading under the Community Impacts section of the EA (EA Section 5.5.2). ● Removed the “Bicycle and Pedestrian Facilities” section of the EA (EA Section 5.5) as bike/ped impacts are better addressed under a new “Access and Travel Patterns” subheading under the Community Impacts section of the EA (EA Section 5.5.3). ● Re-numbered Section 5 sub-sections of the EA to reflect above-referenced changes ● Minor revisions to the “Protected Lands” Section of the EA (EA Section 5.9) to remove references to “documentation” of Chapter 26 compliance to avoid inference that Chapter 26 documentation must be attached to the EA, as there is no such requirement. ● Updated reference in the “Induced Growth” Section of the EA (EA Section 5.14) to “Induced Growth Analysis” instead of “Indirect Impacts Analysis.” ● Removed references to Section 4(f) and Chapter 26 handbooks which are no longer used.

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	<ul style="list-style-type: none"> Other clarifying revisions.
November 2023	<p>Version 25 was released.</p> <ul style="list-style-type: none"> Revised Section 3.8 of EA Handbook, Section 4.0 of the EA (“Alternatives”), and Section 5.10.1 of the EA (“Clean Water Act Section 404”) to add special instructions regarding the need for a Section 404 individual standard permit from the USACE. Revised Section 4.0 of the EA (“Alternatives”) and Section 4.3 of the EA (“Preliminary Alternatives Considered but Eliminated from Further Consideration”) to add instructions for incorporating a planning study by reference. Updated Texas Administrative Code citations in Section 5.10.10 of the EA (“Coastal Zone Management”).
July 2023	<p>Version 24 was released.</p> <ul style="list-style-type: none"> Added hard 75 page limit for EA (not including citations or appendices) to align with Federal debt ceiling bill (Pub. L. 118-5)
February 2023	<p>Version 23 was released.</p> <ul style="list-style-type: none"> Removed requirement to include planning consistency documents as an appendix to the EA (formerly “Appendix E”), re-number appendices to account for Appendix E being removed Revised Section 7.0 of the EA (“Public Involvement”) and description of Appendix H to require public hearing comment/response matrix to be attached to the EA as Appendix H (was previously optional)
December 2022	<p>Version 22 was released.</p> <ul style="list-style-type: none"> Amended Section 2.2 of the EA, “Proposed Facility,” to require mention of the need for an interstate access justification request, if applicable Fixed typo in title of Section 2.4 of the EA, “Planning Consistency” Revised Section 5.12 of the EA, “Air Quality,” to require use of standard language from ENV’s Guidance for Preparing Air Quality Statements for construction emissions Revised Section 5.17 of the EA, “Construction Phase Impacts,” to remove standard language for construction emissions
June 2022	<p>Version 21 was released.</p> <ul style="list-style-type: none"> Revised Section 5.1 of the EA, “Right-of-Way/Displacements” to instruct not to include the owner or resident’s name when discussing potential residential displacements

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	<ul style="list-style-type: none"> • Corrected regulatory reference in standard language in Section 5.4 of the EA, “Utility Relocation” (43 TAC 21.38(e)(2)) • Revised standard language in Section 5.11.5 of the EA, “Migratory Bird Protections” • Revised standard language in Section 5.18.3 of the EA, “TxDOT and a Changing Climate” to clarify that the referenced technical report is a “statewide” report
April 2022	<p>Version 20 was released.</p> <ul style="list-style-type: none"> • Revised instructions regarding Section 6(f) of the Land and Water Conservation Fund Act (LWCF) in EA Section 5.9 to be more specific and consistent with the National Park Service’s 2011 LWCF Federal Financial Assistance Manual. • Updated terminology in EA Section 5.10.1 regarding Section 404 of the Clean Water Act and EA Section 5.10.4 regarding the Rivers and Harbors Act to refer to “water features” rather than “water bodies.” Also revise EA Section 5.10.1 regarding Section 404 of the Clean Water Act to include an updated list of possible water features (e.g., palustrine emergent, estuarine emergent, etc.).
November 2021	<p>Version 19 was released.</p> <ul style="list-style-type: none"> • Revised Section 5.0 to indicate that it is permissible to add subheadings under the required EA sections to break-up large sections of text and improve readability • Relocated some instructions in Section 2.2 of the EA, “Proposed Facility,” to before the new “Logical Termini and Independent Utility” and “Planning Consistency” subheadings • Added a new subheading, Section 2.3 of the EA, “Logical Termini and Independent Utility” • Added a new subheading, Section 2.4 of the EA, “Planning Consistency” • Revised Section 5.4 of the EA, “Utility Relocation,” to provide more detailed instructions about addressing utilities in the EA • Added reminder about flexibility to add additional subheadings in Section 5.6 of the EA, “Community Impacts” • Removed Section 5.11.1 of the EA, “Texas Parks and Wildlife Coordination” • Added instructions regarding local government projects to Section 5.11.2 of the EA, “Executive Order 13112 on Invasive Species” • Added instructions regarding local government projects to Section 5.11.3 of the EA, “Executive Memorandum on Environmentally and Economically Beneficial Landscaping”

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	<ul style="list-style-type: none"> • Revised Section 6.0 of the EA, “Agency Coordination,” to specifically address TPWD coordination. • Revised Section 8.2 of the EA, “Design/Construction Commitments,” to require a statement regarding TPWD-recommended BMPs. • Revised Appendix G of the EA, “Resource Agency Coordination,” to specifically require inclusion of the TPWD BMP form
September 2021	<p>Version 18 was released.</p> <ul style="list-style-type: none"> • Revised Section 3.3 regarding “ENV Director Approval of Timeline Greater than 1 Year” to clarify that the one year is measured from the <i>first</i> time the project work plan is accepted in ECOS – i.e., the “Project Start Date” on WPD III. Also, clarify that when the ENV Director approves a timeline longer than one year, he/she must approve a new deadline for the FONSI. • Amended Section 3.8 regarding “Agency Coordination” to specifically mention coordination of the draft EA with TPWD. • Clarifying revisions to the standard language for Clean Water Act Section 401 compliance in Section 5.10.2 of the EA.
July 2021	<p>Version 17 was released.</p> <ul style="list-style-type: none"> • Added reminder in Section 2.2 of the EA that the source of funding must remain consistent through the EA. • Revised Section 5.10.1 of the EA to expand the types of water bodies that may be populated in the table. • Revised Section 5.10.2 of the EA to reflect that Clean Water Act Section 401 is triggered by the need for a Section 404 permit, not a permit under Section 10 of the Rivers and Harbors Act. • Revised Sections 5.11.1, 5.11.8, 5.11.9, 5.11.10, 5.11.11, and 8.2 of the EA to emphasize that any voluntary conservation measures or other commitments resulting from coordination under various resource-protection laws must be noted in the EA. • Revised references to a Section 404 “individual permit” to instead refer to an “individual standard permit.” • Revised Section 5.10.7 of the EA regarding Floodplains. • Clarifying revisions in Section 11.0 of the EA regarding Names and Qualifications of Persons Preparing the EA or Conducting an Independent Evaluation of the EA.
May 2021	<p>Version 16 was released.</p> <ul style="list-style-type: none"> • Added Section 5.18 of the EA, “Greenhouse Gas and Climate Change.” • Updated Sections 2.1, 2.2, and 5.5 of the EA to reflect TxDOT’s April 2021 Bicycle Accommodation Design Guidance

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
February 2021	<p>Version 15 was released.</p> <ul style="list-style-type: none"> • Revised Clean Water Act Section 401 standard language in Section 5.10.2 of the EA to reflect new process for projects that require an Individual Permit under Section 404 or Section 10.
September 2020	<p>Version 14 was released.</p> <ul style="list-style-type: none"> • Various changes to implement July 15, 2020 CEQ rulemaking. • Correction to Fish and Wildlife Coordination Act discussion.
August 2020	<p>Version 13 was released.</p> <ul style="list-style-type: none"> • Revised Clean Water Act Section 402 standard language in Section 5.10.6 of the EA to refer to the “current version of Special Provision 506” rather than “Special Provision 506-003.”
March 2020	<p>Version 12 was released.</p> <ul style="list-style-type: none"> • Extensive revisions, mostly to conform the EA Handbook to new business process and instructions in ENV’s Environmental Guide Volume 1: Process and ENV’s Environmental Guide Volume 2: Activity Instructions.
January 2020	<p>Version 11 was released.</p> <ul style="list-style-type: none"> • Updated NEPA assignment disclaimer language to reflect first renewed NEPA assignment MOU date of December 9, 2019.
December 2019	<p>Version 10 was released.</p> <ul style="list-style-type: none"> • Removed reference to paper project scope in Section 3.2, as scoping is now done in ECOS for both TxDOT- and local government-sponsored projects. • Revised discussion of Section 5.5 of the EA (“Bicycle and Pedestrian Facilities”). Revisions include adding a discussion of impacts on linkages to transit stops and corridors, and removing the reference to ENV’s Environmental Handbook on Bicycle and Pedestrian Accommodation, which is withdrawn.
April 2019	<p>Version 9 was released.</p> <ul style="list-style-type: none"> • Updated throughout to reflect new MOU with TCEQ. • Revised discussion of Section 1.0 of the EA (“Introduction”) to clarify that both the Introduction for both the draft EA and final EA must explain that if TxDOT determines that there are no significant effects it will prepare a FONSI.

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	<ul style="list-style-type: none"> • Revised discussion of Section 2.2. of the EA (“Proposed Facility”) to instruct not to include references to CFR for a state project. • Revised discussion of Section 5.10.7 of the EA (“Floodplains”) to remove unnecessary instructions. • Revised discussion of Section 5.10.13 of the EA (“Drinking Water Systems”) to require the section to consist of a statement referencing TxDOT’s Standard Specifications. • Revised discussion of Section 9.0 of the EA (“Conclusion”) to require the section to consist of specific language, depending on whether the project would or would not result in a significant impact.
January 2019	<p>Version 8 was released.</p> <p>Various updates and revisions, including:</p> <ul style="list-style-type: none"> • Updated description of scoping process to reflect that scoping is done in ECOS for TxDOT-sponsored projects. • Removed MAPO references. • Fixed standard language about the project not irretrievably committing federal funds <u>for other future transportation projects</u>. • Added a reminder that, if there are multiple build alternatives being evaluated, the preferred alternative may be developed to a higher level detail to (1) facilitate the development of mitigation measures or (2) facilitate concurrent compliance with other applicable laws. • Clarified that discussion of displacements in EA is subject to final design considerations. • Various changes to description of Water Resources EA content, including new standard language for floodplains and an added reference to the new MOU with EPA regarding the Edwards Aquifer. • Revised MBTA section of the EA to reflect new standard language and new subheading title, “Migratory Bird Protections.” • Clarified that if a notice of availability of the draft EA is provided to an agency, and no response is received, there’s no need to include a copy of the notice of availability in Appendix G of the EA. • Removed references to “Environmental Permits, Issues and Commitments,” and revised Section 8.0 of the EA to instead refer to “Post-Environmental Clearance Activities and Contractor Communications,” with each being addressed under separate subheadings 8.1 and 8.2 in the EA.
July 2018	<p>Version 7 was released.</p> <p>Revised Section 5.1. Removed the requirement to obtain a letter from a local government confirming that it followed the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970 (“Uniform Act”) in making an advance</p>

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Revision History	
Effective Date Month, Year	Reason for and Description of Change
	acquisition of right-of-way. ENV has determined that this is not needed as part of the environmental review process, as the ROW Division has its own processes for confirming Uniform Act compliance for a given project.
February 2018	Version 6 was released. Revised Section 6.0 to indicate that, if project is one of the four types that normally require an EIS, just the final EA, and not also the draft FONSI, must be made available for public review 30 days prior to issuance of the FONSI.
October 2017	Version 5 was released. Revised Section 5.10 (Water Resources) to be consistent with TxDOT's Environmental Handbook on Water Resources.
October 2017	Version 4 was released. Revised Section 2.2 (Proposed Facility) to require specific discussion of logical termini. Revised discussion of EA Section 5.0 (Affected Environment and Environmental Consequences) to explain how to handle situations in which no encroachment-alteration effects are identified.
June 2017	Version 3 was released. Revised Section 5.11, Biological Resources, to break-out various biology-related laws and executive orders into separate subheadings, and add explanations of multiple biology-related laws and executive orders. Removed Section 5.15, Greenhouse Gas Emissions, and revised Section 5.17, Cumulative Impacts, in response to the Council on Environmental Quality's April 5, 2017 withdrawal of its August 1, 2016 final guidance on greenhouse gas emissions and climate change. Re-numbered affected EA sections. Revised "should" to "must" or "shall" throughout.
October 2016	Version 2 was released. Added Section 5.15, Greenhouse Gas Emissions in response to the Council on Environmental Quality's August 1, 2016 final guidance on greenhouse gas emissions and climate change. Also revised discussions on Clean Water Act Section 401, Clean Water Act Section 303(d), Coastal Zone Management, and Edwards Aquifer to improve accuracy and completeness. Also added EA Section 5.10.14, Drinking Water Systems.
June 2016	Version 1 was released.