amongst the

Wilmington District, United States Army Corps of Engineers North Carolina Division, Federal Highway Administration North Carolina Department of Environmental Quality North Carolina Department of Transportation

Purpose

The purpose of this Memorandum of Understanding (MOU) is to establish a transparent and coordinated process (i.e., Merger Process) for conducting environmental reviews and making authorized decisions for surface transportation projects in North Carolina that merges the requirements of Section 404 of the Clean Water Act (33 U.S.C. 1344) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.). The implementation procedures, as amended, are incorporated by reference.

Applicability

A. The United States Army Corps of Engineers (USACE), Federal Highway Administration (FHWA), North Carolina Department of Environmental Quality (NCDEQ), and North Carolina Department of Transportation (NCDOT) are the Merger MOU Signatories. These agencies will consult after the draft STIP has been released for public comment and apply screening criteria to identify specific projects that will follow the Merger Process. Potential Merger projects may include any highway project that has conflicting resources or would otherwise benefit from a structured and coordinated review process.

Note: If a project is being developed under the North Carolina Environmental Policy Act (SEPA) without FHWA involvement, this Process can be applicable but would be implemented without FHWA participation.

B. Regulatory/Resource Agency participation in the Merger Process does not imply endorsement of a transportation plan or project. Nothing in these procedures is intended to diminish, modify, or otherwise affect the statutory or regulatory authorities of the agencies involved. In the event of any conflict between this process and other statutes or regulations, the statutes or regulations are the final authority.

Concurrence Points and Merger Plan Coordination

There are seven strategic decision (concurrence) points in the NEPA project development and permitting process.

- 1. Purpose and Need and Study Area Defined: The foundation upon which justification for the project is established.
- 2. Detailed Study Alternatives Carried Forward: Alternatives that satisfy the purpose and need for the project.
- 2A. Bridging Decisions and Alignment Review: Identification of major structures (including approximate lengths and dimensions) and a review of the preliminary alignment for each alternative.
- 3. Proposed Least Environmentally Damaging Practicable Alternative (LEDPA)/Preferred Alternative Selection: Selection of an alternative as the Proposed LEDPA.
- 4A. Avoidance and Minimization: A detailed, interdisciplinary, and interagency review to optimize the design and benefits of the project while reducing environmental impacts to both the human and natural environments.
- 4B. Hydraulic Design Review: A review of the development of the stormwater best management practices and hydraulic design.
- 4C. Permit Drawings Review: A review of the completed permit drawings after the hydraulic design is complete and prior to permit application.

At the outset of the process, NCDOT will establish a project-specific Merger Plan in coordination with the Merger MOU Signatories, which will include establishing coordination protocols, need for meetings (including pre-meetings), and an anticipated schedule for project development/permitting. Throughout the process, NCDOT will collaborate with the Merger MOU Signatories on the Merger Plan, including anticipated concurrence dates and project status updates, to determine the best approach for coordination (in-person meetings, virtual meetings, conference calls, or email conversations). The Merger Team will be given the opportunity to comment on project schedules and work collaboratively through the Merger Process to maintain those schedules.

Concept of Concurrence

Concurrence implies that each agency/organization representative does not object to decisions made at strategic points in the project development process and, in doing so, pledges to abide by the decision made, unless there is a profound changed condition. Each agency should enter the discussion of concurrence with a solution-oriented mindset that involves proactive sharing and examination of information to achieve sound decision-making. Each concurrence point builds upon prior decisions, so it is important to ensure that agencies/organizations concur on a decision before requesting the subsequent concurrence point decision.

NCDOT will use the project's Merger Plan to enhance communication and data sharing, which should in turn help an agency determine their concurrence decisions.

Decisions for concurrence points 1 through 4A will be documented by signature of a concurrence form summary statement. Decisions for concurrence points 4B and 4C will be documented with meeting minutes. Definitions of concurrence, non-concurrence, and abstention are provided below.

Concurrence

- "I do not object to the concurrence decision based on the laws and regulations of my program and agency."
 - Concurrence by an agency or organization means that the specific agency/organization representative does not object to decisions made at strategic points in the project development/permitting process and agrees to abide by the decision made, unless there is a profound changed condition in the future. A profound changed condition does not include changes in agency/organization representatives.
- Non-concurrence (see Conflict Resolution attachment)

"I do not concur as the information is not adequate for this stage and/or concurrence could violate the laws and regulations of my program and agency."

- If an agency/organization representative does not concur, that representative is responsible for documenting their reasons in writing and providing that documentation per the Roles and Responsibilities.
- Non-concurrence should not be utilized based on lack of information without affording NCDOT a reasonable opportunity to provide the requested information.
- Abstention (Merger MOU Signatories cannot abstain)

"I do not actively object, but I am not signing the concurrence form. The Merger Process may continue, and I agree not to revisit the concurrence point subject to the guidance on revisiting concurrence points."

 If an agency/organization representative decides to abstain, that representative is responsible for documenting their reasons in writing and providing that documentation to all Merger MOU Signatories within five business days of the decision to abstain. The Merger MOU Signatories (FHWA, USACE, NCDEQ, and NCDOT) are responsible for reviewing the reason(s) for abstaining to determine if the process should move forward.

"I have no resources that are impacted by decisions made at this concurrence point."

• In this case, no follow up information is required by the agency.

A written request to revisit a previous concurrence point should be made to the Merger MOU Signatories and will include supporting documentation. Merger MOU Signatories will provide a written response to the entire Merger Team for that specific project request within 15 days.

Procedures

This agreement will be implemented through a series of guidance documents to be approved by the Merger MOU Signatories and published on <u>NCDOT's website</u>. With the exception of the attached Conflict Resolution and Roles and Responsibilities guidance, these documents can be updated with the approval of all the Merger MOU Signatories via their Merger Management Team representatives.

Modification

Substantive changes to this Memorandum of Understanding will require approval of all Merger MOU Signatories. Modification may be proposed by any participating agency/organization but must be endorsed for consideration by one or more Signatories. Proposals for modification will be circulated to all Signatories for a 30-day review period. Approval of such proposals will be indicated by written acceptance. A Signatory may terminate participation in this agreement upon 30-day written notice to all other Signatories.

Merger Team

NCDOT will coordinate with the USACE, FHWA, and NCDEQ to identify the participating agencies/organizations that should partner to comprise the Merger Team for a specific project. Each agency/organization will determine the appropriate staff person(s) empowered with decision-making to represent their specific regulatory/resource interests on the Merger Team. In addition to the MOU Signatory agencies, the following will normally participate as Partnering Agencies.

- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)
- North Carolina Wildlife Resources Commission (WRC)
- North Carolina Department of Natural and Cultural Resources, Historic Preservation Office (HPO)
- Metropolitan Planning Organizations (MPOs) and/or Rural Planning Organizations (RPOs)

The following agencies will be requested to participate when there is any possibility that resources under their jurisdiction are in the project vicinity.

- North Carolina DEQ, Division of Coastal Management (DCM; within the 20 coastal counties)
- National Park Service (NPS)
- U.S. Coast Guard (USCG)
- U.S. Forest Service (USFS)
- Tennessee Valley Authority (TVA)
- U S. Fish and Wildlife Service Wildlife Refuge
- North Carolina Division of Marine Fisheries (DMF)
- National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly NMFS; staff could include Essential Fish Habitat and Protected Resource Division)

Federally-recognized tribes shall be invited to participate on the Merger Team for projects that may affect lands held in trust for the tribe or if the Merger Team is aware that a resource of importance to a tribe may be affected by a project.

Other Federally-recognized tribes with an interest in North Carolina that may have resources in or near a project area will be consulted with during project development and through the Section 106 consultation process. They may also be invited to participate on the Merger Team.

Each Partnering Agency will develop protocol to determine which office or individual(s) from each agency/organization will participate. During the Merger Process, team members who are not Merger MOU Signatories may conclude their participation if resources under their jurisdiction will not factor into the LEDPA selection and/or permit decision.

Signatures

The four agencies listed below as Merger MOU Signatories are the owners of the Merger Process. These agencies are the decision-making authorities regarding NEPA and Section 404 permitting and are responsible for conflict resolution.

By participating on a Merger Team, agencies/organizations agree to abide by the procedures agreed upon by the Merger MOU Signatories. Such agreement does not compromise or eliminate statutory or regulatory remedies available to the listed agencies/organizations (e.g., 404(q) or (c)), nor does it circumvent statutory requirements that are mandated to specific agencies/organizations. The intent of this agreement is to provide an interactive, defined process that allows agencies/organizations to address their statutory and regulatory requirements during the development of transportation projects within the State of North Carolina.

Robert M. Burnham LTC, U.S. Army Deputy District Commander

amongst the

Wilmington District, United States Army Corps of Engineers North Carolina Division, Federal Highway Administration North Carolina Department of Environmental Quality North Carolina Department of Transportation

Signatures (cont'd)

John F. Sullivan III, Division Administrator Federal Highway Administration, North Carolina Division

amongst the

Wilmington District, United States Army Corps of Engineers North Carolina Division, Federal Highway Administration North Carolina Department of Environmental Quality North Carolina Department of Transportation

Signatures (cont'd)

Elizabeth Biser, Secretary North Carolina Department of Environmental Quality

amongst the

Wilmington District, United States Army Corps of Engineers North Carolina Division, Federal Highway Administration North Carolina Department of Environmental Quality North Carolina Department of Transportation

Signatures (cont'd)

Chris Peoples, Chief Engineer North Carolina Department of Transportation



ATTACHMENT A: MERGER ROLES AND RESPONSIBILITIES

The Merger Process relies on individual participants to represent their agency/organization in a collaborative decision-making environment. The Merger Team participants are expected to enter the discussion of concurrence with a solution-oriented mindset that involves proactive sharing and examination of information and early identification and resolution of issues to achieve sound decision-making, thus supporting all relevant regulatory/resource interests. Key roles and responsibilities are outlined as follows.

NCDOT Roles

The NCDOT Project Team is made up of the NCDOT Project Manager, its consultant(s), and NCDOT's technical experts. The NCDOT Project Team will:

- Develop and maintain the Merger Plan.
- Attend all relevant Merger Team meetings.
- Be introduced at the beginning of each Merger meeting.
- Support the Merger Team with information about the project to assist in reaching concurrence.

See below for the NCDOT Project Manager's roles.

Merger Team

The Merger Team is comprised of representatives of the MOU Signatory Agencies and Partnering agencies, as denoted in the MOU. Merger Team Members are expected to provide a concurrence decision for all concurrence points.

Merger Team Chair

The USACE representative for the project is the Merger Team Chair. The Chair will guide the concurrence point meeting by:

- Coordinating process-related needs prior to the scheduled concurrence date
- Calling the meeting to order and stating the purpose of the meeting.
- Initiating introductions.
- Ensuring the meeting stays on course and refocusing discussion when appropriate.
- Polling other agencies for concurrence.
- Ensuring there is a discussion on next steps and action items.
- Adjourning the meeting.

NCDOT Project Manager

The NCDOT Project Manager will be clearly identified in all communications. The NCDOT Project Manager may indicate a designee (another NCDOT staff member or a consultant) who will perform project manager responsibilities on their behalf. The NCDOT Project Manager may change over the course of the project.

The NCDOT Project Manager, in coordination with the NCDOT environmental policy lead will:

 Coordinate the establishment of the Merger Team, in collaboration with the Merger MOU Signatory Agencies.



- Coordinate to implement the Merger Plan and will distribute materials timely in advance of concurrence points (i.e., at least two weeks ahead of Merger Meetings).
- Work with the Lead Federal Agency to coordinate with each agency representative after the circulation of the packet regarding concerns, questions, abstentions, or potential for nonconcurrence.
- Announce to the Merger Team that concurrence has been achieved and distribute the signed concurrence form, with assistance from NCDOT EPU if necessary.
- Coordinate with NCDOT Environmental Policy Unit (EPU) in administering the Conflict Resolution process.

Merger Team Member

Merger Team Members include agencies/organizations (including NCDOT) with resources or jurisdiction within the geographic area of the project. Merger Team Members will:

- Work in a collaborative, problem-solving spirit.
- Assist in satisfying all applicable federal and state regulations and laws.
- Represent only their own agency and will make decisions based on the mission and authority of their agency.
- May provide their written concurrence, abstain (with the exception of the Merger MOU Signatory Agencies), or choose to not concur. For non-concurrence see Conflict Resolution Guidance.
- Review the Merger Packet and provide ample notice (five working days minimum) to the Merger Team Signatory Agencies and pertinent members of the Merger Team when requesting any additional information for decision-making and/or if concurrence is questionable prior to the scheduled concurrence date. When requests for additional information are made, the Merger MOU Signatories will determine the most effective approach for resolving the request in consideration of the anticipated concurrence date and Merger Plan.
- When an agency or organization is not able to concur, they shall follow the Conflict Resolution Process.
- Notify the NCDOT EPU of any changes in their agency's Merger Team membership.
- Notify the Merger Team via email when participation is no longer warranted for a specific concurrence point(s).
- Refrain from revisiting concurrence point decisions unless new, substantial information is brought to light. A request to revisit a previous concurrence point will be provided by email to the Merger MOU signatories and will include supporting documentation
- Notify the Merger Team Chair (USACE) within three days of the scheduled concurrence date if they are unable to participate. The Team Member should submit written comments and/or designate another agency representative with decision-making authority in their stead. Non-attendance or non-response by a particular Team Member is not a valid reason for non-concurrence.
- Provide a concurrence decision for all concurrence points.

Facilitator (optional)

A Facilitator is a neutral party who provides structure and process during meetings so the Merger Team may function effectively and make decisions. While a Facilitator is not necessary for all projects, one should be considered for large, complex, or controversial projects.



Merger Management Team (MMT)

The MMT is comprised of representatives from NCDOT, FHWA, USACE, and NCDEQ. The MMT will:

- Be responsible for addressing program-specific questions (e.g., methodology, regulatory changes, team performance, and program guidance).
- Periodically coordinate with their staff and partnering agencies to assess issues arising from Merger meetings and determine if programmatic changes are necessary.
- Review project-specific challenges that arise from Merger meetings.
- Participate in the Conflict Resolution Process.
- Be led by an NCDOT EPU representative (the MMT Chairperson).

MMT Chairperson

The MMT Chairperson is the NCDOT Environmental Policy Unit Head. The MMT Chairperson will:

- Support the Merger Review Board for the Conflict Resolution Process.
- Coordinate with the MMT to establish an agenda for regular meetings.
- Lead the coordination effort to train staff and consultants on the Merger Process.

Merger Review Board

The Merger Review Board is comprised of representatives from NCDOT, FHWA, USACE, and NCDEQ. If a conflict arises on a project in which an agency cannot concur and Informal Conflict Resolution is not successful, the Chairperson of the MMT will initiate the formal Conflict Resolution Process, involving the Merger Review Board. The Board will:

- Meet to resolve project-specific Merger Team conflicts as detailed in the Conflict Resolution Process.
- Work in a collaborative, problem-solving spirit.
- Decide on conflicts brought to the board in a timely manner.



ATTACHMENT B: CONFLICT RESOLUTION PROCESS

Agreement (concurrence) at critical identified points during project development and permitting is the key to the success of each agency's mission, and a successful Merger Process enhances this collaborative effort. However, the Merger MOU signatory agencies recognize that there may be occasional conflicts between Merger Team Members. It is understood that every effort will be taken to resolve conflicts at the Merger Team level. This guidance provides an elevation procedure for resolving conflicts that cannot be resolved informally. (See also Merger Roles and Responsibilities.)

Informal Conflict Resolution

If a Merger Team Member cannot concur prior to the Merger Meeting, they agree to provide a written explanation to the rest of the Merger Team at least five working days prior to the scheduled concurrence date. If, during a Merger Meeting, a Merger Team Member cannot concur, they agree to provide a written explanation to the Merger Team within five working days of the meeting, unless action items specified during the meeting will address the issue.

The Merger Team will inform the Merger Management Team (MMT) of the non-concurrence and will work to resolve the issue within a 10-day informal coordination period. In some circumstances, this period may be expanded if additional documentation is required, with the agreement of the Merger Team.

If, at the end of the informal coordination period, the issue is unable to be resolved, the non-concurring Merger Team Member(s) will initiate the formal Conflict Resolution Elevation Process by providing a written request to the NCDOT Environmental Policy Unit Head (the Chair of the MMT). Merger Team Members are responsible for keeping their respective chain of command informed.

Formal Conflict Resolution Elevation Process

The formal Conflict Resolution Elevation Process is administered by the MMT and overseen by the Merger Review Board. Members of the Review Board are:

- U.S. Army Corps of Engineers (USACE), Regulatory Division Chief
- North Carolina Department of Environmental Quality (NCDEQ), Division of Water Resources (DWR) Deputy Director
- Federal Highway Administration (FHWA), Deputy Division Administrator
- North Carolina Department of Transportation (NCDOT), Chief Engineer.

If the dispute is not resolved within the Merger Team, the parties in dispute will continue to attempt to resolve the issue(s) within the MMT and non-MMT agency chains of command. Each non-concurring agency will provide a written brief supporting their respective positions to the Chairperson of the MMT at least two weeks prior to the meeting. The Chairperson of the MMT will disseminate the brief(s), along with an explanation of the project involved and the concurrence point or issue which is unresolved, to MMT members and establish a meeting date. If resolution is achieved, it will be documented by signing the Concurrence Form (or a revised Form, as appropriate).



If the issue is not resolved within the MMT, the Merger Review Board will resolve the matter. The Chairperson of the MMT will schedule a Merger Review Board meeting as expeditiously as practical and disseminate the issues briefs from each non-concurring team member. All Merger Team members that are not represented on the MMT will be invited to attend the meeting. If the Review Board determines that additional information is needed, the decision will be delayed until the information is obtained for the Merger Review Board's use.

After the Merger Review Board makes a decision, all Merger Team Members will sign the Concurrence Form (or a revised Form, as appropriate). Merger Team members may sign the Form or provide written statements of abstention. Concurrence by all Merger Review Board members shall constitute a final decision

It is understood that a Merger Team Member's participation in this conflict resolution process does not preclude other conflict resolution or elevation options available by regulation to that agency. Nothing in this guidance diminishes the USACE, FHWA, and NCDEQ responsibilities to make decisions regarding permit requirements, permits, certifications or approvals. Additionally, FHWA's SAFETEA-LU legislation (Section 6002) provides a formal process for resolving serious issues that may delay the project or result in a denial of a required approval for the project. NCDOT or the Governor of North Carolina may invoke the Section 6002 process for issue resolution at any time. While the Section 6002 process is a tool available to States and project sponsors for resolving issues of concern, there are other options that are available to lead and participating agencies. Those options include this guidance for Conflict Resolution, other procedures embodied in a project-specific coordination plan, and the Council on Environmental Quality (CEQ) referral process under 40 CFR Part 1504.



The intent of this guidance document is to convey the context behind the Merger Process and fill in any possible gaps, hopefully anticipating many practitioners' questions.

What is Concurrence?

The Merger Team provides decisions at concurrence points 1 through 4A, which are documented via signature on a designated form that contains a summary of that concurrence point. Definitions of concurrence, non-concurrence, and abstention are provided below.

Concurrence

"I do not object to the concurrence decision based on the laws and regulations of my program and agency."

- Concurrence by the Merger Team Members means that they do not object to decisions made at strategic points in the project development/permitting process and agrees to abide by the decision made, unless there is a profound changed condition in the future. A profound changed condition does not include changes in agency/organization representatives.
- Non-concurrence (see Conflict Resolution guidance)

"I do not concur as the information is not adequate for this stage and/or concurrence could violate the laws and regulations of my program and agency."

- If a Merger Team Member does not concur, that representative is responsible for documenting their reasons in writing and providing that documentation per the Roles and Responsibilities.
- Non-concurrence should not be utilized based on lack of information without affording NCDOT a reasonable opportunity to provide the requested information.
- Abstention (Merger MOU Signatories cannot abstain)

"I do not actively object, but I am not signing the concurrence form. The Merger Process may continue, and I agree not to revisit the concurrence point subject to the guidance on revisiting concurrence points."

 If a Merger Team Member decides to abstain, that representative is responsible for documenting their reasons in writing and providing that documentation to all Merger MOU Signatories within five business days of the decision to abstain. The Merger MOU Signatories (FHWA, USACE, NCDEQ, and NCDOT) are responsible for reviewing the reason(s) for abstaining to determine if the process should move forward.

"I have no resources that are impacted by decisions made at this concurrence point."

 \circ In this case, no follow up information is required by the Merger MOU Signatory.

Who is on the Merger Team?

An important aspect of this collaborative effort is to have the right team members in the right conversations. The Division of Coastal Management will be included in the Merger Team for all projects located in the 20 Coastal Counties. NCDOT Project Managers will work with their Merger MOU Signatory counterparts to include the appropriate agency representatives and NCDOT subject matter experts in the discussions. To support the Team's decision-making, the appropriate NCDOT staff need to be present and prepared, as do the other Merger Team members. For example, if the Merger Team is trying to concur CP3 and there are traffic capacity reasons for eliminating certain alternatives, NCDOT should have a traffic capacity expert ready to answer questions on that topic. Additionally, other Merger Team members should have read the meeting information and informed NCDOT and the Merger Chair ahead of the meeting if they had any questions that the packet did not address.

How does NCDOT coordinate concurrence?



At the outset of the process, NCDOT will establish a project-specific Merger Plan in coordination with the Merger MOU Signatories. The Plan will include establishing the Merger Team and coordination protocols, anticipated meeting arrangements (including pre-meetings and the potential for combined meetings), and an anticipated schedule for project development/permitting. Throughout the process, NCDOT will collaborate with the Merger MOU Signatories on the Merger Plan and provide updates on anticipated concurrence dates and project status. This information will be used to determine the best approach for coordination and meeting arrangements (in-person meetings, virtual meetings, conference calls, email conversations, pre-meetings, combined meetings, etc.).

Traditionally, the Merger Team sought concurrence in formal, in-person meetings. Technology improvements and recent social distancing requirements have led to an increased use of virtual meetings or concurrence based on agency review of the Merger Packet without a meeting. For the purposes of this guidance, any instance in which concurrence is requested or achieved will be referred to as a Merger Meeting, regardless of whether it is an in-person, virtual, email, or packet concurrence.

Every effort will be made to achieve concurrence based on the information provided in the Merger packets which will be provided to the Team Members in advance of a scheduled concurrence date. At least five working days before a concurrence date, each agency will communicate their anticipated concurrence, abstention, or concerns that require additional information to arrive at a decision. At a minimum, agencies should communicate this anticipated concurrence decision via email the NCDOT Project Manager and the USACE Merger Team Lead. If agencies can concur based on the Merger packet information, no meeting will be necessary. If this occurs, the scheduled meeting will be cancelled, and the NCDOT Project Manager will circulate a concurrence form via DocuSign. This concurrence form will include any action items or next steps to be undertaken prior to the next concurrence point.

In some cases, concurrence may be achieved via email rather than having a meeting. If this is known in advance, this option will be identified in the Merger Plan and discussed and agreed upon with Merger Team Members at the prior concurrence meeting.

In those cases that require a meeting, the meeting will be held on the scheduled concurrence date to discuss agency concerns and questions. With the conversion to more online meetings in 2020, more and more meetings are anticipated to be held virtually in the future; therefore, the "default" concurrence format will be a virtual meeting on the designated Merger days each month. In some instances, an in-person meeting may be most efficient. In those cases, NCDOT will coordinate with the Merger MOU Signatories to ensure Merger Team Members are aware and available to meet in person. Merger Team Members may always choose to participate in meetings virtually when virtual means are available.

NCDOT will continue to reserve dates and a conference room each month in anticipation of hosting inperson concurrence point meetings in Raleigh. A calendar is posted each year with the reserved dates for western and eastern projects to allow all agency staff to schedule accordingly.

While it is expected that in-person Merger meetings will be held in Raleigh on the reserved dates to best allow Merger Team Members to attend, it is possible to have meetings on other dates or in other locations when circumstances warrant it. For instance, some meetings may require a field visit and would be held at a location near the project (e.g., NCDOT Division office). Additionally, if an NCDOT Project Manager expects to need more than 4 hours to cover all meeting topics, their meeting may be



scheduled outside of the reserved dates so it does not impact the needs of other projects. To schedule a pre-meeting outside of the reserved dates, the NCDOT Project Manager, or their designee, will poll the applicable Merger Team Members for available dates; this should be done as early as possible, as many Merger Team Members have other responsibilities and projects to review/process.

It should be noted that Merger meetings scheduled outside of the meetings outside of the reserved dates will adhere to the time requirements for notification and providing meeting materials; and will only be undertaken when all members of the Merger Team are available.

For information on concurrence points and specific roles for Merger Team Members, please refer to the Merger MOU and to the Merger Roles and Responsibilities guidance.

How is a project added to the Merger meeting agenda?

The NCDOT Project Manager, or their designee, must email NCDOT EPU with a request to be added to the agenda for one of the reserved meeting dates. The request should be submitted at least four to six weeks in advance of the requested date; NCDOT EPU recommends that requests should be submitted three months in advance to ensure adequate time is allotted for the project.

What is a Merger packet?

The Merger packet includes information about the project as it relates to the specific concurrence point that helps Merger Team Members reach a concurrence decision. Many Members consider this packet to be part of their project file and may rely on this information for their regulatory decisions and administrative record. Packet requirements specific to each concurrence point are included in the templates, and are the responsibility of NCDOT to ensure all appropriate information is included.

When do Merger packets need to be provided to the Merger Team?

Merger packets must be sent to the Merger Team **at least two weeks** prior to a scheduled concurrence date. This two-week period allows the agencies to review the packet and, if necessary, notify the NCDOT Project Manager and copy the Merger MOU Signatories of any missing information or questions. Professional courtesy dictates that this information does not change during this two-week period. Failure to meet this deadline will result in the meeting being cancelled. The NCDOT Project Manager provides the final packet to NCDOT EPU, who will then post the packet and distribute a link to the Merger Team. The packet distribution email should include a statement that each Merger Team Member is requested to provide their anticipated concurrence decision at least five working days before the concurrence date. The Merger Team Members are responsible for reviewing the packet during this two-week period and for notifying the NCDOT Project Manager and Merger MOU Signatories of any questions or concerns that arise from their review as soon as possible (minimum five days prior to the meeting), thereby giving the PM an opportunity to provide responses prior to or during the meeting. The NCDOT Project Manager is responsible for coordinating with NCDOT EPU and ensuring that the packet has undergone sufficient review by appropriate parties prior to distribution to the Merger Team. Please refer to the Merger MOU and to the Merger Roles and Responsibilities guidance for more detai

What should be included in Merger packets?



Specific expectations for each Merger packet are summarized in each concurrence point's guidance and expanded upon using examples in the training modules. No packets are required for CP 4B and CP 4C. For all other concurrence points, all packets will contain the following information:

- Lead federal agency
- Primary point(s) of contact, including NCDOT PM, NCDOT GESC PM (if applicable), and consultant PM
- Meeting purpose
- Project description, vicinity map, and study area figure
- For CP 1, project history including cost/schedule and draft Merger Plan
- After CP 1, Summary of Merger Process decisions to date with CP links and Merger Team information such as purpose and need, public involvement activities, as well as cost, schedule, and proposed Merger Plan updates (if needed). If a change in the project study area is proposed, that should be included in this section.
- Discussion of the Concurrence Point(s) topic(s)
- Action Items/Next Steps

What is a "Merger Pre-Meeting" and when is it necessary?

Best practices suggest that the NCDOT Project Manager reach out to MOU Signatories or other Merger Team Members as appropriate prior to developing the Merger Packet if there are any issues that may impact the ability to achieve a given concurrence point. This can take any form from documented phone calls, emails, or meetings.

Prior to a scheduled concurrence point, the NCDOT Project Team may host a call or meeting with some members of the Merger Team to solicit any questions or concerns the agencies might have. These premeetings should include, at a minimum, NCDOT, FHWA (for federal projects), USACE, and NCDWR. Premeetings are **required for CP 1 and CP 3** and strongly encouraged for other concurrence points on large or complex projects. All pre-meetings will be scheduled a minimum of <u>three weeks</u> in advance of the respective concurrence point to allow adequate time to modify the merger packet and distribute it two weeks prior to the concurrence date. The NCDOT Project Manager, or their designee, will poll the applicable Merger Team Members for available dates; this should be done as early as possible, as many Merger Team Members have other responsibilities and projects to review/process.

Prior to the pre-meeting, the NCDOT Project Manager will provide a QC-reviewed draft Merger packet, along with any necessary maps and figures, to the Merger Team Members who are invited to the premeeting. To allow time for review, the packet should be provided at least one week before the premeeting. The NCDOT Project Team Members that attend the pre-meeting will be prepared to address any concerns expressed at the pre-meeting by updating and/or revising the Merger packet and meeting presentation.

What are Informational Meetings?

Informational meetings serve a variety of purposes and help with efficiency of subsequent meetings. Informational meetings should be considered when substantial time has passed since the most recent concurrence point, when project circumstances have changed, or to provide additional information for an upcoming concurrence point. This coordination can take place via email if practical, with agency comments and NCDOT responses circulated to the entire Merger Team. A formal packet is not required



for an informational meeting. No formal concurrence or decisions will be reached for informational meetings; however, this coordination can be invaluable for laying the groundwork for future concurrence points and may be integral in updating the Merger Plan for the project.

What is a typical agenda for a Merger meeting?

In those circumstances where a meeting of the Merger Team is required, the Merger meeting agenda should include the following:

- Meeting Purpose
- Team Introductions
- Project Description/Cost/Schedule
- Merger History (with links to prior documents as appropriate)
- Resource/Regulatory History and Considerations (to include context for the current concurrence point)
- Any notable changes to the project or new information
- Concurrence Point Specific Information
- Discussion
- Polling for Concurrence
- Summary of Avoidance/Minimization since last Concurrence Point
- Next Steps/Action Items/Merger Plan Updates

Who leads the Merger meeting?

The Merger Team Chair (USACE) will call the meeting to order, initiate introductions, ensure discussions stay on topic, and poll the agencies for concurrence. The NCDOT Project Manager or their designee will go over the agenda, give a brief presentation, take meeting minutes, and lead the technical discussion. The NCDOT Project Manager will also circulate a sign-in sheet at the meeting and is responsible for recording the names of participants on the phone.

NCDOT EPU will generally attend all meetings to provide a consistent NCDOT presence; they will also secure audio and visual equipment, telephone conference number, and video meeting link and will start these at the beginning of the meeting. NCDOT EPU staff will help meetings run smoothly and support the NCDOT Project Manager as needed. The NCDOT Project Manager is NCDOT's representative on the Merger Team; they have ownership of the project and should answer project questions and make decisions relative to the project. NCDOT EPU staff will help the Project Manager identify issues and are able to help facilitate unanticipated contentious discussions.

Some projects may benefit from having a formal facilitator. A facilitator should be considered on large, complex, or controversial projects. In those instances, the NCDOT Project Manager will coordinate with NCDOT EPU to retain a neutral facilitator.

Should the NCDOT Project Team bring displays and materials for use during the Merger meeting?

If an in-person meeting is required, it may be beneficial for the NCDOT Project Team to bring larger hard copy maps or displays. Also, the NCDOT Project Team should bring additional handouts to the Merger meeting for Merger Team Members to keep, such as copies of the presentation. Hard copy handouts of



the Merger packet are not necessary unless there is new or supplementary information requested by an agency to help facilitate concurrence.

The NCDOT Project Team should be aware that some Merger Team Members may be participating remotely and will not have the benefit of seeing these larger displays, maps, or additional handouts. To the extent possible, this material will be made available to all Merger Team Members, preferably in an electronic format, at least five business days ahead of the Merger meeting and online during the meeting. Online meetings will be conducted using technology available to all agencies. The NCDOT Project Team will not distribute materials electronically on the day of the meeting; as technological glitches often prevent this from working.

To orient all meeting attendees, it may be beneficial for NCDOT to provide a Google Earth (or similar) view of the project with available (at the time of the meeting) and appropriate layers overlaid (e.g., delineated waters (WET file), photographs, known historic resources, known federally listed species and/or critical habitat, impacts to waters, etc. Most Merger Team Members are now familiar with these tools, and a 2-D or 3-D aerial perspective can often kickstart discussions.

Should the NCDOT Project Team prepare a presentation for the Merger meeting?

Presentations are not required for a Merger meeting; however, most NCDOT Project Teams choose to use a presentation to help guide the discussion. Time limitations should be considered to make sure the Merger Team Members have adequate time for questions, comments, and discussion. Generally, presentations should be less than 15 minutes and will not include new information that was not in the Merger packet provided to Merger Team Members in advance of the meeting. Presentations will not rehash every detail that was contained in the packet; the expectation is that attendees are familiar with the packet and have provided any major comments or concerns to the Merger MOU Signatories in advance of the meeting and copied to the Merger Team. The presentation is typically led by the NCDOT Project Manager or their designee.

Can anyone attend Merger meetings? Are Merger meetings public?

Merger meetings are **not** considered public meetings. Guests may make a formal written request to attend a Merger meeting and occasionally attendance may be granted at the discretion of the Merger Team. Requests from stakeholders to attend a Merger meeting will be discussed with the Merger MOU Signatories and NCDOT EPU to determine if attendance is appropriate. Merger meetings are meant to be working meetings among NCDOT and its agency partners for a free and open exchange of ideas for projects, allowing for a collaborative process for decision-making. However, it should be noted that Merger packets and meeting summaries are subject to public information requests.

What happens at the end of and after a Merger Meeting?

There are three potential Merger outcomes, as discussed below. In some instances, one or more agencies may abstain from concurrence (see Merger MOU and Appendices).

1. <u>Concurrence is achieved based on the packet or at the meeting.</u> After concurrence is achieved, the NCDOT Project Manager will send a DocuSign form to the Merger Team within one week so that they can formally sign. Each Merger Team Member is expected to DocuSign within one week of receipt.



2. <u>Concurrence is not achieved at the meeting but obtaining concurrence with informal follow-up coordination is anticipated.</u> If an agency cannot concur based on the information provided in the Merger Packet, they will provide a written explanation to the Merger Team at least five working days prior to the scheduled concurrence date. If an agency determines that they cannot concur during a Merger meeting, they will provide a written explanation to the Merger Team at least five action items specified during the meeting. However, no written explanation is needed if action items specified during the meeting are expected to address the agency's concerns and will lead to concurrence.

The NCDOT Project Manager, NCDOT EPU representative and relevant NCDOT Team Members will work, using the informal Conflict Resolution Process, to address the Merger Team Member's concerns in a timely manner, with a goal of reaching resolution within 10 working days. The follow-up coordination could take varying forms (emails, phone calls, an additional meeting), but the intent is to continue the conversation relevant to that concurrence point. As with the original meeting, the NCDOT Project Manager will ensure that any information provided to the non-concurring Merger Team Member is shared with all team members and will keep the Merger Chair apprised of progress. If concerns are adequately addressed, the NCDOT Project Manager will circulate the concurrence form electronically for signature. If, at the end of the informal coordination period, the issue is unable to be resolved, the non-concurring agency(ies) will initiate the formal Conflict Resolution Elevation Process by providing a written request to the NCDOT Project Manager and the NCDOT <u>Environmental Policy Unit Head (</u>the Chairperson of the MMT).

3. <u>Concurrence is not achieved at the meeting and conflict resolution is anticipated.</u> The formal Conflict Resolution Elevation Process is administered by the MMT and overseen by the Merger Elevation Review Board.

Please see the Conflict Resolution Guidance for more information.

At the end of each Merger meeting the Project schedule, including the timing of the next concurrence point will be discussed and the Merger Plan will be reviewed. If time allows, the next concurrence point topic should be discussed, particularly if agencies are likely to need specific information to concur or have any questions that need to be addressed.

NCDOT, or the designee, will document the substantive points of the Merger meeting and will send this Merger Meeting Summary to Merger Team Members for review within 2 weeks of the Merger meeting. It is expected that participating parties will review and provide any substantive comments within 2 weeks of receipt. If no comments are received at the end of the 2-week period, the meeting summary will be considered final. Once all items are final, NCDOT will upload the packet, electronically signed concurrence form, and meeting summary to the project's ATLAS Workbench.

Who is responsible for preparing Merger meeting summaries?

The NCDOT Project Manager, or their designee, is responsible for preparing the draft meeting summary using the templates included in this guidance. Summaries should emphasize decision points (including pertinent deliberations), action items, and next steps. The NCDOT Project Manager, or their designee,



will distribute the draft meeting summary to the Merger Team between one and two weeks after the Merger meeting, unless the Merger Team is notified that the meeting summary will be delayed. If additional information was requested during the meeting, the requested information may be included with the meeting summary or the meeting summary will provide a timeline for distributing the information to the team. The Merger Team will be given two weeks to review the summary. If no comments are received by the end of two weeks, or if all agencies have commented prior to the end of the two weeks, the meeting summary will be considered final and the NCDOT Project Manager, or their designee, will recirculate it as such and upload to the project's ATLAS Workbench. The meeting summary can be revised and reissued if relevant comments are received after that time.

Meetings may be recorded at the request of the NCDOT Project Manager and Merger Team Members will be notified that the meeting is being recorded. The recording can be retrieved from NCDOT EPU following the meeting.

Where are Merger meeting materials stored?

Merger meeting materials are uploaded by NCDOT staff to the project External Collaboration SharePoint site and at <u>https://xfer.services.ncdot.gov/pdea/MergerMeetings</u>.

The NCDOT Project Manager will also store final Merger materials, including meeting summaries and signed concurrence forms, in the ATLAS Workbench using appropriate naming conventions.

Can a Concurrence Point be revisited?

Having concurred at a particular milestone, a Merger Team Member shall not request to revisit previous concurrence points unless there is profound new information that warrants consideration. Examples for such consideration may include:

- A change in the assumptions on which the project purpose or need was based;
- A change in regulatory authority that extends regulatory jurisdiction to include an area or resource that was not previously regulated;
- Discovery of an impact, resource, or additional information that was not previously identified or did not previously exist; or
- Discovery of engineering limitations.

In some cases, the Merger Team may decide that a change is minor in scope and can be agreed upon without revisiting a concurrence point. For example, if a traffic study prior to CP 3 determines that an intersecting road (Y-line) needs additional storage distance, it may be necessary to expand the project study area. If there are no conflicting resources, the Merger Team may agree that it is not necessary to revisit CP1 to accept this expansion of the project study area and instead agree to it during the CP 3 packet review. In that case, the expansion will be noted in the CP 3 meeting summary and on the CP 3 concurrence form.

Another example that may occur during project development is the determination that a resource in the project study area is eligible for inclusion in the National Register of Historic Places. This may require development of an avoidance alternative and the Merger Team may decide it is appropriate to revisit CP 2.



A change in agency/organization representation on the Merger Team is not sufficient reason to revisit a previous concurrence point, and newly involved representatives will abide by the project decisions made by previous representatives and the Merger Team. A request to revisit a previous concurrence point will be provided by email to the MOU Signatories and will be supported by documentation. The NCDOT Project Manager will provide the Merger MOU Signatories' response in writing to the entire Merger Team.

Can multiple concurrence points be addressed at a single meeting?

Yes. It is encouraged to combine concurrence point meetings when possible and is typically done for smaller, less complex projects. Please refer to the Combining Concurrence Meetings guidance. Combining concurrence meetings will be considered and, if chosen, noted as part of the Merger Plan.

What are avoidance and minimization measures and how should they be applied throughout Merger?

Avoidance and Minimization Measures (AMMs) seek to avoid or reduce potential impacts to the human or natural environment. Section 404 of the Clean Water Act requires project proponents (e.g. NCDOT) to first avoid impacts to the aquatic ecosystem, then minimize impacts (to the maximum extent practicable) to the aquatic ecosystem that cannot be avoided, and finally, provide compensatory mitigation for those impacts that are unavoidable. This critical mitigation sequence is required to comply with the Section 404(b)(1) guidelines. AMMs occur throughout the life of a project and proper documentation is essential to meet the requirements stated above. NCDOT has developed an <u>Avoidance and Minimization Measures Tracker</u> to be used by all projects, including those in the Merger Process, for documentation purposes. While AMMs are documented throughout project development (see EPU's <u>Avoidance and Minimization Measures Tracker Guidelines</u>), CP 4A focuses on documenting AMMs through CP 3 and in preparation for the development of permit drawings. At CP 4A, treatment goals required to meet water quality criteria should be outlined to the extent practicable.

What level of design is required for each concurrence point?

NCDOT will ensure that the design provided throughout the process includes appropriate horizontal alignment, vertical alignment, slope stake limits, and/or buffers to show quantifiable potential impacts to the resources evaluated at each concurrence point. This level of design may be dependent on project characteristics, types of resources in the area, schedule, and available mapping. Generally, impact calculations will be buffered 40 feet from slope stake limits for CP 2 and 2A and 25 feet from slope stake limits for CP 3 and CP 4A. The NCDOT Project Manager should consider service roads, utilities, and turn lanes when determining appropriate slope stake limit buffers and be prepared to discuss the range of impacts and costs that the slope stake buffers create. Designs are preliminary and subject to change. The NCDOT Project Manager will work with the Merger Team to determine when a design change will require revisiting a particular concurrence point.

What are alternative(s) evaluation criteria and when are they used?

Please see the definition contained in the Merger Glossary. NCDOT uses alternatives evaluation criteria (aka performance measures or goals) to compare/contrast various alternatives and facilitate the determination of the least environmentally damaging practicable alternative (LEDPA) at CP3. Such measures are typically tied to a project's needs and regulatory requirements and are typically derived after the purpose and need and finalized prior to the alternatives analysis. Evaluation criteria create a



threshold to be met by all viable alternatives, which affords NCDOT (and our regulatory partners) a documented process to eliminate alternatives that do not meet the criteria, resulting in a defensible LEDPA determination. Evaluation criteria generally include quantitative data associated with the project's defined needs. As referenced in the Merger Plan guidance, the use of evaluation criteria should be initially discussed during screening, with any planned criteria established at or prior to CP2.

While not directly related to alternatives evaluation criteria, NCDOT must also consider what is reasonable, prudent, and practicable. These considerations may tie directly to the project's purpose and need, or they may include other factors related to cost, safety, public support, community impacts, and regulatory compliance requirements. The NCDOT Project Manager should discuss these evaluations and justifications with the relevant NCDOT and agency units/groups on a regular basis. Such coordination will help to deliver the best possible project.

What kind of permits may be required?

One of the benefits of the Merger Process is that NCDOT properly considers the Clean Water Act permitting requirements during project development and design. During the Merger Process, consideration of the type(s) of permits that may be required will be discussed (i.e., a Section 404 Nationwide/Regional General/ Individual Permit, Section 401 Water Quality Certification, Buffer Authorization, CAMA Permit, or US Coast Guard Bridge Permit). NCDOT should discuss the anticipated permit requirements with the Merger Team at each concurrence point to ensure they are generally in agreement with the permitting strategy and that decisions made during the Merger Process will allow for a smooth permit application process. The NCDOT Project Manager should consult with the applicable NCDOT Team Member knowledgeable in permitting issues throughout the Merger Process for advice on the permitting process.

Most Merger Projects are likely to apply for one of four different Section 404 permits: Nationwide (NWP) 14, Regional General Permit (these are commonly referred to as GP) 31, GP 50, or an Individual Permit (IP). If the project is a best-fit widening project, or a phase of a "phased" best-fit widening project, and the project impacts will exceed the impact thresholds or cannot meet other conditions for authorization under a NWP 14 and/or GP 50, a GP 31 or an IP will need to be considered. To qualify for use of a GP 31, the project (1) must have undergone interagency review and completed the interagency Merger Process, and (2) would cause only minimal individual and cumulative adverse environmental effects.

While there is no impact threshold under GP 31, the USACE will require an IP if the proposed impacts (permanent and/or temporary) of a best-fit widening project, or phases of a "phased" best-fit widening project, would have more than minimal individual and cumulative adverse environmental effects. Additionally, if the USACE determines, on a case-by-case basis, that the concerns for the aquatic environment so indicate, the USACE may exercise discretionary authority to override GP 31 and require an IP. To avoid any confusion about permit type(s) that will be required and allow NCDOT to calculate timelines, permit requirements should be discussed during the Merger Process. However, the USACE will not be able to issue a decision on the use of GP 31 before the Merger Process is completed and they have reviewed the complete application. Note that a GP 31 application usually takes less time to prepare and less time for the USACE to review and issue a verification letter (authorization). See the full text of GP 31 for all requirements.



Are there public involvement requirements for Merger Projects?

Public involvement is a vital part of every NEPA/SEPA project. All projects will follow NCDOT's Statewide Public Involvement Plan. For Merger Projects, Public Involvement must occur prior to CP 3 and NCDOT will share the findings with the Merger Team. See the guidance for Public Involvement in the Merger Process.

Is there a partial Merger Process? Can a project have just a CP 4B and 4C meeting?

There is no partial merger process. Projects can enter the Merger Process at any time during project development. However, concurrence on all points would need to be achieved to complete the Merger Process. This can be done by combining concurrence meetings (see guidance). For challenging projects that are not in the Merger Process, the NCDOT Project Manager may want to hold a meeting/meetings with one of more agency representatives to discuss LEDPA, or Avoidance and Minimization Measures, Hydraulic Design, or Permit Drawings. However, these are not considered Merger Process meetings and agencies should not be asked to sign concurrence forms. Nothing in the current Merger Guidance places a barrier to NCDOT working with resource agencies to achieve permittable projects.



Where can I go for more information?

If you have additional questions that are not included in this document, please refer to the Merger MOU and the Merger Roles and Responsibilities guidance. For those who are working on Merger Projects for the first time, coordination with NCDOT's Environmental Policy Unit is recommended.

In Summary...

- Have a Plan. Have you reviewed the Merger Plan? What was decided for each concurrence point? If it has been a significant amount of time between concurrence points, the plan may be worth revisiting.
- Think ahead. What has happened since the last Merger meeting? How much time does NCDOT need to get the required information for the next Merger meeting packet deadline? What information will help the Merger Team reach concurrence? What can NCDOT do at the meeting to prepare everyone for the next concurrence point? Revisit the true intent of the concurrence point and the intended result.
- **Provide accurate, concise materials.** Be cognizant of providing too much detail and potentially losing the true intent of the material, but also be sure to provide the appropriate level of project background in Merger packets to lay the groundwork for the concurrence being sought. Clearly state the purpose of what NCDOT is trying to achieve up front in the packet as well as in the presentation. Make sure Merger packets are complete and avoid having to present revised or updated information at the meeting itself.
- Keep the Merger Team Informed. Do not assume the agency representatives know the project as well as the NCDOT Project Team. If public meetings are being held, make sure Merger Team Members are invited; it is a good opportunity for other members of the Merger Team to stay informed and hear any concerns raised by the public. Keeping the Merger Team members updated is critical for ensuring that any emerging issues or concerns are identified and raised proactively so that the necessary approach for addressing and resolving issues can be pursued in an effective and efficient manner.
- Keep it simple and consistent. Many of the Merger Team Members go to Merger meetings multiple times a year for a number of different projects. Use this guidance and the provided templates to keep the presented information consistent with their expectations.
- And, finally, know what the available resources are. There are numerous resources at NCDOT's disposal to help navigate the process (Tips for Virtual Meetings, Agency Map, NCDOT EPU staff, etc.). Regardless of your amount of experience, this guidance is meant to make your job easier as a Merger Practitioner!



Note: Traditionally, the Merger Team sought concurrence in formal, in-person meetings. Technology improvements and recent social distancing requirements have led to an increased use of virtual meetings or achieving concurrence via email and based on the Merger Packet. For the purposes of this guidance, any instance in which concurrence is requested or achieved will be referred to as a Merger Meeting, regardless of whether it is in-person, virtual, or email.

Can we address multiple concurrence points on one concurrence date?

When developing the Merger Plan, the Merger Team should consider addressing multiple concurrence points on a single scheduled concurrence date (i.e., combined concurrence meetings) when possible. This will allow for the most efficient use of the Merger Team's time and reduce holding unnecessary, additional Merger meetings for a project. However, it is the responsibility of the NCDOT Project Manager to ensure that (1) Merger Team Members are provided with adequate information for each concurrence point to be discussed in advance of the scheduled concurrence date, and (2) a sufficient amount of time is built into the meeting to allow discussion of all issues under consideration. The goal of all concurrence meetings, whether combined or not, is to achieve concurrence. Concurrence must be achieved in point order. For example, if in a combined CP 2, 2A, and 3 meeting if concurrence on CP 2 cannot be reached then concurrence form. This makes it easier for records retention and if a Concurrence Point needs to be reevaluated in the future (see Merger Basics).

What are the basics of combining Concurrence Meetings?

Since CP 1 is typically held prior to substantive environmental work, it is recommended that CP 1 be addressed independently. Depending on project-specific issues, it is generally reasonable to combine other Merger meetings. Combinations may include CP 2 and 2A, CP 2, 2A and 3, CP 2A and 3, or CP 3 and 4A. For example, for a project with a single Build Alternative and few major hydraulic crossings that are recommended "retain and extend" it may be reasonable to combine CP 2 and CP 2A. For projects where there is only one logical Preferred Alternative or Least Environmentally Damaging Practicable Alternative (LEDPA), it may be reasonable to combine the CP 3 and CP 4A meetings. Specific items to consider for each potential combined concurrence meeting are discussed below. Note, combining concurrence meetings is not usually recommended for EIS projects.

What items should the Merger Team consider?

Combining the CP 2, CP 2A, and CP 3 meetings

If the project has only one Build alternative, and the project is included in the Merger Process, one combined meeting for these concurrence points should be considered when developing the Merger Plan. It will be necessary for the Merger Team to concur on CP 2 and then CP 2A before CP 3 can be concurred upon. Note that sufficient public involvement must be carried out to meet agency requirements prior to CP3. Therefore, if the three concurrence points are combined and discussed in one meeting, required public involvement activities (see Public Involvement in Merger) must take place prior to the meeting.

Combining the CP 2 and CP 2A meetings

In some instances, it would not be reasonable to combine alternatives discussions (CPs 2 and 2A) with the LEDPA determination (CP 3). For example, once hydraulics recommendations for major stream crossing structures have been determined, it may be useful to have a separate discussion of potential



stream crossings prior to the determination of LEDPA; in this case, a meeting that combines CP 2 and CP 2A should be used. Examples of this include projects where a current major culvert requires replacement due to condition of the culvert or hydraulic conditions or where a change to the type of structure(s) is recommended.

For projects that allow for elimination of alternative corridors once hydraulics information is available, a combined CP 2 and CP 2A meeting may also be useful. This would allow for a more complete discussion of potential impacts associated with various build alternatives, prior to making a decision on alternatives that require additional, detailed study.

Stand-alone CP 2 Meeting

A stand-alone CP 2 meeting is recommended for those projects where a substantive discussion of project alternatives is needed. Please refer to the CP 2 guidance for additional information for a standalone CP 2 meeting.

Stand-alone CP 2A Meeting

If the Merger Team has requested a field meeting, or if a substantive discussion of major crossing structures is needed, a stand-alone CP 2A meeting is recommended. Please refer to the CP 2A guidance for additional information for that meeting.

Combining the CP 2A and CP 3 meetings

For those projects that required a stand-alone CP 2 meeting, the Merger Team should consider combining the CP 2A and CP 3 meeting. If a combined CP 2A and CP 3 meeting is held, the Merger Team must concur on CP 2A at the meeting before CP 3 can be discussed and concurred upon. Note that sufficient public involvement must be carried out to meet agency requirements prior to CP3. Therefore, if the two concurrence points are combined and discussed in one meeting, required public involvement activities (see Public Involvement in Merger) must take place prior to the meeting.

Combining the CP 3 and CP 4A meetings

After either a stand-alone CP 2A meeting or a combined CP 2 and 2A meeting, the Merger Team should consider combining the CP 3 and CP 4A meeting. Under the new Merger Process guidance, avoidance and minimization will be discussed at each Merger meeting and will be documented in the Avoidance and Minimization Measures (AMM) Tracker. If the current designs for a project are sufficient to document avoidance and minimization of impacted resources, the combined meeting should be pursued.

Stand-alone CP 3 Meeting

A stand-alone CP 3 meeting may need to be held if a project has multiple viable alternatives. A standalone meeting for this reason is most common on new location projects. Frequently, when there are multiple alternatives on new location, the designs are based on LiDAR data. This reduces the amount of time and effort required for designs on alternatives that may ultimately be eliminated. The Preferred Alternative or LEDPA is chosen based on these designs and then revised with survey data. The Merger Team may request to see what additional AMMs were taken once the design of the LEDPA is developed with survey data prior to making a decision on CP4A.

Note that while a stand-alone CP 3 meeting for a project may be necessary, concurrence on CP 4A should be possible via email.



Stand-alone CP 4B and 4C Meetings

In most cases, separate meetings are recommended for CP 4B and CP 4C.

What is required to combine Concurrence Meetings?

The Merger Plan should outline the plan for combining concurrence meetings to the extent possible and will identify anticipated level of detail to be available at each concurrence point.

Combining the CP 2, CP 2A, and CP 3 meetings

For this option, the following activities must be completed prior to developing the Merger packet:

- Stream, wetland, and buffer and sub-aquatic vegetation (SAV) (if applicable) delineations and verification by the regulatory agencies;
- Updated Environmental Features Map;
- Cultural resource reports and Section 106 and/or Section 4(f) effects determinations, as applicable;
- Surveys for federally listed species and federally designated critical habitat;
- Hydraulic recommendations for major structures;
- Public outreach sufficient to meet resource agency requirements detailing the potential impacts of the build alternative(s) with a summary of comments received (see Public Involvement in Merger);
- Sufficient design to allow for a representation of impacts based on slope stake limits plus 25 feet (total stream impacts should be summarized to the nearest 10 feet, and total wetland impacts should be noted to the nearest tenth (0.1) of an acre);
- Impacts and detour duration for any off-site detours; and
- Avoidance and minimization measures committed to and/or implemented to date.

Combining the CP 2 and CP 2A meeting and not CP 3

For this option, the following activities must be completed prior to developing the Merger packet:

- Updated Environmental Features Map;
- Stream, wetland, and buffer and SAV (if applicable) location information;
- Locations of potential habitat for federally listed species and federally designated critical habitat;
- Cultural resource reports and location information, if available;
- Hydraulic recommendations for major structures;
- Sufficient design to allow for a representation of impacts based on slope stake limits plus 40 feet (total stream impacts should be summarized to the nearest 100 feet, and total wetland impacts should be noted to the nearest acre); and
- Avoidance and minimization measures committed to and/or implemented to date.

Combining the CP 2A and CP 3 meeting

For this option, the following activities must be completed prior to developing the Merger packet:

- Stream, wetland, and buffer and SAV (if applicable) delineations and verification by the regulatory agencies;
- Cultural resource reports and Section 106 and/or Section 4(f) effects determinations, as applicable;



- Hydraulic recommendations for major structures;
- Public outreach sufficient to meet resource agency requirements detailing the potential impacts of the build alternative(s) with a summary of comments received (see Public Involvement in Merger);
- Sufficient design to allow for a representation of impacts based on slope stake limits plus 25 feet (total stream impacts should be summarized to the nearest 10 feet, and total wetland impacts should be noted to the nearest tenth (0.1) of an acre);
- If an off-site detour is required, the impacts and detour duration will need to have been determined; and
- Avoidance and minimization measures committed to and/or implemented to date.

Combining the CP 3 and CP 4A meeting

For this option, the following activities must be completed prior to developing the Merger packet:

- Stream, wetland, and buffer and SAV (if applicable) delineations and verification by the regulatory agencies;
- Cultural resource reports and Section 106 and/or Section 4(f) effects determinations, as applicable;
- Public outreach sufficient to meet resource agency requirements detailing the potential impacts of the Build Alternative with a summary of comments received (see Public Involvement in Merger);
- Sufficient design to allow for a representation of impacts based on slope stake limits plus 25 feet (total stream impacts should be summarized to the nearest 10 feet, and total wetland impacts should be noted to the nearest tenth of an acre);
- If an off-site detour is required, the impacts and detour duration will need to have been determined; and
- Avoidance and minimization measures committed to and/or implemented to date.

Is a pre-meeting required?

For any meeting that includes CP 1 and CP 3, a pre-meeting with at least the Merger MOU Signatories in attendance is required. For other combined meetings, a pre-meeting is recommended to assist with concerns about the meeting structure or if the project is large or complex. It is anticipated that the pre-meetings will increase the possibility of achieving concurrence based on the final packet.

What happens at the end of and subsequent to the combined meeting?

During the meeting, it will be a Merger Team priority to reach concurrence on the points in the proper order. For example, for a combined CP 2, CP 2A, and CP 3 meeting, the highest priority will be to obtain concurrence on CP 2, then 2A, and finally on 3. If concurrence on all points is achieved based on the packet, next steps will be included in the DocuSign concurrence form. It is also important to discuss what critical information each agency needs prior to developing the next meeting packet to agree on the next concurrence point(s).

There are three potential outcomes of a combined Merger meeting:

1. Concurrence is achieved for all of the discussed concurrence points.



- After the Merger meeting, the NCDOT Project Manager will send a DocuSign form(s) to the Merger Team within one week so they can formally concur. Each Merger Team Member should DocuSign within one week of receipt.
- 2. Concurrence is not achieved for all the concurrence points discussed at the meeting and followup coordination is needed to obtain concurrence.
 - While it is possible to discuss multiple concurrence points at one meeting, official concurrence is sequential (i.e., the Merger Team must agree on CP 2 before they can agree on CP 2A).
 - Occasionally, one or more Merger Team Member(s) may withhold or delay their concurrence, usually because more information is requested. The NCDOT Project Team will determine how to address the Merger Team Member's concerns to achieve concurrence. This may include:
 - o providing additional information,
 - o follow-up one-on-one discussions with the agency(ies) not concurring,
 - NCDOT deciding not to provide the additional requested information and asking the non-concurring agency(ies) to provide the reason for non-concurrence in writing, or
 - presenting additional information at a future Merger meeting to obtain concurrence.

The NCDOT Project Manager will ensure that any information provided to the nonconcurring Team Member is shared with all members of the Merger Team. In accordance with the Merger MOU, the Merger Team will attempt to resolve issues within 10 working days of the scheduled concurrence date. Once issues have been resolved, the NCDOT Project Manager will send a DocuSign to the Merger Team for signature. Each Merger Team Member should DocuSign within one week of receipt.

- 3. Concurrence is not achieved at the meeting or within 10 days of the scheduled concurrence date, which initiates the Merger Conflict Resolution Process.
 - The Merger Management Team (MMT) makes a concurrence decision on the point in conflict and the project continues to the next concurrence point.



What is the Merger Plan?

A Merger Plan is a project-specific plan which details how a project will be processed through Merger. The project-specific Merger Plan provides flexibility to the team so that they can establish the appropriate Merger approach based on project complexity, and other variables specific to that project. The intention of a Merger Plan is to identify the best approach to evaluate a specific project, rather than using a "one-size-fits-all" approach. Considering the specific needs of the project and using this and other Merger guidance documents, the Merger Plan should outline the following:

- Identification of the NCDOT Project Team members, particularly the NCDOT Project Manager and the anticipated roles of any consultants;
- Identification of the lead federal agency and the Merger Team members (see Merger Roles and Responsibilities);
- Factors that led the project to follow the Merger Process (e.g., conflicting resources, number/location of jurisdictional features, substantial controversy, etc.);
- Proposed methodologies, including whether or not alternatives evaluation criteria will be used and when they will be introduced, and level of design to be used at various stages of the project;
- Anticipated project schedule with Merger concurrence points identified, denoting any public involvement and concurrence meetings that may be combined (see Combining Merger Meetings); and
- Format that Merger meetings will use (e.g., meetings that address multiple concurrence points, field meetings, in-person/virtual meetings, or email concurrence).

The NCDOT Project Team will use the Merger Plan template to assist with developing the plan.

Who develops the Merger Plan?

The NCDOT Project Manager will lead development of the Merger Plan with support from NCDOT EPU.

When is the Merger Plan developed?

NCDOT will begin drafting a Merger Plan after Merger Pre-Screening determines the project will proceed to Merger Screening. The draft Merger Plan will be discussed and endorsed by Merger MOU signatories at Merger Screening or, if unavailable, shortly thereafter. The Merger Plan will be provided to all Merger Team Members with the Concurrence Point (CP) 1 meeting packet to allow Merger Team input. Merger Team Members need not concur with the Merger Plan; however, there should be general agreement with the Merger Plan, including advice regarding the project schedule and the type of concurrence meetings anticipated. The Merger MOU Signatories are responsible for overall implementation of the Merger Plan.

Development of the Merger Plan should be discussed at the Merger Screening or CP 1 pre-meeting, and the NCDOT Project Manager will work with the Merger MOU Signatories to streamline and customize the Merger Process to benefit the project. Many factors should be considered when developing the Merger Plan including permitting scenarios; anticipated alternatives and whether they would benefit from alternatives evaluation criteria; anticipated resource and agency concerns; complexity of the project; and lessons learned from previous projects.



The goal of the Merger Plan is to facilitate efficient evaluation of a specific project to meet the expectations of all parties involved.

Who should be on the Merger Team?

The Merger Roles and Responsibilities provides further details on the potential Merger Team Members. The Merger Plan will identify, at a minimum, the following:

- Lead federal agency
- Cooperating agencies
- Merger MOU Signatories and partnering agency staff
- NCDOT Project Manager
- NCDOT Project Team Members (including key NCDOT and Consultant staff)

As stated in the Merger Roles and Responsibilities, the Merger MOU Signatories, as well as US Environmental Protection Agency (USEPA), US Fish and Wildlife Service (USFWS), North Carolina Wildlife Resources Commission (NCWRC), NC Historic Preservation Office (NC HPO), and Municipal Planning Organization/Rural Planning Organization (MPO/RPO) representatives will always be invited to participate on the Merger Team. When identifying other Merger Team Members, consider additional permits that may be required for the project, the resources involved and agencies with interests in those resources, as well as other local/regional factors. For example, projects impacting coastal wetlands require Coastal Area Management Act (CAMA) permits and therefore, require NC Division of Coastal Management (NCDCM) input. It would be beneficial to include the NCDCM representative on the Merger Team.

If there are no resources in the project study area of interest to an agency that is always invited to be on the Merger Team, NCDOT should contact that agency to determine if they would prefer to opt out or have a reduced level of participation in the Merger Process for a project. It is better to let the agency make the decision rather than to assume they would not want to be involved. For example, if there are no federally listed threatened or endangered species or habitat present in the study area, USFWS and NCWRC may choose not to be involved or may choose to limit their involvement to certain concurrence points. The Merger Plan should document an agency's decision to participate or not participate at these concurrence points.

What project details are included in the Merger Plan?

Methodology and Level of Design

The Merger Plan should identify the design elements to be provided and any technical studies that will be completed prior to each concurrence point. For example, on projects with multiple alternatives or alternatives on new location, NCDOT may propose using available spatial datasets and/or predictive modeling for initial analyses. Other projects, such as widenings, may already have detailed survey data available when design begins. If NCDOT is proposing to wait until later in the process before conducting certain detailed field surveys (e.g., wetland delineations, federally listed threatened and endangered species surveys, etc.), this should be discussed and clearly identified in the Merger Plan. Also, the level of design precision and accuracy that will be available at each concurrence point should be noted, including the source of data used to support each point (e.g., GIS data, field surveys, etc.). Generally, impact calculations will be buffered 40 feet from slope stake limits for CP 2 and 2A and 25 feet from slope stake limits for CP 3 and CP 4A. (also see Merger Basics).



For projects on new location or with numerous alternatives, consider developing the initial alternatives (prior to CP 2) to a lower level of detail, then doing additional work on detailed study alternatives (between CP 2 and CP 3), and use more refined survey data for the Preferred Alternative/Least Environmentally Damaging Practicable Alternative (LEDPA). For a widening project with limited alternatives, it may make sense to begin design using survey data. At each point in the process, alternatives must be compared based on equivalent level of detail. NCDOT will include these assumptions in the Merger Plan and obtain agency input on the proposed methodology and level of detail for each phase.

If it is determined during Merger Screening that the project would benefit from Alternatives Evaluation Criteria, these criteria will be included in the Merger Plan. Alternatives evaluation criteria are often associated with the ability of an alternative to meet purpose and need and aid in the determination of the least environmentally damaging practicable alternative (LEDPA) at CP 3; these criteria may be discussed at CP 1 but must be refined and endorsed by the Merger MOU Signatories at CP 2 or shortly thereafter. Evaluation criteria for the alternatives should not be arbitrary and capricious nor used to guide the Merger Team to choose a particular alternative or set of alternatives for detailed study. NCDOT's EPU can also help refine any evaluation criteria for the alternatives that are being proposed.

Permitting Considerations

The USACE is responsible for issuance of a USACE Clean Water Act Section 404 permit for the project (i.e., Nationwide/Regional General/Individual Permit), and the Merger Plan should indicate which type of Section 404 permit is anticipated. The Merger Plan should also indicate any other permits such as Section 401 Water Quality Certification, buffer authorization, Coastal Area Management Act (CAMA) Permit, and US Coast Guard Permit. The Merger Process was designed to meet the requirements of both NEPA and Section 404 of the CWA and can be particularly beneficial for projects that will likely require a Section 404 Individual Permit (IP). If an IP is anticipated by the USACE, noting this up front will help Merger Team Members provide meaningful input on project issues that could affect decision-making related to the permit.

Additionally, if the USACE is considering permitting the project using USACE Regional General Permit 31 (commonly referred to as GP31), this should be factored into the development of the Merger Plan; however, as noted in GP31 the USACE cannot make the final determination about the applicability of the use of GP31 for a project until the Merger Process is complete and the application is reviewed.

Schedule and Meeting Format

The Merger Plan should identify anticipated dates for each concurrence point, public involvement activities (See Public Involvement in Merger), and commit to providing regular updates to the Merger Team. For instance, the NCDOT Project Manager will consider providing an update to the Merger Team every six months via email if there are longer than anticipated stretches between concurrence points. This will keep everyone up to speed on what's happening with the project and minimize surprises if a project is delayed or takes longer between meetings than anticipated. Such updates will benefit all parties over the course of a project's development.

If the NCDOT Project Team is considering combining concurrence meetings (see Combining Merger Meetings) or believes reaching concurrence can be done via email, this should be discussed with the Merger MOU Signatories at Merger Screening and included in the Merger Plan. The Merger Plan should



also indicate the proposed timing and meeting format for each concurrence point and include whether meetings are anticipated to be in-person/virtual or via email.

What happens to the Merger Plan?

Once the Merger Plan is developed, the NCDOT Project Manager should email it to the Merger Team Members for review with the CP 1 Merger Packet. The Plan may be further discussed and refined by Merger Team comments to the Merger Packet or at the CP 1 meeting, if held. The Merger Plan will be a "living document," meaning that it will be updated throughout the life of the Merger Process to reflect any changes that are made. For example, if after CP 1 the Merger Team decides that it would be appropriate to combine CP 2 and CP 2A, this will be documented in the Merger Plan.

The Merger Plan will be uploaded to the project's ATLAS Workbench and/or Connect SharePoint site when it is established and each time it is updated.



What are the requirements for public involvement in the Merger Process?

Public involvement is a vital part of both the NEPA/SEPA and Section 404 Processes. All projects will follow NCDOT's Statewide Public Involvement Plan. For Merger projects, public involvement must occur prior to Concurrence Point (CP) 3 and NCDOT will share the findings with the Merger Team. If a project is to be documented under an Environmental Impact Statement (EIS) and Record of Decision (ROD), public involvement activities should be closely coordinated with the lead federal agency to ensure regulatory requirements (for the EIS distribution in particular) are met.

Public involvement can take many forms; however, at a minimum, NCDOT will send a mailing (postcard or newsletter) and/or hold a public meeting for Merger projects. The mailing and public meeting materials can reference a website (NCDOT project site or NCDOT Public Involvement Public Input site) where detailed information is provided. The public must be provided the following information:

- Project location;
- Existing conditions (land use, control of access type, and water resources including primary nursery areas, essential fish habitat, outstanding resource waters, high quality waters, water supply watersheds, etc.);
- Purpose and Need for project;
- Project Description;
- Explanation of Detailed Study Alternatives;
- Figure that shows water resources and alternatives.
- Impact tables showing impacts of each alternative, including at a minimum:
 - Historic Architecture (include as a footnote: "These initial findings are Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the Interim Guidance Documents for Appendix C dated April 25, 2005, and January 31, 2007. The District Engineer consulted district files and records and the latest published version of the National Register of Historic Places.");
 - Archaeology (include as a footnote: "These initial findings are Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the Interim Guidance Documents for Appendix C dated April 25, 2005, and January 31, 2007. The District Engineer consulted district files and records and the latest published version of the National Register of Historic Places.");
 - Wetlands (acres);
 - Streams (feet);
 - Ponds/Open Waters (acres); and
 - Federally listed species and federally designated critical habitat.
- Avoidance and Minimization statement: "Through development of the preliminary functional designs within the Detailed Study Alternatives (DSAs), NCDOT has attempted to avoid and minimize impacts to streams and wetlands to the greatest practicable extent; where avoidance was not possible, impacts were minimized to the greatest extent practicable. This included developing alignments and interchange configurations for the DSAs that avoided/minimized these resources as much as possible, while also minimizing impacts to other resources. NCDOT will continue to seek ways to avoid and minimize impacts in further design efforts for the selected Alternative."



 Compensatory Mitigation statement: "The purpose of compensatory mitigation is to offset unavoidable functional losses to the aquatic environment resulting from project impacts to waters of the United States. NCDOT will investigate potential on-site stream and wetland mitigation opportunities once a preferred alternative has been chosen. If on-site mitigation is not feasible, or if a sufficient amount of mitigation is not available on-site, mitigation will be provided by the NC Division of Mitigation Services (NCDMS), or an approved mitigation bank."

Standard Language

The following standard text will be included at the end of all NCDOT-produced materials for the project (e.g. newsletter/meeting handout). Text in brackets and red font (i.e. [Text]) should be replaced with the appropriate project information.

The information provided in this [postcard, newsletter, handout] is also provided on behalf of the Department of the Army, who will, at a future time, be asked for authorization to discharge dredged or fill material into waters of the United States.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments.

For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines (40 CFR Part 230).

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Native American Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to select the least environmentally damaging practicable alternative (LEDPA) for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and other public interest factors. Public interest factors may include, but are not limited to: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

All comments received will also be evaluated and used in the determination of whether to (1) process this project under an Individual Permit, in which case the Corps will prepare a project specific Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to NEPA, or (2) verify that this project meets the terms and conditions for use of Regional General Permit 31 or another general permit. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Although all comments provided on the subject project will be shared between the NCDOT Project Team and the Corps of Engineers, comments may also be provided directly to the Corps of Engineers representative for the subject project:



[NAME] [ADDRESS] [EMAIL/PHONE NUMBER]

How does this relate to the "Merger Permit Application"?

Following this guidance will eliminate the need for the previous "Merger Permit Application". This guidance was developed in coordination with FHWA and USACE to ensure that the needs of both agencies are being fulfilled.



What is Concurrence Point I (Purpose and Need and Study Area Defined)?

Concurrence Point (CP) 1 establishes the project's Purpose and Need and Study Area. The primary product of CP 1 is achieving concurrence on a purpose and need statement that clearly states the needs, or problems, that require action in the study area as well as the purpose or objective that the project would achieve. Please refer to the Roles and Responsibilities Guidance for information on NCDOT and agency tasks.

The purpose and need is the foundation supporting the entire NEPA/SEPA decision-making and Section 404 regulatory processes, as established in 23 CFR 771 and 40 CFR 230, respectively. Per Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects: 2015 Red Book (Red Book), the purpose and need "explains the reason that the action being proposed is needed and serves as the basis for developing a reasonable range of alternatives." The purpose and need statement is a critical factor in aligning the proposed transportation solution with the U.S. Army Corps of Engineers' (USACE) Least Environmentally Damaging Practicable Alternative (LEDPA) at CP 3.

The need is the problem(s) that requires an action. The need sets the factual foundation for the project's purpose by providing available data and information to identify and describe the nature, characteristics and extent of the problem(s); where feasible, need(s) should relate to quantifiable data. The need should never identify the solution, but instead it should focus on explaining the underlying cause of the problem.

TO BE THE LEDPA AND BE AUTHORIZED FOR CONSTRUCTION UNDER A USACE 404 INDIVIDUAL PERMIT, AN ALTERNATIVE MUST MEET THE 404(B)(1) GUIDELINES AND PURPOSE AND NEED

The purpose is a basic statement, two or three sentences long, that succinctly defines the transportation objective(s) intended to satisfy the need(s). There may be more than one purpose that correlates with the needs identified. The purpose should always be achievable, unbiased, and comprehensive enough to generate a reasonable range of alternatives. As noted in the AASHTO Practitioner's Handbook *Applying the Section 404(b)(1) Guidelines in Transportation Project Decision Making* (August 2016), "If the project purpose is not clearly defined, disputes regarding the practicability of avoidance alternatives become far more likely."

The study area is the boundary in which potential effects are most likely to occur, based upon the project description and termini defined in NCDOT's STIP. The boundary of a study area should be large enough that it covers the reasonable range of alternatives, but not so large that NCDOT expends effort (time and budget) on resources that will not be affected by the project.

What items should be considered at CP I?

For many projects, the purpose and need will revolve around addressing deficiencies of an existing roadway facility or increasing connectivity. There may be multiple factors that are considered in the purpose and need. For examples, please refer to the Identified Need Form and/or Problem Statement Guidance on the NCDOT Connect Site. The NCDOT Project Team will use NCDOT's Purpose and Need Guidance as well as other federal guidance documents to help validate the project needs and establish a defensible purpose statement. The NCDOT Project Team is encouraged to coordinate the draft purpose statement with the USACE/NCDWR to discuss how the statement may affect the future LEDPA decision.



Supporting information for CP 1 may be found in the Comprehensive Transportation Plan (CTP), the project Express Design, Merger Pre-screening form, Merger Screening summary, and the Project Scoping Report; relevant supporting information will be summarized in a packet for CP 1, along with any known issues (data gaps, schedule constraints, public input, etc.) that could support the Merger Team's decision. The NCDOT Project Manager will develop a draft Merger Plan prior to CP 1 and will discuss with agency partners at the CP 1 premeeting. Please see <u>Merger Plan Guidance</u> for more information.

When determining a potential study area, the NCDOT Project Team needs to strike a balance. If a study area is too large, it will waste time and money on unnecessary surveys. However, if a study area is too small and changes to the potential project take place, requirements for additional surveys can negatively impact schedules. It is generally best to establish a slightly wider than anticipated study area to ensure inclusion of service roads, potential roadway realignments, avoidance of impacts to parks and potential historic resources, and sufficient storage for turning movements.

In many situations, the NCDOT Project Manager, or their designee, will have information on potential alternatives prior to the CP 1 meeting. It is important to not limit alternatives in the CP 1 phase. Alternatives must meet purpose and need to be LEDPA. It is necessary to craft a sufficiently detailed purpose to allow for a complete alternatives analysis.

If the lead federal agency is considering the use of (alternatives) evaluation criteria to assist with the LEDPA decision-making, this should be progressively discussed in the Merger Plan, CP 1 pre-meeting, CP 1 meeting, and future Merger Team meetings. Evaluation criteria (see inset) are not required on every project; if they are to be used, then they should be collaboratively developed amongst the Merger MOU

Signatories and finalized at CP2 or shortly thereafter. Alternatives evaluation criteria are often associated with the ability of an alternative to meet purpose and need and can aid in the determination of the LEDPA at CP 3. Evaluation criteria should not be arbitrary or capricious, nor used to guide the Merger Team to choose a particular alternative or set of alternatives for detailed study. NCDOT Environmental Policy staff can help refine any evaluation criteria for the alternatives that are being proposed. Ultimately, the USACE may rely on the use of such evaluation criteria for their LEDPA concurrence, per their 404(b)(1) regulations.

Per <u>AASHTO Practitioner's Handbook #14</u> regarding "evaluation criteria": "Even when agencies agree on a project's basic purposes, there can be significant disagreements about which alternatives meet those purposes. For example, highway projects often are proposed to address congestion problems. Establishing the existence of the congestion need may be relatively straightforward. The more challenging issue often involves determining how much improvement is needed in order for an alternative to meet the project purpose. **Evaluation criteria** can help to provide a framework for making this judgment. When an individual Section 404(b)(1) Guidelines permit is needed, it is important to engage the Corps as these evaluation criteria are developed."

Is a pre-meeting required?

Yes, a pre-meeting with the Merger MOU Signatories is required for CP 1. The NCDOT Project Manager, or their designee, will set up this meeting with the Federal Highway Administration (FHWA, for federal projects), USACE, and North Carolina Department of Environmental Quality, Division of Water Resources (NCDWR) representatives. This is NCDOT's opportunity to preview the project purpose, need, and study area with regulatory partners prior to the official concurrence meeting, and to discuss potential issues or



concerns the Merger MOU Signatories may have with the project. Other topics that might be discussed in the pre-meeting are evaluation criteria, logical termini, independent utility, and segmentation; these topics should be settled with Merger MOU Signatories prior to CP1 to avoid any further debate. Where NCDOT is prepared with the necessary information, the NCDOT Project Manager should consider combining this pre-meeting with the Merger Screening meeting. See Merger Basics for more information on pre-meetings.

What happens after the CPI Meeting?

See Merger Basics (What happens at the end of the merger meeting?) for information on specific items that must occur at the conclusion of every concurrence point meeting.



What is Concurrence Point 2 (Detailed Study Alternatives Carried Forward)?

The purpose of Concurrence Point (CP) 2 is to establish Detailed Study Alternatives (DSAs) that will be carried forward in the Merger Process for the project. The intent of CP 2 is to gain concurrence on which alternatives will be analyzed in detail for the environmental document. The No-Build Alternative is also included at CP 2 to serve as a baseline measure for evaluation of the build alternatives. This evaluation compares potential improvements to the baseline condition and helps determine if the project benefits are worth the impacts to the human and natural environment. Agreement on CP 2 does not preclude the development or modification of alternatives as the project moves through the Merger Process. Please refer to the Roles and Responsibilities Guidance for information on NCDOT and agency tasks.

What items should be considered at CP 2?

To determine which alternatives should move forward for detailed study, the Merger Team should be presented with enough information that allows for a sufficient evaluation of which alternatives meet the purpose and need of the project and a detailed evaluation of resource impacts. This should form the basis of the Merger Packet. It is the responsibility of all Merger Team Members to ensure that agreement on an alternative carried forward at CP 2 means that they believe that alternative could be developed in a way that complies with their specific agency requirements. Asking "what additional information or other considerations may be necessary to achieve concurrence for CP 2" should help identify items that may need to be included in the packet, such as:

- What design criteria were used to develop a proposed typical section?
- Are there any proposed changes to the project study area? Any modifications should be discussed to determine if they are of sufficient magnitude to require CP 1 to be revisited.
- What alternatives were evaluated and what kind of alternatives analysis framework was used?
- How does each alternative moving forward meet the purpose and need agreed upon at CP 1?
- If evaluation criteria were previously agreed upon, how did each alternative fare under the criteria? The impacts of the alternatives should be analyzed using a buffer of slope stake limits plus 40 feet. At this stage, stream impacts should be summarized to the nearest 10 feet, and wetland impacts should be noted to the nearest tenth (0.1) of an acre.
- What alternatives were recommended for elimination from further consideration and on what basis was the decision made?
- Has there been any public outreach? If so, provide a summary of the outreach and any comments received. See Public Involvement in Merger for additional public involvement requirements.

Is a pre-meeting required?

A pre-meeting is recommended for this CP for large, complex projects but is not required. See Merger Basics for more information on pre-meetings.



What happens at the end of and subsequent to the CP 2 Meeting?

See Merger Basics for information on specific items that must occur at the conclusion of every concurrence point meeting.



What is Concurrence Point 2A (Bridging Decisions and Alignment Review)?

The purpose of Concurrence Point (CP) 2A is to determine the most practicable major hydraulic structure(s) and review the proposed alignment(s) of the detailed study alternative(s) agreed to at CP 2. This step is done for avoidance and minimization purposes. Please refer to the Roles and Responsibilities Guidance for information on NCDOT and agency tasks.

What items should be considered at CP 2A?

CP 2A discusses any major hydraulic structure (retained or new) on a project as well as the alignment of each alternative. Structure lengths and sizes are preliminary and subject to change. More detailed hydraulic analysis and plan development, including avoidance and minimization measures, may affect the final dimensions of hydraulic structures.

Culverts are considered major structures if they are equal to or larger than a 72-inch pipe or have an opening equal to or greater than 30 square feet. All bridges are considered major structures. This information is included in the Hydraulic Planning Report, which is used to determine the length of bridge or size of culvert that is needed for hydraulic conveyance. The report also details any issues with existing structures that require replacement/modification/extension due to current condition or hydraulic conditions. Cost estimates and impact analysis using slope stake limits plus a 40-foot buffer should be used for evaluating new or replacement structures. NCDOT recommends including estimated stream/wetland mitigation costs in the estimates, if possible, generally with a 2:1 ratio assumed. Estimates should be prepared to a level that provides an "apples to apples" comparison.

At a minimum, a line and grade alignment and impacts assessment using slope stake limits plus 40 feet of each alternative should be provided.

Unless a field visit is required, the Merger Team should consider discussing CP 2A on the same day as other concurrence point discussions. See Combining Concurrence Meetings guidance.

The alignment review is used to provide a summary of impacts, especially in areas where protected resources may be in conflict associated with the proposed crossing structures. Because the nature of potential conflicts vary, alignment reviews should be project specific. One best practice would be to provide an impacts matrix with the CP2A meeting packet.

What kind of meeting is needed?

Depending on the project's hydraulic and alternatives considerations, the NCDOT Project Manager, in collaboration with the Merger MOU Signatories, may opt for achieving concurrence via email, an inperson or virtual meeting, or a field meeting. The Merger Plan Guidance includes information in developing the tentative concurrence meeting format decisions.

Prior to the discussion with the Merger MOU Signatories concerning the type of meeting, NCDOT Project Team will furnish the Merger MOU Signatories with information about the major hydraulic structures, such as location, existing structure(s) versus proposed structure(s), photographs, and potential impacts. The NCDOT Project Manager should also review the Merger Plan and determine if there is a reason to change the anticipated meeting type. If there are potential changes, the Project Manager should discuss with the Merger MOU Signatories.



Email Concurrence

The Merger MOU Signatories will determine if a meeting is not required and if concurrence can be achieved via email. If this is pre-planned, it will be noted in the Merger Plan and discussed at the prior concurrence meeting.

In-Person or Virtual Office Meeting

Depending on the number and location of the major hydraulic structures, or at the determination of the Merger MOU Signatories, an in-person or virtual office meeting may be preferred. Sometimes it is more helpful and practical to show the project and major hydraulic locations using Google Earth and digital photos rather than visiting the site. The NCDOT Project Manager should discuss project-specific issues with the Merger MOU Signatories to determine the proper meeting format.

Field Meeting

Some Merger Team Members may want to visit the project site, particularly if the project is controversial, has resources within their agency's jurisdiction, and/or has problems related to right of way and the transportation setting. If the Merger Team determines that a field meeting is appropriate, the NCDOT Project Manager or their designee will consider the following:

- Is an on-site preliminary discussion needed? If so, determine location;
- Notify landowners at sites you intend to visit;
- Determine where Merger Team Members will meet (consider parking locations and carpooling);
- Have a plan of action of which sites to visit, preferably based on pre-meeting correspondence with Merger Team Member preferences;
- Determine how the team will access the site (sometimes it may be helpful to flag or clear a path a day or two before the meeting for ease of movement and safety); and
- Identify nearby hospitals and potential emergency needs.

If the Merger Team determines that a site review via Google Earth with appropriate GIS layers and photos is preferrable to a site visit, individual Merger Team members may visit the site independently. If individual Merger Team members wish to visit the site independently, they will need to coordinate with NCDOT who will notify the landowners.

Is a pre-meeting required?

A pre-meeting is not required for CP 2A. It may be useful for more complex projects with substantial environmental concerns.

What happens at the end of and subsequent to the CP2A meeting?

See Merger Basics (What happens at the end of the merger meeting?) for information on specific items that must occur at the conclusion of every concurrence point meeting.



What is Concurrence Point 3 (Least Environmentally Damaging Practicable Alternative/Preferred Alternative)?

The purpose of Concurrence Point (CP) 3 is to establish the Least Environmentally Damaging Practicable Alternative (LEDPA). The LEDPA is the best solution to the problem satisfying the purpose and need, considers environmental and community resources, and meets the US Army Corps of Engineers' (USACE) Section 404 (b)(1) guidelines of the Clean Water Act (CWA) regulatory requirements. The Preferred Alternative is the solution that meets NCDOT's NEPA/SEPA requirements; if it satisfies all CWA requirements it will align with the LEDPA. CP 3 is the culmination of the merger decision-making process from a NEPA perspective, and it is a foundational element for the eventual USACE permit decision.

What items should be considered at CP 3?

Selection of the LEDPA at CP 3 is based upon the thorough analysis of alternatives selected for detailed study at CP 2, excluding any alternatives removed from further study at CP 2A. Therefore, it's important to present to the Merger Team any differences in analyses between alternatives to inform their decision on the LEDPA. Determining these differences should form the basis of the Merger packet. Also asking "what additional information or other considerations may be necessary to achieve concurrence for CP 3" should help identify items that may need to be included in the packet:

- Has NCDOT identified a **Preferred Alternative**? How does the Preferred Alternative fulfill the transportation need(s)? Is there any unresolved issue or concern that could hinder getting concurrence? If so, what is the proposal for resolving the issue?
- If **evaluation criteria** were previously agreed upon, how did each alternative fare under the criteria? The alternatives are typically analyzed based on slope stake limits plus 25 feet.
- What **key issues** should be discussed regarding community effects, water resources, cultural resources, protected species, and design components that help to explain why the LEDPA has been identified?
- Will **cost estimates** be useful in comparing and contrasting the alternatives? If both regulatory and cost considerations will drive the LEDPA decision, both should be clearly presented in the packet and discussed in the pre-meeting.
- Is a summary of **public outreach** efforts (detailing the potential impacts of the build alternatives) available and **sufficient to meet resource agency requirements**? What input and insight into the assessment of the alternatives did the public provide that informed NCDOT's identification of their Preferred Alternative?

Is a pre-meeting required?

A pre-meeting among the Merger MOU Signatories is required for CP 3. Under the Clean Water Act, the determination of LEDPA is made by the USACE. Things to consider when having a pre-meeting for CP 3 with the MOU signatories could include:

• Do the MOU signatories have any questions related to the identification of the LEDPA that require resolution to allow concurrence?



- Is there a pending issue that could hinder getting concurrence? If so, what actions are needed to resolve the issue?
- Have there been any modifications to an alternative to such an extent that the Merger Team may need to revisit a previous concurrence point?
- Should any additional items be added to the agenda for the CP 3 meeting?

What happens subsequent to the CP3 Meeting?

Concurrence Point 3 directly correlates with the timing of NCDOT's NEPA/SEPA documentation:

- If NCDOT is preparing a Categorical Exclusion (CE) or a combined State Environmental Assessment (SEA)/Finding of No Significant Impact (FONSI), the environmental document will be completed after the CP 3 meeting.
- If NCDOT is preparing an Environmental Assessment (EA), followed at a later date by the FONSI, the EA may predate concurrence on CP 3, but the FONSI cannot be completed until after CP 3.
- If NCDOT is preparing an Environmental Impact Statement (EIS), the Draft EIS may predate concurrence on CP 3, but the Final EIS is generally completed after CP 3. CP 3 concurrence is required prior to development of the Record of Decision (ROD) if the project is in Merger.

See Merger Basics for more information on pre-meetings and information on **specific items that must** occur at the conclusion of every concurrence meeting.



What is Concurrence Point 4A (Avoidance and Minimization Measures)?

Concurrence Point (CP) 4A is the point at which NCDOT summarizes all avoidance and minimization measures (AMMs) committed to and/or completed throughout project development. AMMS can apply to a range of impacts to the natural and human environment. Section 404 of the Clean Water Act requires project proponents (e.g., NCDOT) to first avoid impacts to the aquatic ecosystem, then minimize impacts (to the maximum extent practicable) to the aquatic ecosystem that cannot be avoided, and finally, provide compensatory mitigation for those impacts that are unavoidable. This critical mitigation sequence is required to comply with the Section 404(b)(1) guidelines. AMMs occur throughout the life of the project and proper documentation is essential to meet the requirements stated above. NCDOT has developed an Avoidance and Minimization Measures Tracker to be used by all projects, including those in the Merger Process, for documentation purposes. Please refer to the Roles and Responsibilities Guidance for information on NCDOT and agency tasks.

What items should be considered at CP 4A?

It is important to understand that AMMs should occur from project conception through final design. All AMMs for all resources must be documented by the NCDOT Project Team, using the Avoidance and Minimization Measures Tracker on the project's Connect SharePoint site.

The NCDOT Project Team will follow NCDOT Avoidance and Minimization Measures Tracker Guidance throughout the life of the project, to show that resources have been considered and effects of the project have been avoided or minimized to the extent practicable. The AMMs guidance is intended to not only explain how to use the Tracker, but also to facilitate discussion and documentation of avoidance and minimization measures throughout project development and at particular concurrence points. AMMs provided as a summary at each concurrence point are NOT part of the concurrence point for signature; they are documented to meet the requirements of Section 404 of the Clean Water Act and provided to the Merger Team for review.

Avoidance and minimization measures may concern either natural or human resources. A summary of the avoidance and minimization to date should form the basis of the CP 4A Merger packet. By also asking "what additional information or other considerations may be necessary to achieve concurrence for CP 4A?" should help identify items that may need to be included in the packet:

- What decision regarding the type of 4A meeting was made at the conclusion of CP 3 or included in the Merger Plan? The NCDOT Project Manager, or their designee, may contact the Merger MOU Signatories to confirm if this concurrence point can be handled via email. If there have been substantive changes since CP 3, it may be helpful to have an in-person or virtual meeting to discuss changes.
- Are there any avoidance and minimization measures that occurred during the Long Range Transportation Plan, Express Design Evaluation, and/or Project Scoping Report phase, before entering project development? For example, a design concept may be determined to be infeasible due to its effects on surrounding resources during the planning phase, and it is important to share this information with the Merger Team.
- What decisions that avoid or minimize impacts to resources have been made with "engineering judgment" by the NCDOT Project Team? For example, when the project first starts, decisions may be



made to avoid an important resource entirely or to use a particular slope ratio due to knowledge of the project area and existing resources. These decisions may feel like common sense, but it is important to make sure that they are properly documented and recorded to demonstrate to the Merger Team how these decisions impact later stages of project development and avoidance and minimization measures that have already occurred.

- What are the impacts of the project? Using the Avoidance and Minimization Measures Tracker, a summary of avoidance and minimization measures, including a table of impacts, should be provided as the CP 4A packet. The table of impacts should be based on slope stake limits plus an additional 25-foot buffer. Impacts will be documented using the following:
 - Jurisdictional resource delineations and mapping, including the WET file;
 - CAMA Wetlands and SAV impacts, summarized to the hundredth of an acre and/or square feet;
 - Completed Section 106 of the National Historic Preservation Act and/or Section 4(f) of Department of Transportation of 1966 Act (if applicable) avoidance and minimization documentation, especially if it requires certain design elements;
 - If applicable, location, type, and size of major hydraulic structures;
 - If applicable, completed Section 7 of the Endangered Species Act avoidance and minimization documentation, especially if it requires certain design elements;
 - Roadway and hydraulic design that includes a set alignment with slope stake limits;
 - If NCDOT has proposed on-site mitigation, a concept plan needs to be prepared for the meeting; and
 - Following requirements set by the Post Construction Stormwater Manual, an explicit determination of treatment goals that must be met to meet water quality needs should be outlined to the maximum extent practicable.

At this stage, total stream impacts shall be summarized to the nearest 10 feet, and total wetland impacts shall be noted to the nearest tenth (0.1) of an acre.

Is a pre-meeting required?

A pre-meeting is not required for CP 4A. However, if a project has unusual challenges or if avoidance and minimization measures noted at previous concurrence point meetings are no longer applicable, it is recommended that you discuss these with the Merger MOU Signatories prior to the scheduled concurrence date. See Merger Basics for more information on pre-meetings.

What happens at the conclusion of and subsequent to the CP 4A Meeting?

See Merger Basics for information on specific items that must occur at the conclusion of every concurrence point meeting. As the project progresses with more refined design, any avoidance and minimization measures taken must continue to be documented using the Tracker. The NCDOT Project Manager should ensure that any commitments made during the Merger Process are listed on the Project Commitments Dashboard, validated, and fulfilled.



If there are changes to the avoidance and minimization measures (from what was discussed at CP 4A), NCDOT will coordinate with the Merger MOU Signatories to determine how to best notify the other team members (e.g., meeting, teleconference, email, etc.).



What is Concurrence Point 4B (Hydraulic Design Review)?

The purpose of Concurrence Point (CP) 4B is to review the preliminary drainage design layout with the Merger Team, with the intent of incorporating the Merger Team's comments into the drainage design. CP 4B occurs once NCDOT completes a preliminary drainage design, and CP 4B needs to be completed prior to the Field Inspection Plan Set. For CP 4B and 4C, an in person or virtual meeting is typically required. Please refer to the Roles and Responsibilities Guidance and NCDOT's Guidance for Concurrence Point 4B Meeting and Plans for information on NCDOT and agency tasks. For all projects, including those not in Merger, permit pre-application meetings are always encouraged.

What items should be considered at CP 4B?

The NCDOT Guidance for Concurrence Point 4B Meeting and Plans includes step-by-step instructions on how the plan set and plan sheets should be developed for the meeting. The Merger Team should review the CP 4A Meeting summary. Items that facilitate agency review and understanding of the proposed plans should be provided to the Merger Team. The plan set may include:

- Plan set
- Design as a .kmz file for use with Google Earth
- Cross sections
- Roadway typical sections
- Existing drainage patterns and ditch descriptions
- Site Photos and field notes
- Information on any issues with utility relocations
- Fish passage for proposed/existing culverts
- Draft Stormwater Management Plan
- Resource/Regulatory History and Considerations (to include context for the current concurrence point)
- Data to evaluate appropriate burial depths, buffer requirements, sill/baffle needs, stream stabilization measures, or other proposed methods to address hydraulic and habitat issues
- Relevant materials identified in the NCDOT's Guidance for Concurrence Point 4B Meeting and Plans; and
- Other relevant documentation and any outstanding issues.

Agency representatives will review structures, hydraulic features, buffers, and utility relocations with a potential to affect protected resources.

Is a pre-meeting required?

A pre-meeting is not required for CP 4B.

What happens at the end of and subsequent to the CP 4B meeting?

See Merger Basics for information on specific items that must occur at the conclusion of every concurrence point meeting.

There is no concurrence form for CP 4B.



What is Concurrence Point 4C (Permit Drawing Review)?

The purpose of Concurrence Point (CP) 4C is to allow the Merger Team to review the Permit Drawings (which includes the Buffer Permit Drawings, if applicable) before the drawings are submitted with the permit application(s). This allows for a smoother review of the permit application(s). CP 4C occurs after CP 4B, NCDOT's field inspection meeting, final hydraulic design, right of way plans, utility relocation design, the FEMA compliance package, and FERC pre-application coordination (if applicable). Please refer to the Roles and Responsibilities Guidance for information on NCDOT and agency tasks. For all projects, including those not in Merger, permit pre-application meetings are always encouraged.

What items should be considered at CP 4C?

It is highly recommended that the MicroStation design file be converted to a .kmz for use in Google Earth and/or have the MicroStation design file available to be shown during the meeting. This will provide a better understanding of the design relative to known features and can allow for a more detailed examination of the design.

For projects that will require a Buffer Authorization, Buffer Permit Drawings will also be reviewed by the Merger Team at the CP 4C meeting. Buffer Permit Drawings will clearly delineate Zone 1 and Zone 2 buffers. If utility impacts are available, they will also be discussed during CP 4C.

What happens before the meeting?

The NCDOT Project Manager or their designee will prepare a CP 4C materials.

Information needed for the meeting:

- Stream and wetland delineations must be completed (WET file) with stream, wetland, buffer, and CAMA sites verified by the agencies, including stream flow classifications and mitigation ratio decisions;
- Location of water supplies, Outstanding Resource Waters and High Quality Waters;
- Bridge Survey Report (BSR) and Culvert Survey Report (CSR);
- Buffer treatment calculations, if necessary;
- If applying for a Coastal Area Management Act (CAMA) permit, the pre-application meeting with NC Division of Coastal Management (NCDCM) should be completed.

The provided information shall include the following:

- Agenda and invitee list for the meeting;
- Avoidance and Minimization measures to date with any additional measures taken during final drainage design;
- Resource/Regulatory History and Considerations (to include context for the current concurrence point);
- Relevant materials identified in the NCDOT's Guidance for Concurrence Point 4C Meeting and Plans; and
- Other relevant documentation and any outstanding issues.



What should be discussed during the meeting?

The NCDOT Hydraulic Engineer, or their designee, will introduce the project and then go through the permit drawing sheets one by one and explain the impacts at each jurisdictional site. Any stream relocations and/or ditching in wetlands should be discussed along with wetland impact types. For example, can hand clearing be done in areas to reduce permanent impacts? Discussions should also include final construction methods for bridges and culverts, and additional avoidance and minimization measures in design and during construction. The NCDOT Project Team will discuss all comments from resource agencies made at CP 4B concerning aquatic life passage (1) if NCDOT's analysis after CP 4B does not allow agency recommendations concerning issues such as installing baffles and/or sills, or not splitting baseflow, and (2) if NCDOT changes any agreed upon (at CP 4B) structures where baffles and/or sills were to be installed, or commitments to not split baseflow. Additionally, if NCDOT previously noted that they would, or would look into, addressing any existing deficiencies that are located at the inlet and/or outlet of the existing culvert/pipe by the proposed work, and have now determined that they cannot, NCDOT will detail reasons to the Merger Team at this meeting.

If available, NCDOT will discuss impacts to jurisdictional sites due to utility impacts. If applicable, any onsite mitigation designs could be discussed by NCDOT EAU and depicted on the permit drawing sheets.

Is a pre-meeting required?

A pre-meeting is not required.

What happens at the end of and subsequent to the CP 4C Meeting?

The NCDOT Hydraulic Engineer, or their designee, should leave enough time at the end of the CP 4C meeting to:

- Review any action items and discuss the permitting strategy and mitigation measures with the permitting agencies (USACE, NCDWR, and NCDCM).
- Discuss the schedule of the permit application and Let date along with any agreed upon avoidance and minimization measures; these will be documented in the meeting minutes.

There is no concurrence form for CP 4C. After the meeting, the NCDOT Hydraulic Engineer, or their designee, shall:

- Circulate the draft meeting minutes for a two-week review. The final meeting minutes will serve as approval of CP 4C.
- Upload the final meeting documentation to the project's ATLAS Workbench.

Glossary of Terms

Abstention

Abstention is used when an agency/organization does not object with the concurrence point but does not sign the concurrence form. However, the agency/organization agrees not to revisit the concurrence point subject to the guidance on revisiting concurrence points. Please see the <u>Merger MOU</u> for more information.

Alternatives Evaluation

A reasonable range of specific transportation improvement proposals, alignments, options, design choices, etc., that have the potential to meet the needs expressed in the Purpose and Need Statement. Alternatives are generally confined to a defined study area. For a transportation project, alternatives to be studied normally include the no-action alternative, an upgrading of the existing roadway alternative, new transportation routes and locations, transportation systems management strategies, multimodal alternatives, and any combinations of the above. To be considered the Least Environmentally Damaging Practicable Alternative (LEDPA), an alternative must meet the Purpose and Need of the project and have less adverse impact on the aquatic ecosystem than the other practicable alternatives under consideration (if any), so long as the alternative does not have other significant adverse environmental consequences. See LEDPA.

ATLAS Workbench

A repository on SharePoint in which final version of documents shall be uploaded to the SharePoint via the ATLAS Workbench. NCDOT staff and consultants will use the ATLAS Workbench to manage their projects. The Workbench steps reflects all facets of the project lifecycle and tracks the progression of a project based on reporting from multiple business units.

ATLAS Search/Screening Tools

The ATLAS Search Tool is used to help create project deliverables by searching for relevant data and downloading the files within the study area, such as an environmental base map for a project's Natural Resources Technical Report or Indirect and Cumulative Effects document. The ATLAS Screening Tool is used to assess study areas for potential affects to the human and natural environment so project teams can quickly understand a project's scope and schedule and obtain information essential to a Scoping meeting and for completion of the NEPA/SEPA documentation.

Applicant's (Agency's) Preferred Alternative

Also see "Section 404(b)(1) Guidelines"

The alternative that the lead agency believes would fulfill its statutory mission and responsibilities, giving consideration to social, economic, environmental, technical and other factors. It is typically identified so that agencies and the public can understand the lead agency's perspective.

Avoidance and Minimization Measures (AMMs)

A general phrase inherent in NEPA and Section 404 regulations necessitating that potential impacts to the natural and human environment are avoided and minimized to the extent practicable.

It is important to document Avoidance and Minimization Measures (AMMS) developed throughout the Merger Process to show compliance with the requirements of several laws and regulations. For example, the CWA specifically discusses avoidance and minimization of impacts to waters of the U.S. within the Section 404(b)(1) Guidelines (40 CFR 230.10 (d)) which notes that no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will

minimize potential adverse impacts of the discharge on the aquatic ecosystem. Additionally, 33 CFR 325.1 (d)((7) notes that applicants must include a statement describing how impacts to waters of the U.S. would be avoided and minimized. Another example is Section 7 of the Endangered Species Act, which requires Federal agencies to consult with the US Fish and Wildlife Service (USFWS) to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitats.

Best Fit Alignment

A road widening design approach that utilizes alignment shifts to avoid and minimize impacts to the human and natural environment in a cost-effective manner.

Bridge/Culvert Survey Report (BSR/CSR)

A BSR/CSR is a summary of the structural and hydraulic aspects of a bridge or culvert necessary for evaluating the preliminary design, FEMA hydraulic model, and scour potential. Included are historical data, site data, design parameters, and model output.

Coastal Area Management Act (CAMA) of 1974

The Coastal Area Management Act (CAMA) of 1974 has the following goals: (1) To provide a management system capable of preserving and managing the natural ecological conditions of the estuarine system, the barrier dune system, and the beaches, so as to safeguard and perpetuate their natural productivity and their biological, economic and esthetic values; (2) To insure that the development or preservation of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water for development, use, or preservation based on ecological considerations; (3)To insure the orderly and balanced use and preservation of our coastal resources on behalf of the people of North Carolina and the nation; and (4) To establish policies, guidelines and standards. CAMA regulations may require NCDOT to request a Major Permit, General Permit, Minor Permit or a variance for certain development activities we are pursuing within coastal resources.

Categorical Exclusion (CE)

A category of actions defined under Section 40 CFR 1508.4 (NEPA) which do not individually or cumulatively have a significant effect on the human (and natural) environment and for which neither an environmental assessment (EA) nor environmental impact statement (EIS) is required. FHWA actions which typically qualify as Categorical Exclusions are specifically defined at 23 CFR 771.117(a). Please see the current version of the <u>FHWA/NCDOT CE agreement</u> for more information.

Concurrence

Also see "Non-Concurrence"

Concurrence by an agency or organization means that the specific agency/organization representative does not object to decisions made at strategic points in the project development/permitting process and agrees to abide by the decision made unless there is a profound changed condition in the future. A profound changed condition does not include changes in agency/organization representatives. Please see the <u>Merger MOU</u> for more information.

Conflict Resolution Process

The process merger agencies use if initial concurrence cannot be achieved. Please see the MOU Appendix B: Conflict Resolution Process for more information.

Comprehensive Transportation Plan (CTP)

A Comprehensive Transportation Plan (CTP) is a long range vision plan for transportation networks defined by the North Carolina General Statutes §136-66.

Cooperating Agency

Cooperating Agency means any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. Please see the MOU Appendix A: Merger Roles and Responsibilities for more information.

Designee

An NCDOT Project Manager or an agency may indicate a designee (another staff member or a consultant) who will perform the Merger-related responsibilities on their behalf.

Detailed Study Alternatives [Carried Forward] (DSAs)

Under the Merger Process, DSAs are preliminary alternatives which are carried forward once the Merger Team determines that these alternatives meet the project purpose and should be studied and evaluated in greater detail in the environmental document. The Merger Team selects the DSAs at Concurrence Point 2.

Draft Environmental Impact Statement (DEIS)

A concise public document prepared by a Federal or State agency to aid an agency's compliance with NEPA/SEPA and support its determination of whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact. The general FHWA criteria for preparing a DEIS is found at 23 CFR 771.115 and the procedures for issuance at 23 CFR 771.123.

Endangered Species Act (ESA)

Section 7(a)(2) of the Endangered Species Act (16 USC § 1531 *et seq.*) requires that federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), take such actions as necessary to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of such endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary of the Interior or Commerce, as appropriate, to be critical. All NCDOT projects must comply with Section 10 of the ESA, which prohibits a landowner's activities affecting these protected species and their habitats unless authorized by an "incidental take" permit. Section 10 does not protect plants unless there is a Federal nexus.

Environmental Assessment (EA)

The preliminary environmental document, which includes those, project or program actions which may or may not result in a significant environmental impact. The FHWA criteria and procedures for EAs are contained at 23 CFR 771.115 and 771.119. The SEPA criteria for an EA are established by NCDOT pursuant to <u>SEPA</u>.

Environmental Features Map

A topographic or photogrammetric map of the study area illustrating resource areas of concern for both the natural and human environments. This mapping is used to identify potential alternatives that warrant study on a screening level basis.

Evaluation Criteria (Screening Evaluation Criteria or Performance Measures)

Occasionally, a project's range of reasonable alternatives present enough complexity (or potential difficulty in eliminating alternatives) that NCDOT needs to use alternatives evaluation criteria (aka performance measures or goals) to compare/contrast various alternatives. Such measures are typically tied to a project's P&N. They create a threshold to be met by all viable alternatives, which affords NCDOT (and our regulatory partners) a documented process to eliminate alternatives that do not meet the criteria. They cannot be arbitrary or designed to eliminate a particular alternative. As with P&N, NCDOT must be careful to not create a bias for or against a reasonable alternative when considering evaluation criteria. Special consideration must be applied when a particular alternative may need approval under other laws such as Section 4(f) and Section 404 of the CWA, both of which include specific alternatives analysis requirements. Evaluation criteria may also include extraordinary costs, community impacts, and regulatory compliance requirements.

Express Design Evaluation

Initial step in the planning and design process for a candidate project that describes the project, estimates preliminary costs, and identifies any potential problems. This evaluation investigates conceptual design option(s) and prepares costs needed for the prioritization process (SPOT). Please see the Merger Screening Guidance for more information.

Federal Lead Agency

The Federal Lead Agency (Lead Federal Agency) is the agency that has the primary responsibility for compliance with NEPA (federal environmental documentation). Where federal-aid funding is anticipated on a federal (USDOT) action, or where federal transportation approval is needed for an action, the U.S. Department of Transportation (FHWA) shall be the Federal lead agency in the environmental review process for a project. Where no federal-aid funding or federal transportation approvals are anticipated, the USACE will normally be the lead agency. Please see the MOU Appendix A: Merger Roles and Responsibilities for more information.

Final Environmental Impact Statement (FEIS)

The final environmental document for a project or program action which incorporates and addresses substantial concerns identified by the public or from review agencies following the issuance of the DEIS. FHWA requirements are specified at 23 CFR 771.125. USACE requirements are specified at Appendix B to Part 325 – NEPA Implementation Procedures for the Regulatory Program.

Finding of No Significant Impact (FONSI)

Note that while the term "EIS" is used below, this also applies to EAs.

A Finding of No Significant Impact is the decision document for an Environmental Assessment. As noted in Council on Environmental Quality's (CEQ's) *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulation (1986)*, the FONSI is a document in which the agency briefly explains the reasons why an action will not have a significant effect on the human environment and, therefore, why an EIS will not be prepared. The finding itself need not be detailed; but must succinctly state the reasons for deciding that the action will have no significant environmental effects, and, if relevant, must show which factors were weighted most heavily in the determination. In addition to this statement, the FONSI must include, summarize, or attach and incorporate by reference, the environmental assessment.

The EA or FONSI must document compliance with NEPA and other applicable environmental laws, Executive Orders, and related requirements. If full compliance with these other requirements is not

possible by the time the FONSI is prepared, the documents must reflect consultation with the appropriate agencies and describe when and how the requirements will be met.

Hydraulic Planning Report (HPR)

Used to determine the length of bridge or size of culvert that is needed for hydraulic conveyance. Culverts are considered major structures if they are equal to or larger than a 72-inch pipe or have an opening equal to or greater than 30 square feet.

Independent Utility

Also see Segmentation and Logical Termini. Note that while the term "EIS" is used below, this also applies to EAs.

An independent utility analysis focuses on whether or not a proposed project is a "stand alone" project (i.e., doesn't require/force the construction of another project) and will not cause segmentation, either to it or to another project (see Segmentation). That is, a project has independent utility if it serves a distinct purpose or function and will not necessitate the construction of another project to meet its purpose and need. The Council on Environmental Quality (CEQ) regulations use the term "unconnected single actions" to describe this concept. According to 40 CFR 1508.25(a), if an action i) does not automatically trigger other actions potentially requiring an EIS, ii) is not an interdependent part of larger actions it depends for its justification, and iii) does not require prior or simultaneous actions to be taken for the action to proceed, then the action should be said to demonstrate "independent utility" and the scope of the EIS should be for the direct, indirect, and cumulative impacts of the proposed action only.

Least Environmentally Damaging Practicable Alternative (LEDPA)

Also see "Section 404(b)(1) Guidelines"

To be the LEDPA, an alternative must meet the purpose of the project and comply with the requirements of the 404(b)(1) Guidelines (Guidelines). The Guidelines, at 40 CFR 230.10(a) require that "...no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."

As such, the LEDPA is the alternative that would have less adverse impact on the aquatic ecosystem (Waters of the U.S.) than the other alternatives under consideration, so long as that alternative does not have other significant adverse environmental consequences. Per 40 CFR 230.10(a)(2), 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 purpose(s). The evaluation of practicable alternatives must consider the impact to waters of the U.S. that would result from an alternative before compensatory mitigation is considered. For Merger projects, the selection of a LEDPA also occurs after the public and other parties have had an opportunity to review and comment on alternatives under consideration. The USACE can only permit the LEDPA. This term refers to the 404(b)(1) Guidelines and not to NEPA. In the Merger Process, the selection of the LEDPA is Concurrence Point 3.

The AASHTO Practitioner's Handbook 14, titled, "Applying the Section 404(B)(1) Guidelines in Transportation Decision Making" provides detailed information about the Guidelines and the LEDPA determination.

Level of Service (LOS)

A qualitative assessment of a road's operating conditions. It is a standard measurement used by transportation officials which reflects the relative ease of traffic flow on a scale of A to F. LOS A is free-flow with no delays while LOS F is rated congested and significant delays.

Logical Termini

Also see Segmentation and Independent Utility.

Logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Please see the <u>FHWA Development of Logical Project Termini</u> guidance for more information.

Long Range Transportation Plan (LRTP)

A plan with a 20-year minimum planning horizon that must be updated every three to five years and is only required for Metropolitan Planning Organizations (MPO). It incorporates all modes of transportation, including transit, bicycle, pedestrian, rail, aviation, ports and ferries. The plan may be viewed as a layering of fiscally constrained plans with each layer equating to a separate, but integrated, mode of transportation.

Major Hydraulic Structures

All bridges over waterbodies are considered major structures. Culverts are considered major structures if they are equal to or larger than a 72-inch pipe or have an opening equal to or greater than 30 square feet. The Merger Team concurs on the major hydraulic structure recommendations at Concurrence Point 2A.

Mass Transit Alternative

A Mass Transit Alternatives may be evaluated during alternatives analysis where applicable. These alternatives include bus or rail passenger service and could include the implementation of express lanes for transit vehicles.

Merger Management Team (MMT)

The Merger Management Team is comprised of representatives from NCDOT, FHWA, USACE, and NCDWR. The MMT will address program-specific questions, participate in the conflict resolution process, review project-specific challenges, and assess issues arising from Merger meetings. Please see the MOU Appendix A: Merger Roles and Responsibilities for more information.

Merger Plan

The Merger Plan is a project-specific plan intended to outline how the Merger Process will be conducted for an individual project; it provides the Merger Team with flexibility to identify the best approach to evaluate a specific project in the Merger Process, rather than to simply meet a schedule. The Merger Plan should be developed after Merger Pre-Screening and updated as needed through the Merger process. Please see the Merger Plan Guidance for more information.

Merger Pre-Meeting

Prior to a scheduled concurrence point, the NCDOT Project Team may host a call or meeting with select members of the Merger Team to solicit any questions/concerns and to confirm assumptions/data prior to the meeting. These pre-meetings should include, at a minimum, NCDOT, FHWA (for federal projects), USACE, and NCDWR. Pre-meetings are required for CP 1 and CP 3 and strongly encouraged for other concurrence points on large or complex projects. Please see the Merger Basics Guidance for more information.

Merger Pre-Screening

NCDOT uses the Merger Pre-Screening process to determine if a project needs a formal Merger screening coordination with the Merger MOU Signatories. There are two possible outcomes of pre-screening: 1) the Merger Process is not recommended for the project; or 2) Merger Screening is

recommended. If NCDOT EPU agrees that Merger Screening is appropriate, then NCDOT EPU will coordinate with the NCDOT Project Manager to determine how to accomplish Merger Screening. Please see the Merger Pre-Screening Guidance for more information.

Merger MOU Signatories

The four agencies (N.C. Department of Transportation; Federal Highway Administration, North Carolina Division; N.C. Department of Environmental Quality; and U.S. Army Corps of Engineers, Wilmington District) identified as primary signatories within the Memorandum of Understanding for the Section 404/NEPA Merger Process. They are the primary decision-making authorities with regards to NEPA and Section 404 permitting, and thus are the owners of the Merger Process and responsible for the successful implementation of the Merger Process, both holistically and project by project. They are also responsible for conflict or dispute resolution under the MOU and guidance contained herein. This term is inclusive of the representatives of the respective agencies throughout the Merger Process (e.g. the FHWA Director of Preconstruction and Environment Engineer/Specialist would represent FHWA on a project team).

Merger Screening

Merger Screening is the formal process where the NCDOT Project Team coordinates with the Merger MOU Signatories to decide if a project should be placed into the Merger Process. The decision to place a project into the Merger Process is made based on an evaluation of available project information with respect to key merger indicators, including CWA Section 404 requirements, proposed project activities, potential conflicting resource impacts, and amount of impacts to Waters of the U.S. and other resources. Merger Screening will occur during or following development of the Project Scoping Report and completion of the Merger Pre-Screening Form. Please see the Merger Screening Guidance for more information.

Merger Screening Meeting

A meeting that is held with the NCDOT Project Team, NCDOT EPU, and the Merger MOU Signatories. At this meeting, the decision to include a project in the Merger Process is then made jointly by NCDOT, FHWA (if involved with the respective project), USACE, and NCDWR.

Metropolitan Planning Organization (MPO)

A regional policy body, required in urbanized areas with populations over 50,000, that is responsible for carrying out the metropolitan planning requirements of federal highway and transit legislation in cooperation with state and other transportation providers; develops transportation plans and programs for the metropolitan area. See the <u>NCDOT MPO directory</u> for MPO contacts in your project area.

Meeting Summary

At the end of each Merger meeting, the Project Manager, will summarize the results of the meeting, including agreements or concurrence points achieved. If agreement or concurrence is not obtained, the next steps or action items will be clearly identified. If additional information or action is required, the type of information or action needed and the responsible agency(ies) or team member(s) will be clearly noted.

Metropolitan Transportation Plan (MTP)

The official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area, in accordance with 23 U.S.C. 134, 23 USC 135 and 49 U.S.C. 5303.

National Environmental Policy Act of 1969 (NEPA)

National Environmental Policy Act of 1969 (NEPA) is an umbrella law that encompasses a wide range of environmental laws. It requires that federal agencies consider environmental consequences in their totality when developing their projects and programs. NEPA ensures agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. Please see <u>23 CFR 771</u> for more information.

Need

See "Purpose and Need" below.

NEPA/SEPA class of action

Three basic "classes of action" are allowed and determine how compliance with NEPA is carried out and documented. An Environmental Impact Statement (EIS) is prepared for projects where it is known that the action will have a significant effect on the environment. An Environmental Assessment (EA) is prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment, a Finding of No Significant Impact (FONSI) is issued. Categorical Exclusions (CEs) are issued for actions that do not individually or cumulatively have a significant effect on the environment.

No-Build (No Action) Alternative

Note that while the term "EIS" is used below, this also applies to EAs.

As noted in *NEPA's Forty Most Asked Questions*, [the implementing regulations] require the alternatives analysis in the EIS to "include the alternative of no action." "No action"...would mean the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward. Where a choice of "no action" by the agency would result in predictable actions by others, this consequence of the "no action" alternative should be included in the analysis. For example, if denial of permission to build a railroad to a facility would lead to construction of a road and increased truck traffic, the EIS should analyze this consequence of the "no action" alternative even if the agency is under a court order or legislative command to act. This analysis provides a benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the action alternatives. It is also an example of a reasonable alternative outside the jurisdiction of the agency which must be analyzed.

Non-concurrence

Non-concurrence implies that the agency or organization does not concur due to insufficient information, or they believe that concurrence would violate the laws and regulations of their program or agency. Please see the <u>Merger MOU</u> for more information.

North Carolina Riparian Buffers

A set of rules within specific watersheds in North Carolina that protect a riparian buffer which is a vegetated area bordering a body of water, such as a stream, lake or pond.

One Federal Decision

Executive Order (E.O.) 13807: Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, was issued on August 15, 2017. It requires Federal agencies to process environmental reviews and authorization decisions for "major infrastructure projects" as One Federal Decision (OFD) and sets a government-wide goal of reducing, to two years, the

average time for each agency to complete the required environmental reviews and authorization decisions for major infrastructure projects, as measured from the date of publication of a notice of intent to prepare an environmental impact statement. Major infrastructure projects are projects requiring an EIS.

Participating Agencies

The Merger Team is comprised of the appropriate MOU Signatories and other agencies that are considered participating agencies. The composition of agencies on each Merger Team varies depending on the subject project's location and scope. This term will be used synonymously with "Merger Team Member." Please see the MOU Appendix A: Merger Roles and Responsibilities for more information.

Practicable Alternative under the Section 404(b)(1) Guidelines (40 CFR Part 230.10(a))

Under the Section 404(b)(1) Guidelines (Guidelines), practicable alternatives include, but are not limited to: 1) Activities which do not involve a discharge of dredged or fill material into the waters of the United State or ocean waters; and, 2) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters.

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 purpose(s). An alternative needs to fail only one practicability factor to be eliminated during the screening process:

• Costs - Cost is analyzed in the context of the overall scope/cost of the project and whether it is unreasonably expensive. This determination is typically made in relation to comparable costs for similar actions in the region or analogous markets. If costs of an alternative are clearly exorbitant compared to those similar actions, and possibly the applicant's proposed action, they can be eliminated without the need to establish a cost threshold for practicability determinations. The data used for any cost must be current with respect to the time of the alternatives analysis. However, just because one alternative cost more than another does not mean that the more expensive alternative is impracticable. It is important to note that in the context of this definition, cost does not include economics. Economic considerations, such as job loss or creation, effects to the local tax base, or other effects a project is anticipated to have on the local economy are not part of the cost analysis;

• Existing Technology - The alternatives examined should consider the limitations of existing technology yet incorporate the most efficient/least-impacting construction methods currently available. For example, alternatives to a proposed highway that occur in unstable or dynamic soils may not be practicable due to a lack of technology to ensure the road will not crumble or collapse. Implementation of state of the art technologies might be available and should be considered if applicable. Engineered retaining walls and cantilevered road ways can also be incorporated into an alternative that substantially minimizes wetland or water impacts by eliminating fill slopes. However, it is recognized that such actions may result in the alternative being determined as impracticable due to costs; and,

• Logistics - The alternatives evaluated may incorporate an examination of various logistics associated with the project, i.e., placement of facilities within a specified distance to major thoroughfares, utilization of existing storage or staging areas, and/or safety concerns that cannot be overcome.

Preliminary Alternatives Impact Table

A table that allows clear comparison of pertinent impacts for each alternative on various human and natural environmental resources. These tables are used in Merger packets, chiefly those for CP 2 and CP 3, as well as environmental documents to evaluate multiple alternatives.

Prioritization

NCDOT has developed a prioritization process to assist the state in determining which projects are added to the State Transportation Improvement Program. Its purpose is to 1) create a formal, documented and visible process, 2) collaborate between NCDOT and stakeholders, 3) rank projects with appropriate perspective (statewide, regional, local), 4) allows for the business case to be made for additional flexibility and funding, and 5) the outcome and data-driven approach is geared towards meeting the goals and objectives.

Project Manager

NCDOT will have a designated Project Manager to oversee the project from the Initiation stage through to construction letting. At any given juncture, they may designate a consultant or another NCDOT staff member to speak on behalf of the project, but there will always be a single NCDOT Project Manager to oversee the project's progress.

Project Scoping Report (PSR)

NCDOT's Project Scoping Report (PSR) provides basic information on the proposed project, environmental features mapping, some alternative concepts or conceptual design, other nearby projects, and a summary of potential impacted resources in the project scoping study area. The PSR may still be in draft format at the time of Merger Pre-screening and Merger Screening. Please see the Merger Pre-Screening Guidance for more information.

Purpose and Need

The purpose and need establishes why the project is proposed and is the foundation used to determine if alternatives meet the established need(s) in the study area. The project team will solicit comments from agencies, stakeholders, and the public on the Purpose and Need. Establishing Purpose and Need is the first concurrence point of the merger process. Please see Concurrence Point 1 Guidance, 40 CFR § 1502.13., "LEDPA", "Evaluation Criteria", and "Section 404(b)(1) Guidelines" for more information.

Project Initiation

The phase of project delivery that includes long range planning, express design development, project prioritization, and project scoping. Please see the Merger Pre-Screening Guidance for more information.

Range of Alternatives (for NEPA)

A noted in *NEPA's Forty Most Asked Questions*, the phrase "range of alternatives" refers to the alternatives discussed in environmental documents. It includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, as well as those other alternatives which are eliminated from detailed study with a brief discussion of the reasons for eliminating them. Section 1502.14. A decisionmaker must not consider alternatives beyond the range of alternatives discussed in the relevant environmental documents. Moreover, a decisionmaker must, in fact, consider all the alternatives discussed in an EIS. Please see <u>40 CFR § 1505.1(e)</u> for more information.

Record of Decision (ROD)

The ROD is the final step in the EIS process and is the lead agency's (normally FHWA) decision that identifies the alternative that has been selected for implementation. The ROD should: (1) state the basis

for the decision, (2) identify all the alternatives considered and specify the "environmentally preferable alternative", and (3) state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted and, if not, why they were not. The ROD may not be issued sooner than 30 days after the approved final EIS is distributed, nor 90 days after the Draft EIS is circulated. After circulation of a draft EIS and consideration of comments received, the lead agencies, in cooperation with the applicant (if not a lead agency), must combine the final EIS and ROD, to the maximum extent practicable. Please see <u>23 CFR §771.124</u> for more information.

For projects where the USACE is the lead federal agency, the ROD serves as the permit decision for the project.

Rural Planning Organization (RPO)

Rural Planning Organizations (RPOs) work cooperatively with the state to plan rural regional transportation systems and to advise the department on rural transportation policy. See the <u>NCDOT RPO</u> <u>directory</u> for RPO contacts in your project area.

SAFETEA-LU

The **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users** (SAFETEA-LU) signed into law on August 10, 2005. This law guaranteed funding for highways, highway safety, and public transportation totaling \$244.1 billion. The **Bipartisan Infrastructure Law** (BIL) was signed into law on November 15, 2021, superseding SAFETEA-LU. The BIL provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure.

Section 6002

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

SAFETEA-LU provides a formal process for resolving serious issues that may delay the project or result in a denial of a required approval for the project. NCDOT or the Governor of North Carolina may invoke the Section 6002 process for issue resolution at any time. While the Section 6002 process is a tool available to States and project sponsors for resolving issues of concern, there are other options that are available to Lead and Participating agencies. Those options include this Implementation Guidance for Conflict or Dispute Resolution, other procedures embodied in a coordination plan, and the CEQ referral process under 40 CFR Part 1504.

Section 404 Clean Water Act (CWA) (33 USC § 1344)

Section 404 Clean Water Act (CWA) (33 USC § 1344) requires authorization from the Secretary of the Army, acting through the USACE, for the discharge of dredged or fill material into all waters of the U.S., including wetlands. Discharges of fill material generally include, without limitation, placement of fill that is necessary for the construction of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for intake and outfall pipes and sub-aqueous utility lines; fill associated with the creation of ponds; and any other work involving the discharge of fill or dredged material. A USACE permit is required whether the work is permanent or temporary. Examples of temporary discharges include dewatering of dredged material prior to final disposal and temporary fills for access roadways, cofferdams, and storage and work areas.

Section 404(b)(1) Guidelines

Also see "Least Environmentally Damaging Practicable Alternative (LEDPA)"

Note that while the term "EIS" is used below, the information also applies to EAs.

The USACE is required to review all permits in accordance with the Section 404(b)(1) Guidelines of the Clean Water Act (40 CFR Part 230). The Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences". 40 CFR 230.10(a).These guidelines require that permits for work in waters of the U.S. (i.e., most wetlands, streams, rivers, lakes, etc.) can be issued only after all appropriate and practicable steps to avoid and minimize impacts have been taken and no permit may be issued for a proposed project if a practicable alternative exists that would have less adverse impact on the aquatic environment (known as the least environmentally damaging practicable alternative the LEDPA), provided that alternative does not have other significant adverse environmental consequences. Practicable alternatives include those alternatives that are "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose."

The requirements of Section 404(b)(1) Guidelines are typically more stringent that those of NEPA because the Guidelines require selection of the least environmentally damaging practicable alternative (i.e., the LEDPA). The USACE's determination of "practicability" under the Guidelines is distinct from the determination of "reasonableness" under NEPA for alternatives. Please see <u>40 CFR § 230</u> for more information.

The AASHTO Practitioner's Handbook 14, titled, "Applying the Section 404(B)(1) Guidelines in Transportation Decision Making" provides detailed information about the Guidelines and the LEDPA determination.

Section 4(f) of the Transportation Efficiency Act of 1966

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits the Federal Highway Administration (FHWA) and other USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and waterfowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use.

Section 6(f) of the Land and Water Conservation Act of 1965

Section 6(f)(3) of the Land and Water Conservation Act of 1965 states that no property acquired or developed with Land and Water Conservation Fund (LWCF) money shall be converted to other than public outdoor recreation uses without the approval of the Secretary of the Interior. If approved, the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location is required.

Section 10 of the Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC § 403) requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure in, under, or over navigable waters of the U.S. Work or structures outside the limits defined for navigable waters of the U.S require a Section 10 permit if the work or structure affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the U.S., and it applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap,

revetment, bulkhead), mooring structure such as a piling, aerial or sub-aqueous power transmission line, intake or outfall pipe, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aid to navigation, and any other permanent or semi-permanent obstacle or obstruction.

Section 106 of the National Historic Preservation Act of 1966

Section 106 National Historic Preservation Act (NHPA) of 1966 (16 USC § 470) requires that the head of any federal agency having direct or indirect jurisdiction over a proposed federal or federally assisted undertaking in any state and the head of any federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The State Historic Preservation Office (SHPO) is responsible for the Section 106 process in North Carolina, with oversight by the Advisory Council on Historic Preservation (ACHP).

Section 401 of the Clean Water Act

Section 401 of the Clean Water Act states that a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States unless a state or authorized tribe where the discharge would originate issues a Section 401 water quality certification verifying compliance with existing water quality requirements or waives the certification requirement. The NCDWR is responsible for the 401 certification program in North Carolina, with oversight by the USEPA.

Section 404 Permits

The Corps of Engineers authorizes impacts to waters of the U.S. for a project by general or standard permit(s).

Standard permits: Individual Permits (IPs) are a type of standard permit. IPs are required for projects that would have more than minimal effects, both individually and cumulatively, to the aquatic environment. Once an application for an IP is reviewed, the USACE will advertise it by public notice. To evaluate a project under an IP, the particular project will be processed in accordance with the USACE's implementing regulations (33 CFR Parts 320-332), which includes a Public Interest Review, and will be subject to a project-specific 404(b)(1) Guidelines analysis (40 CFR Part 230). Most Merger projects will be IP level projects, with the exception of RGP 31 projects (note that the Corps will determine if RGP 31 will be used (vs. and IP) after completion of the Merger Process).

General permits: Nationwide Permits (NWPs) and Regional General Permits (RGPs) are types of general permits. These permits are reserved for projects that would have no more than minimal effects, both individually and cumulatively, to the aquatic environment. NWPs are issued for use nationwide. In North Carolina, RGPs are issued by the USACE, Wilmington District, for use statewide, or for particular areas in the State. All NWPs and RGPs must be issued for use every five years. When an applicant wishes to obtain authorization under a particular NWP or RGP, they must review the requirements to determine if (1) their project does or does not require submission of a pre-construction notification (PCN) to the USACE, or (2) submit a PCN to the USACE to obtain written verification from the USACE before proceeding. If a PCN is required, the USACE will review the project and will (1) issue a NWP or RGP verification letter (authorization) for that project, or (2) notify the applicant that the project will be elevated to an IP (note that this is not typical).

For those projects that are non-notifying projects under a particular NWP or RPG, the permittee is still conducting the work in waters of the U.S. a permit (e.g., the applicable NWP or RGP) and must comply with all terms and applicable general and regional conditions (for NWPs) and all terms and applicable special and general conditions (for RGPs).

Segmentation

Also see Independent Utility and Logical Termini.

Illegal segmentation is when an agency artificially divides a major federal action into smaller components to avoid application of NEPA to some of its segments/parts. Segmentation will not occur if a project:

- (1) Has logical termini;
- (2) Has independent utility;
- (3) Does not restrict the consideration of alternatives for other transportation projects; and
- (4) Does not irretrievably commit federal funds for closely related projects.

If a proposed project does not meet those criteria, it may be unlawfully segmented. After completion of the NEPA decision documents, projects may be divided into phases during construction to account for funding availability, contracting, constructability, etc.

Slope stake limits

Slope stake limits determine the point at which the proposed slope of a roadway intersects the existing ground, which define the construction limits. These limits are used to calculate environmental impacts with a specified buffer.

North Carolina Environmental Policy Act (SEPA)

The North Carolina Environmental Policy Act of 1971 (SEPA) requires state agencies to review and report the environmental effects of all activities that: 1) involve a state action, 2) involve an expenditure of public money or private use of public land, and 3) have a potential environmental effect. This may include some local government projects. If SEPA applies, the state agency involved must process an environmental document through the State Clearinghouse under the North Carolina Department of Administration before a permit, license, grant, or other state authority can be completed. See North Carolina Policy Act § 113A-1.

State Transportation Improvement Program (STIP)

The STIP is a multi-year capital improvement document which denotes the scheduling and funding of construction projects across the state over a minimum 4-year time period as required by Federal law. North Carolina's STIP covers a 10-year period, with the first six years referred to as the delivery STIP and the latter four years as the developmental STIP. North Carolina's STIP is generally updated every two years and developed in concert with federal and state revenue forecasts.

Project Study Area

The area in which alternatives are developed to meet the Purpose and Need for the proposed improvement and the boundary in which potential effects are most likely to occur. The boundary of a study area should be large enough that it covers reasonable alternatives, but not so large that NCDOT expends resource (time and budget) on resources that will not be affected by the project. Project study area is determined at CP 1, but can be amended later, if necessary.

Transportation Demand Management Alternative (TDM)

TDM is a term given to a variety of measures used to improve the efficiency of the existing transportation system. TDM addresses traffic congestion by reducing travel demand for the existing transportation system rather than increasing transportation capacity and focuses on alternatives such as ridesharing, flexible work schedules, telecommuting, guaranteed ride programs, bicycling, walking, and transit.

Transportation System Management Alternative (TSM)

TSM alternatives may be evaluated in alternatives analysis where applicable. TSM measures focus on operational improvements that aim at minimizing inefficient travel and include, but are not limited to optimizing traffic signal timing, signal coordination, ramp metering, speed restrictions, access control, special events management strategies, incident management, and turn prohibitions. TSM operational measures usually can be implemented easily and require little capital investment, relative to build alternatives. TSM physical improvements include such measures as grade separations, adding turning lanes, intersection realignments, or installing new traffic signals.

U.S. Coast Guard Permit

Section 9 of the Rivers and Harbors Act of 1899 and the General Bridge Act of 1946 gives the U.S. Coast Guard the authority to protect navigable waters of the United States. Navigable waters are those waters that at some time, in the past, present, or future are used to transport interstate or foreign commerce.

Waters of the US

"Waters of the United States" is a threshold term in the Clean Water Act and establishes the scope of federal jurisdiction under the Act. Clean Water Act programs, including Water Quality Standards, TMDLs, and sections 311, 402, and 404 address "navigable waters," defined in the statute as "the waters of the United States, including the territorial seas." On June 9, 2021, EPA and Department of the Army announced their intent to initiate a new rulemaking process that restores the protections in place prior to the 2015 WOTUS implementation and develops a new rule to establish a durable definition of "waters of the United States." Please see the EPA Waters of the United States guidance for more information.

WEX/WET file

A WEX file is a CAD file created for a Natural Resources Technical Report (NRTR) that shows the potentially jurisdictional waterbodies within a project study area. The WEX file is finalized into a WET file once the waterbodies in a project study area are determined jurisdictional in a Preliminary Jurisdictional Determination (PJD) or an Approved Jurisdictional Determination (AJD) by the US Army Corps of Engineers (USACE).