Project Name | Project #   
**PIN # | Location**

# Executive Summary/Project Description

*[Insert brief executive summary/project description, including major project work components]*

# Contract Information

*Fill in contract details. Add rows as needed and delete unused rows. Delete instructions when complete.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| [Enter Prime Consultant Name] | | | | | |
| **Contract #:** Enter | **Contract Type:** Choose an item. | **Payment Type:** Choose an item. | **Overhead:** Enter % | **Fee:**  Enter % |
| [Enter Subconsultant Name – if applicable; add more rows as needed] | | | | | |
| **Contract #:** Enter | **Contract Type:** Choose an item. | **Payment Type:** Choose an item. | **Overhead:** Enter % | **Fee:** Enter % |

# Project Information

*Fill in project information. Delete instructions when complete.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project Information | | | | | | | | |
| **Contract Letting Date:** Enter Date | | | | | | | | |
| **Region:** Enter # | | **Route:** Enter # | | | **County:** Enter County | | **City:** Enter City | |
| **Project Limits (log mile):** Enter Limits | | | | | | **Length (miles):** Enter # Miles | | |
| **Concept Estimate:** | | | | **Funding Source:**  Federal  State  Other: Explain | | **Document Type:**  CE  EA/FONSI  EIS/ROD  TEER  Other | | **Delivery Type:**  Design/Bid/Build  Design Build  CMCG (Construction Manager/General Contractor)  Other |
| ROW: | Enter ROW$ | | Enter Date |
| Enter Creator |
| Construction: | Enter Const$ | | Enter Date |
| Enter Creator |
| Utilities: | Enter Utilities$ | | Enter Date |
| Enter Creator |
| **Base Year:** Enter | | | | **Design Year:** Enter | | **Number of Build Alternatives:** Enter # | | |
| **Description of Build Alternatives:** Enter Brief Description | | | | | | | | |
| **AADT:** Enter # | | | | | | **Design Hour Vol.:** Enter # | | |
| **Design Speed:** Enter # | | | | | | **Posted Speed:** Enter # | | |
| **Functional Class:** Enter Tier | | | | | | **Terrain:** Enter Terrain | | |
| **Design Standard:** Enter Applicable Standard | | | | | | **Standard Drawings Used:** Enter #’s | | |
| **Bicycle Route:** Choose an item. | | | | | | **Sidewalk:** Choose an item. | | |
| **Railroad Involvement:** Choose an item. | | | | | | **Utility Impact:** Choose an item. | | |
| **Bridges:** Enter # Bridges | | | | | | **Major Drainage Structures/Crossing:** Enter # | | |

# Project Goals and Commitments

*Fill in project goals and commitments. Delete instructions when complete.*

# Detailed Scope of Work

# 1AT1 | Conduct Active Transportation Review

## Objective:

Conduct an active transportation review to ensure compliance with the *TDOT Multimodal Access Policy*, *Multimodal Scoping Manual*, *Multimodal Design Guidelines*, and Standard Drawings and to coordinate existing and planned state and local active transportation projects

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Conduct Active Transportation Review   * Receive initial project information and review request from Engineering Concepts Lead. * Review the information provided and request additional information, if needed. * Determine if the project is within a priority corridor. * Identify any overlapping or nearby TDOT active transportation or multimodal projects. * Identify any overlapping or nearby local agency active transportation or multimodal projects. * Identify opportunities for active transportation accommodations and collaboration with other existing state and local multimodal projects. * Provide comments using the Concept Comment Resolution Form. |
| Attend Site Visit   * Attend site visit for projects where recommendations have been identified or anticipated. * Review the site visit packet to prepare for the site visit. |
| Review the Concept Report   * Provide review comments on the Concept Report. * Upload completed forms to the project folder and notify the Engineering Concepts Lead. |
| Develop Considerations and Recommendations   * Develop Draft Multimodal Considerations & Recommendations and discuss with project team. * Develop/coordinate Final Multimodal Considerations & Recommendations to be included in the conceptual layout and Concept Report. * Upload the Draft and Final Multimodal Considerations & Recommendations to the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EC1 | Initiate Concept Evaluations

## Objective:

Initiate development of the Concept Report. Once traffic and safety data are finalized, initiate coordination with assigned Division staff to gather information and kick off project-specific reviews to inform the subsequent Site Visit.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Request Safety Data   * Develop a map of the project location. * Submit a request to complete an initial safety evaluation. * Review the crash information to inform potential conceptual layout(s) and estimate(s). |
| Coordinate with Planning Division   * Request past studies, reports, and plans within the project area. * Initiate coordination with local officials and/or interested regional agencies (RPO/MPO). |
| Request Traffic Data   * Develop a map of the project location, .kmz files, or any additional files. * Submit the data request to the Traffic Data Lead with a direct link to a project file location. |
| Initiate Division Reviews   * Determine which Divisions to coordinate with based on project needs and anticipated scope. * Email involved divisions to:   + Inform them of the conceptual layout, initial estimate, and draft Concept Report.   + Request any past studies, reports, or plans within the project area. * Direct the project team to the project folder. * Confirm all studies, comments, reports, and/or plans are within the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EC2 | Develop the Conceptual Layout and Complete Site Visit

## Objective:

Develop the conceptual layout(s), estimate(s), and complete the site visit.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop Draft Conceptual Layouts and Estimates for the Site Visit   * Develop the conceptual layout(s). * Develop a horizontal layout to identify and initially evaluate potential impacts and risks. * Provide an advanced/early draft of the conceptual layout to the Regional ROW Manager if the project may require right-of-way acquisition. |
| Compile Initial Divisional Reviews for Site Visit   * Coordinate any findings and/or recommendations from the Divisional reviews. * Summarize the initial Divisional reviews in Word format. |
| Prepare Site Visit Packet and Participate in Site Visit   * Create a site visit packet. * Develop a summary sheet, outlining the project information and potential improvements. * Coordinate the site visit date and distribute the packet. * Attend the site visit and introduce the project. * Draft meeting minutes from the site visit and distribute to attendees. |
| Initiate IAR/SOAR Concept Coordination with FHWA   * Initiate early coordination with FHWA when a project requires an IAR or SOAR. * Draft the Framework document in accordance with the related SOP. * Review the document(s) prior to submittal to FHWA. * Continually update FHWA on status of the concept. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EC3 | Develop and Finalize the Concept Report

## Objective:

Draft, review, and finalize the Concept Report and associated deliverables.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop, Compile, and Distribute the Draft Concept Report   * Comple the required actions/information on the Concept Report Template to develop the draft. * Confirm termini. * Distribute the document via a file share link to internal and external reviewers. * Compile all comments received and revise based on comments. |
| Develop Environmental Technical Study Area (ETSA)   * Develops the ETSA boundary figures (include in the draft Concept Report). * Complete a QC check of the ETSA layout(s). * Resolve any comments received and finalize the ETSA. |
| Finalize the Conceptual Layout   * Resolve major concerns that pertain to potential scope changes. * Finalize the Conceptual Layout. |
| Address Comments and Finalize the Concept Report   * Resolve the noted comments and incorporate agreed-upon changes into the report. * Compile the final report. * Complete the required actions on the Action Checklist. |
| Request for Concept Report Signature(s) and Distribution   * Submit the final Concept Report for review and signature. * File the executed, final Concept Report in the project folder, updating the status by inserting the distribution date, uploading the document, and marking the document complete in the project management software. * Upload all documents to the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EC4 | Complete an Interstate Access Request (IAR) or Safety and Operational Analysis Report (SOAR)

## Objective:

Complete an IAR or SOAR for any proposed new interstate interchange or for any proposed modification to the type or configuration of an existing interchange based on the Framework Document developed in 1EC2.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Obtain IAR Approval   * Compile required information to develop an IAR summary packet. * Invite FHWA to attend a Site Visit and present the packet’s materials and findings at the Site Visit (Schedule an additional review meeting with FHWA if needed). * Complete all additional documentation. * Submit the draft IAR and supporting information to FHWA. * Submit the final IAR to FHWA for approval in accordance with the applicable SOP. * File all related correspondence, FHWA approval letter, and the IAR documentation in the project folder. |
| Obtain SOAR Concurrence   * Complete all necessary SOAR documentation and schedule an additional review meeting with FHWA if needed. * Submit the draft SOAR and supporting information to FHWA. * Submit the final SOAR to FHWA for approval in accordance with the applicable SOP. * File all related correspondence, FHWA concurrence email, and the SOAR documentation in the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EN1 | Complete Environmental Desktop Review

## Objective:

Identify known environmental resources and coordinate with Engineering Concepts and the project team to inform the design/alignment of a proposed project to avoid or minimize serious environmental limitations.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Identify Known Environmental Resource Information   * Identify and communicate known resource information to the project team, via the Environmental Desktop Review Form, * Review the project location map, draft purpose and need, or reason for the project. * Input information about the identified resources into the form, returning the Environmental Desktop Review and/or provide comments. * Upload completed forms to the project folder and notify the Engineering Concepts Lead. |
| Attend Site Visit   * Review the site visit packet and attend the site visit. * Establish the scope of the environmental studies based on findings from site visit. |
| Review Concept Report   * Provide review comments on the draft Concept Report. * Upload a completed Concept Comment Resolution Form to the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1EN2 | Complete Environmental Resource Identification

## Objective:

Investigate the Environmental Technical Study Area (ETSA) to locate, identify, describe, and document environmental resources, including initiating coordination of resource findings with appropriate regulatory agencies and assisting in development of the concept design or Line and Grade Package to avoid or minimize environmental impacts.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Identify Historic Property Boundary(ies) and Initiate Agency Coordination   * Conduct necessary field work to identify National Register-listed or eligible above-ground resources within the ETSA. * Identify historic property boundaries and provide location details to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft an Environmental Boundaries Report and Section 106 Identification Study (respond to comments and finalize as needed). * Initiate coordination with the State Historic Preservation Officer (TN-SHPO) (TDOT Environmental staff only). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to potentially eligible site(s) when developing the Line and Grade Package. |
| Identify Boundary(ies) for Potentially Eligible Archaeology Sites and Initiate Agency Coordination   * Conduct necessary field work to identify eligible archaeology sites/resources within the ETSA. * Identify site boundaries and provide location details to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft an Environmental Boundaries Report and Section 106 Phase One Identification Study (respond to comments and finalize as needed). * Initiate coordination with the State Historic Preservation Officer (TN-SHPO) (TDOT Environmental staff only). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to potentially eligible site(s) when developing the Line and Grade Package. |
| Conduct Native American Coordination to Identify Consulting Parties   * Draft an Early Coordination Packet (respond to comments and finalize as needed). * Develop and send correspondence with federally recognized Native American Tribes. |
| Identify Ecology Site Boundaries   * Conduct necessary field work to identify water, species, and habitat resource feature boundaries within the ETSA. * Identify site boundaries and provide shapefile (or other location details) to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft the Environmental Boundaries Report (EBR) (respond to comments and finalize as needed). * Initiate coordination with all state and federal regulatory agencies (TDOT Environmental staff only). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to potentially eligible site(s) when developing the Line and Grade Package. |
| Establish Air Quality Designation   * Complete appropriate level of review. * Complete the needed Stage 1 Air Quality documentation (respond to comments and finalize as needed). |
| Identify Potential Noise Receptor Locations   * Conduct necessary field work/level of review to identify potential noise-sensitive receivers/receptors within the ETSA. * Identify receiver/receptor and provide location details to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft the Environmental Boundaries Report (EBR) (respond to comments and finalize as needed). * Develop the noise model (likely completed under 2EN1). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to potentially receiver(s)/receptor(s) when developing the Line and Grade Package. |
| Identify Potential Hazardous Materials Sites   * Complete appropriate level of Hazardous Materials review withing the ETSA, based on information available, and conduct any Environmental Site Assessments or other studies, as required. * Identify site boundaries and provide location details to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft the Environmental Boundaries Report (EBR) (respond to comments and finalize as needed). * Initiate coordination with all state and federal regulatory agencies (TDOT Environmental staff only). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to site(s) when developing the Line and Grade Package. |
| Identify Section 4(f) and Section 6(f) Resources   * Conduct necessary field work to identify potential Section 4(f) and/or Section 6(f) resources within the ETSA. * Identify site boundaries and provide location details to the Roadway Design Lead/Engineer for inclusion in the Line and Grade Package. * Draft the Environmental Boundaries Report (EBR) (respond to comments and finalize as needed). * Initiate coordination with all state and federal regulatory agencies (TDOT Environmental staff only). * Coordinate with the Roadway Design Lead and/or Structural Design Lead to strategize efforts to avoid or minimize impacts to site(s) when developing the Line and Grade Package. |
| ***Analyze the CSRP/Determine the NEPA Class of Action***   * Reviews the CSRP and technical studies impact analyses to inform the NEPA class of action. * Determine NEPA Class of Action and report to the team as part of 1PM5. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2EN1 | Complete Environmental Resource Effects/Impacts Studies

## Objective:

Ensure compliance with all relevant federal and state environmental laws and regulations via technical studies that document impacts to each environmental resource type as identified within the Environmental Technical Study Area (ETSA) and the immediate vicinity.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Necessary Resource Effect/Impact Evaluations   * Complete or request other required resource impact evaluations. * Finalize all needed memos for inclusion with the Environmental Document. * Coordinate inclusion of the Study and related information in the Environmental Document. |
| Complete Historic Preservation Effects Study   * Draft and finalize (based on comments received) the Section 106 Effects Assessment and Memorandum of Agreement. * Continue coordination with the State Historic Preservation Officer (TN-SHPO) (TDOT Environmental staff only). * Coordinate inclusion of the Study and related information in the Environmental Document. |
| Complete Phase Two Archaeological Eligibility Study   * Draft and finalize (based on comments received) a Phase Two Archaeological Eligibility Study. * Continue coordination with the State Historic Preservation Officer (TN-SHPO) (TDOT Environmental staff only). * Coordinate inclusion of the Study and related information in the Environmental Document. |
| Complete Air Quality Impact Study   * Draft and finalize (based on comments received) the Air Quality Impact Study (respond to comments and finalize as needed). * Coordinate inclusion of the Study and related information in the Environmental Document. |
| Finalize Noise Abatement Study   * Develop the noise model. * Complete a Noise Abatement Study to determine if noise barriers are needed, feasible, and reasonable. * Coordinate inclusion of the Study details and related information in the Environmental Document. * Coordinate with the Roadway and Structural Design Lead on placement of any proposed noise barriers on the Functional Design Plans prior to the field review. |
| Complete Ecology Environmental Boundaries Report   * Update the Environmental Boundaries Report (EBR) (as needed). * Continue coordination with all state and federal regulatory agencies (TDOT Environmental staff only). * Coordinate inclusion of the Study and related information in the Environmental Document. |
| Complete Hazardous Materials Study   * Conduct any additional Environmental Site Assessments or other studies as required. * Review the Line and Grade Package or the Functional Design Plans to identify impacts. * Complete any updates to the Environmental Boundary Report (EBR) that identify impacts to hazardous materials within the ETSA. * Coordinate with all state and federal regulatory agencies for concurrence on the impacted features within the ETSA. Note: Only TDOT Environmental staff can complete this step. * Communicate any future remediation activities (e.g., asbestos abatement, removal, or closure of Underground Storage Tanks (USTs), etc.). |
| Confirm Multimodal Compliance Determination   * Review the Final Multimodal Considerations and Recommendations (request re-validation from the Multimodal Lead if needed). * Coordinate inclusion of the related information in the Environmental Document. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2EN2 | Complete Environmental Documentation

## Objective:

Complete a categorical exclusion (CE) (C-list, PCE, or D-list), environmental assessment (EA), or Tennessee Environmental Evaluation Report (TEER) to document the environmental decision.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Review/Finalize Purpose and Need Statement   * Review the purpose and need statement. * Coordinate inclusion of the related information in the Environmental Document. |
| Complete Environmental Document   * Coordinate needed work with the lead and supporting agencies. * Draft and finalize (based on comments received) the Environmental Document. * Provide necessary public outreach and noticing efforts to support publication. * Coordinate inclusion of all studies and related information in the Environmental Document. |
| *Additional Considerations for Environmental Assessments (EAs)*   * *Submit the administrative draft of the EA for TDOT Civil Rights and FHWA’s review.* * *Issue a notice of availability (NOA) to review the draft EA.* * *Select the preferred alternative (or elect to proceed with the proposed action when only a no-build and build alternative have been evaluated).* * *Prepare the FONSI.* * *Submit a draft of the FONSI to FHWA along with a copy of the public hearing transcript and a request that a finding of no significant impact be made.* * *Distribute the FONSI to all external participating agencies.* |
| Receive Approval   * Review and approve the NEPA Document or TEER or coordinates the approval of the NEPA Document with FHWA. * Distribute the document approval to the team and save in the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2EN3 | Conduct Permit Assessment

## Objective:

Complete a permit assessment referencing the environmental features/boundaries detailed in the Environmental Boundaries Report (EBR) as depicted on the Line and Grade Package or Functional Design Plans. Use the assessment to coordinate design options and permit sketches to support developing and submitting a project’s permit applications.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Conduct Permit Assessment   * Review the Ecological (and other appropriate) Environmental Boundaries Report, current version of the Utility Coordination Plans (if available), and Line and Grade Package or Functional Design Plans (which must include the boundaries of the identified ecological features). * Complete the Permit Assessment. (And document if there are no proposed impacts to stream or wetland areas in the EBR.)   OR   * Review impacts to environmental features (streams and wetlands). Based on the impacts, identify the types of environmental permits required. * Redline plans to identify required changes. * Coordinate with the Roadway Design Lead on all required design revisions/redlines to ensure the plans meet regulatory requirements for avoidance and minimization. * Identify the need for permit sketches and the location where permit sketches are required. * Determine requirements for on-site mitigation or natural channel designs (see 2EN4 and 3EN1 for related information). * Complete the Permit Assessment (if impacts to streams and wetlands are identified). |
| Finalize Plans and Sketch Review and Prepare Permittable Plans Package   * Continue coordination with the Roadway Design Lead on all required design revisions/redlines to ensure the plans meet regulatory requirements for avoidance and minimization. * Finalize permit sketches. * Prepare permittable plans package and revise (as needed) based on comments received. |
| Evaluate Permittable Plans Package   * Submit the permittable plans package to Headquarters Permitting for review. |
| Review EPSC Plans in the Functional Design Plans   * Review the Functional Design Plans and ESPC plans for accuracy. * Submit and coordinate comments with the Roadway Design Lead and applicable Roadway Engineer. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2EN4 | Conduct Mitigation Assessment & Initiate Mitigation Design

## Objective:

Assess mitigation to offset identified and unavoidable stream and wetland impacts from the project in Stage 2. Initiate the mitigation design to offset and generate mitigation credits required for the “transportation project,” as opposed to an off-site mitigation project (delineated throughout this section).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Mitigation Assessment   * Review the Ecological (and other appropriate) Environmental Boundaries Report, and Line and Grade Package or early Functional Design Plans (which must include the boundaries of the identified ecological features). * Complete the Mitigation Assessment. (And document if there are no proposed impacts to stream or wetland areas in the EBR.)   OR   * Identify stream and wetland areas requiring mitigation. * Identify Mitigation Bank or In-Lieu Fee credits, where available. * Identify potential locations on or adjacent to the transportation project (Mitigation Bank or In-Lieu Fee credits are not available). |
| Develop Preliminary Mitigation Plan   * Review current Roadway and Utility Coordination Plans. * Develop plans for the proposed on-site mitigation area(s). * Develop off-site mitigation project, which could be required as a separate set of mitigation plans (if required under the Mitigation Assessment). * Coordinate inclusion of plans in the Functional Design Plans. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3EN1 |Finalize Stream & Wetland Mitigation Design

## Objective:

Finalize mitigation design to offset and generate mitigation credits required for the transportation project as soon as feasible, but no later than Stage 3.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Finalize Mitigation Plans   * Review current Roadway and Utility Coordination Plans. * Finalize plans for the proposed on-site mitigation area(s). * Finalize off-site mitigation project, which could be required as a separate set of mitigation plans (if required under the Mitigation Assessment). * Coordinate inclusion of plans in the Plan-in-Hand Plans. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3EN2 |Complete and Obtain Aquatic Permit

## Objective:

Complete and submit the necessary aquatic permit application(s). Obtain all permit(s), review the conditions, and distribute the permit(s) required to construct the projects.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Aquatic Permit Application (for the Roadway Project)   * Determine the environmental impact details requiring a permit(s) and draft the permit application. * Gather/finalize all supporting documentation for the application. * Submit the draft application internally and revise (as needed) based on comments received. * Submit the draft application to the regulatory agencies and revise (as needed) based on comments received. |
| Obtain Aquatic Resource Permits   * Coordinate (as needed) with the regulatory agencies to secure the permit approval. * Review the conditions and wording for accuracy. * Distribute permit(s) to the team. |
| Modify or Complete Aquatic Permit Application (for Utility Relocation Impacts)   * Identify environmental features and potential areas not to be used for utility relocations in the Utility Coordination Plans. * Support the Utility Coordination Lead in meetings and discussions with the Utility Owners. * Evaluate schedule risk for either modifying the existing permit application or preparing and submitting a new application to address utility relocation impacts. * Modify and resubmit the permit application (as needed) to document utility relocation impacts. |
| Obtain Aquatic Resource Permits (for utilities)   * Coordinate (as needed) with the regulatory agencies to secure the permit approval. * Review the conditions and wording for accuracy. * Distribute permit(s) to the team. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4EN1 | Complete and Obtain Stormwater Permit

## Objective:

Complete and submit the necessary stormwater permit application(s). Obtain permit(s), review the conditions, and distribute the permit(s) required to construct the projects.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Stormwater Permit Application   * Develop the Stormwater Application, including the SWPPP and documentation. * Apply for Construction General Permit (CGP) coverage. * Submit the draft applications to the regulatory agencies and revise (as needed) based on comments received. |
| Obtain NPDES Coverage   * Coordinate (as needed) with the regulatory agencies to secure the permit approval. * Review the conditions and wording for accuracy. * Distribute permit(s) to the team. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1GT1 |Conduct Preliminary Geotechnical Assessment

## Objective:

Complete a high-level review of the project for potential/major geotechnical risks or mitigation opportunities in the project area.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Geotechnical Division Review   * Complete a high-level review of the project (e.g. Google street view) for potential/major geotechnical risks or mitigation opportunities in the project area. * Provide comments using the Concept Comment Resolution Form. |
| Attend Site Visit   * Review the site visit packet to determine if geotechnical staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify Engineering Concepts Lead via email. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1GT2 |Develop Geotechnical Work Plan

## Objective:

Develop a geotechnical work plan based on field reconnaissance, study of geologic maps, and possible limited subsurface investigations.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Gather Relevant Geotechnical Information   * Collect/evaluate relevant project information. |
| Conduct Initial Field Visit (if needed)   * Coordinate with Operations and Maintenance staff to discuss maintenance history and existing conditions. * Determine site-specific seismic or liquefaction potential. * Determine where certain geotechnical subsurface locations may conflict with utilities. |
| Identify Project Type and Potential Mitigation Strategies   * Develop a preliminary strategy to mitigate identified issues/risks. * Develop preliminary costs to implement mitigations. |
| Develop Geotechnical Work Plan   * Draft the Geotechnical Work Plan (including responding to comments on the draft). * Finalize the Geotechnical Work Plan and send to survey, if needed. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2GT1 |Complete the Soils and Geology Report

## Objective:

Complete a Soils and Geology Report, including site exploration, laboratory testing, engineering analysis, and recommendations. Additionally, develop Geotechnical Sheets (G-sheets) and supporting geotechnical addenda for the Functional Design Plans.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Conduct Site Exploration for Soils and Geology Report (may be combined with 2GT2 exploration)   * Make the TN One Call and document feedback. * Coordinate with TDOT Maintenance for required traffic control and ensure equipment is ready to mobilize to project site. * Mobilize crew * Conduct the workplan’s drilling, sampling, and geophysical testing for the site. * Add additional steps specific to the drilling and documentation process here. |
| Select the Appropriate Laboratory Testing Program   * Determine the appropriate test methods. |
| Develop the Soils and Geology Report   * Provide samples to GeoServices for lab testing and ensure necessary lab work is completed to process results. * Create boring logs and develop necessary report details. * Draft the Soils and Geology Report (including responding to comments on the draft). * Finalize the Report, including uploading final product to the project folder. |
| Develop Associated Geotechnical Sheet (G-Sheets)   * Develop the Geotechnical Sheets (G-Sheets). * Send preliminary slope recommendations to Roadway Design Lead. * Coordinate inclusion of the G-Sheets in the Functional Design Plans and Plan-in-Hand Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Develop Supporting Project Addenda   * Develop (as needed) any project addenda to address additional issues or scope change. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2GT2 |Complete Foundation Reports

## Objective:

Prepare foundations reports early in Stage 3 for required bridge foundations, retaining walls, noise walls, and foundations for high-mast lighting, standard lighting, signing, and signal structures. Advanced the geotechnical design and draft the geotechnical special provisions to include with the Plan-in-Hand Plans finalized in Stage 4.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Conduct Site Exploration (for Foundation Reports; may be combined with 2GT1 exploration)   * Make the TN One Call and document feedback. * Coordinate with TDOT Maintenance for required traffic control and ensure equipment is ready to mobilize to project site. * Mobilize crew * Conduct the workplan’s drilling, sampling, and geophysical testing for the site for proposed retaining wall(s). * Conduct the workplan’s drilling, sampling, and geophysical testing for the site for proposed noise wall(s). * Conduct the workplan’s drilling, sampling, and geophysical testing for the site for proposed signs, signals, and lighting. * Conduct the workplan’s drilling, sampling, and geophysical testing for the site for proposed bridges (hydraulic and non-hydraulic). * Attend the X field review meetings (list and count hours in the meeting list above). * Add additional steps specific to the drilling and documentation process here. |
| Complete and Submit Foundation Report for Retaining Wall(s)   * Provide samples to GeoServices for lab testing and ensure necessary lab work is completed to process results. * Create boring logs and develop necessary report details. * Draft the Report (including responding to comments on the draft). * Finalize the Report, including uploading final product to the project folder. * Develop associated foundation R-sheets in .dgn format, including uploading final product to the project folder. |
| Complete and Submit Foundation Report for Noise Wall(s)   * Provide samples to GeoServices for lab testing and ensure necessary lab work is completed to process results. * Create boring logs and develop necessary report details. * Draft the Report (including responding to comments on the draft). * Finalize the Report, including uploading final product to the project folder. * Develop associated foundation detail sheets in .dgn format, including uploading final product to the project folder. |
| Complete and Submit Foundation Report for Signs, Lighting, Signals, ITS, and High-Mast Lighting   * Provide samples to GeoServices for lab testing and ensure necessary lab work is completed to process results. * Create boring logs and develop necessary report details. * Draft the Report (including responding to comments on the draft). * Finalize the Report, including uploading final product to the project folder. * Develop associated foundation detail sheets in .dgn format, including uploading final product to the project folder. |
| Complete and Submit Foundation Report for Bridges   * Complete necessary lab work to process results. * Create boring logs and develop necessary report details. * Draft the Report (including responding to comments on the draft). * Finalize the Report, including uploading final product to the project folder. * Revise associated foundation detail sheets in .dgn format, including uploading final product to the project folder. * Draft Geotechnical Special Provisions, including uploading draft product to the project folder. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4GT1 |Finalize Geotechnical Plans

## Objective:

Compile the final Geotechnical Design Documents with any other required documentation to assist the Roadway Design Lead in compiling the Construction Documents needed to advertise and let the project.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Finalize Geotechnical Design Documents   * Review comments from the Plan-in-Hand Field Review and address necessary design revisions and plan updates. * Prepare the plans for the PS&E Review Meeting, submitting plans for inclusion with the other design plans for review. * Attend the review meeting (list and count hours in the meeting list above). * Assemble the final Geotechnical Design Documents and reports for letting. * Sign and submit sealed plans and CADD files to the Roadway Design Lead for inclusion with the Construction Documents. |
| Finalize Geotechnical Special Provisions for Letting   * Finalize Geotechnical Special Provisions and submit to the Roadway Design Lead for inclusion with the Construction Documents. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1PM1 |Set Up Project

## Objective:

Confirm project details and assignment and begin project setup. Assess the reliability of the data used to develop project planning documents (e.g., Concept Report), consider the amount of time since collection and/or the limitations of the data, account for and resolve ambiguities.

Collaborate with the discipline managers and technical leads to develop preliminary project management documents and define expectations for how the project team manages risk, communicates as a team, and delivers quality.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Verify Project Funding, Project Number, PIN, and Task Profile Numbers   * Request the TX number using the Task Profile Form. * Request authorization to use PE-N funds. * Notify the project team members of the project information (including project number, PINs and other details). |
| Confirm Project Assignment (TDOT staff only) |
| Request Shared Project Folder (TDOT staff only) |
| Prepare Draft Project Scope   * Collect and review available project information. * Determine project delivery method (e.g., design-bid-build/DBB). * Establish stakeholder communications protocols and draft agreements. * Develop a draft scope for the project. |
| Prepare Preliminary Schedule   * Develop a draft project schedule. |
| Validate Preliminary Budget   * Validate the estimate in the Concept Report and update the estimate with new project details. * Confirm the project is approved within the current Statewide Transportation Improvement Program (STIP) or Transportation Improvement Program (TIP), as appropriate. * Confirm the funding sources, type, and programmed amounts for the project are adequate for the fiscal year. * Develop a preliminary budget. |
| Prepare Draft Project Quality Management Plan   * Clarify expectations with discipline managers and technical leads early and discuss any quality issues that may impact the project. * Develop a draft quality management plan. * Define roles and responsibilities for critical quality tasks. |
| Prepare Draft Risk Management Plan   * Clarify expectations with discipline managers and technical leads early and discuss any risks that may impact the project. * Develop a draft risk management plan and register (to be updated as noted in the plan). |
| Prepare Draft Project Communication Plan   * Identify the communication needs and expectations of the project team. * Develop a draft Project Communication Plan. |
| Prepare Draft Project Commitment Document (PCD) (TDOT staff only)   * Develop a draft Project Commitment Document (PCD). |
| Request and Obtain Authorization of Funds (Incidentals) (TDOT staff only)   * Request ROW and Utility Incidental funding. * Request Railroad Preliminary Engineering funding. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1PM2 |Build Project Team

## Objective:

Identify project team needs, understand the roles required to deliver the project, and allow enough lead time to secure the necessary resources.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Identify Project Team Resources (TDOT staff only) |
| Build Project Team (TDOT staff only)   * Create project team contact list. |
| Determine Type of Consultant(s) and Contract(s) Required (TDOT staff only) |
| Obtain Consultant(s) (TDOT staff only) |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1PM3 |Hold Kickoff Meeting

## Objective:

Organize, lead, and facilitate the Kickoff Meeting with the project team and external stakeholders as needed. This meeting may also entail a Site Visit informed by Engineering Concepts.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., the Project Management Plan, project mapping, preliminary concept designs, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. |
| Hold Meeting and Document/Distribute Minutes   * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed (e.g., project management plan documents, project commitment document, risk register, comment resolution form, etc.). |
| Verify the ETSA   * Coordinate review of the ETSA with the assigned technical leads. * Request updates, if needed. |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1PM4 |Conduct Initial Risk Workshop

## Objective:

Conduct risk analysis early in the project in preparation for the Initial Risk Workshop and the subsequent workshops to identify, minimize, and/or eliminate risks or maximize opportunities that may negatively or positively impact schedule and/or budget. Updates to the register are repeated as often as necessary throughout the project (but minimally at each design field review).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., the Project Management Plan, project mapping, preliminary concept designs, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. |
| Hold Meeting and Document/Distribute Minutes   * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| Update and Monitor Risk Register   * Evaluate the effects and status of the risks as the project progresses. * Update the Project Risk Register following the approach and schedule in the Risk Management Plan. * Confirm assignments for team members to document and resolve risks in the risk register. |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1PM5 |Hold Scoping Meeting and L&G Field Review

## Objective:

Organize, lead, and facilitate the Project Scoping Meeting and Line and Grade Field Review (may be two separate meetings during Stage 1). For smaller or less complex projects, determine whether to combine these meetings once the Line and Grade Package is ready for review.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., the Project Management Plan, project mapping, preliminary concept designs, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. |
| Review and Complete Comment Form   * Review and Complete Comment Form * Complete PM-level review of the submittal (as appropriate) and add comments to the form. |
| Compile Comments, Hold Meeting and Document Minutes   * Compile all comments received. * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| Estimate the Project Using the Line and Grade Package   * Compile the information needed to complete the Line and Grade Estimate. * Initially draft the Line and Grade Estimate Form. * Coordinate input into the forms with discipline leads. * Finalize the Line and Grade estimate. |
| Determine Need for Value Engineering |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PM1 |Manage Project

## Objective:

Lead the project team to ensure the project remains on schedule, within allocated resources (budget and staff), and within the project scope of work. Provide project oversight through the entire design phase and proactively facilitate regular coordination between project team members to improve quality, resolve issues, and mitigate risks. The deliverables and tasks in this activity are repeated throughout Stages 2, 3, and 4.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop the Project Management Plan   * Develop Scope * Develop Schedule * Develop Budget * Request and obtain funding in each Stage (e.g., Preliminary Engineering/Final Design (PE-D) funding (TDOT staff only). * Request ROW acquisition and utility relocation funding) (TDOT staff only). * Request Railroad preliminary engineering funding (if not done earlier; TDOT staff only). * Finalize the Project Quality Management Plan. * Update the Risk Management Plan/Risk Register. * Finalize the Project Communication Plan. |
| Report Project Status (TDOT staff only) |
| Finalize Local Government Agreements (TDOT staff only) |
| Perform Letting Readiness Assessment (TDOT staff only)   * Verify required documentation is complete for the milestone. |
| Support Value Engineering Efforts (TDOT staff only) |
| Manage Consultant Contracts and Modifications (TDOT staff only)   * Ensure contract compliance. * Process invoices. * Conduct annual consultant evaluations. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PM2 |Complete Project Commitment Document (PCD)

## Objective:

Complete the Project Commitment Document (PCD) to memorialize the scope of work (inclusive of commitments).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Verify Scope, Schedule, and Budget   * Verify schedule. * Verify estimates. * Confirm all components of the PCD are accurate. |
| Finalize Project Commitment Document (TDOT staff only)   * Compile all information. * Verify PCD is on the committed planned project course prior to each milestone review meeting (TDOT staff only). * Obtain signatures from disciplines and internal stakeholders. * Review and adjust the PCD (if needed and as a final resort) following the process in 2PM2. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PM3 |Conduct ROW Strategy Meeting(s)

## Objective:

Work with the Design Lead (e.g., the Roadway Design Lead, Structural Design Lead) and ROW Lead to organize, and facilitate the Right-of-Way (ROW) Strategy Meeting(s). The deliverables and tasks in this activity continue into Stage 3.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., current design plans/Functional Design Plans for all disciplines with existing right-of-way, property ownership right-of-way estimate, Comment Resolution Form, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. |
| Hold Meeting and Document/Distribute Minutes   * Attend/Lead meetings (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| Attend ROW Site Visit and Collect Feedback (list and count hours in the meeting list above) |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PM4 |Conduct Permit Strategy Meeting(s)

## Objective:

Organize and facilitate the Permit Strategy Meeting. Review permits required to construct the project(s). The deliverables and tasks in this activity continue into Stage 3.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

# Insert # meetings

* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. |
| Hold Meeting and Document Minutes   * Attend/Lead meetings (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| Verify Permit(s) Are Complete and Submitted |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PM5 |Hold Functional Design Plans Field Review Meeting

## Objective:

Organize and facilitate the Functional Design Plans Field Review Meeting, with support from the Design Lead (e.g., the Roadway Design Lead, Structural Design Lead) to lead specific design and technical discussions to solidify the project’s footprint.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., Functional Design Plans, estimates, Comment Resolution Form, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. * Coordinate with the Design Lead to confirm all disciplines have completed quality checks and that the plans are ready for review. |
| Review and Complete Comment Form   * Distribute comment resolution form. * Complete PM-level review of the submittal (as appropriate) and add comments to the form. |
| Compile Comments, Hold Meeting and Document Minutes   * Compile all comments received. * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3PM1 |Manage Project

## Objective:

Lead the project team to ensure the project remains on schedule, within allocated resources (budget and staff), and within the project scope of work. Provide project oversight through the entire design phase and proactively facilitate regular coordination between project team members to improve quality, resolve issues, and mitigate risks. The deliverables and tasks in this activity are repeated throughout Stages 2, 3, and 4.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Update the Project Management Plan (as needed)   * Update Scope. * Update Schedule. * Update Budget. * Update Project Quality Management Plan. * Update Risk Management Plan and Risk Register. * Develop and Facilitate Project Communication Plan. |
| Report Project Status (TDOT staff only) |
| Finalize Local Government Agreements (TDOT staff only) |
| Perform Letting Readiness Assessment (TDOT staff only)   * Verify required documentation is complete for the milestone. |
| Support Value Engineering Efforts (TDOT staff only) |
| Manage Consultant Contracts and Modifications (TDOT staff only)   * Ensure contract compliance. * Process invoices. * Conduct annual consultant evaluations. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3PM2 |Hold Plan-in-Hand Field Review Meeting

## Objective:

Organize and facilitate the Plan-in-Hand Field Review Meeting with support from the Design Lead (e.g., the Roadway Design Lead, Structural Design Lead) to lead specific design and technical discussions to produce a complete design.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Gather all relevant materials (e.g., Plan-in-Hand plans, quantities and estimates, specifications/special provisions, Comment Resolution Form, etc.) in the shared project folder and distribute to the meeting invitees. * Organize this meeting and develop the agenda. * Coordinate with the Design Lead to confirm all disciplines have completed quality checks and that the plans are ready for review. |
| Review and Complete Comment Form   * Distribute comment resolution form. * Complete PM-level review of the submittal (as appropriate) and add comments to the form. |
| Compile Comments, Hold Meeting, and Document/Distribute Minutes   * Compile all comments received. * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Update documents as needed. |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4PM1 |Manage Project

## Objective:

Lead the project team to ensure the project remains on schedule, within allocated resources (budget and staff), and within the project scope of work. Provide project oversight through the entire design phase and proactively facilitate regular coordination between project team members to improve quality, resolve issues, and mitigate risks. The deliverables and tasks in this activity are repeated throughout Stages 2, 3, and 4.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop and Refine the Project Management Plan (as needed)   * Update Scope. * Update Schedule. * Update Budget. * Update Project Quality Management Plan. * Update Risk Management Plan and Update the Risk Register. * Update and Facilitate Project Communication Plan. |
| Report Project Status (TDOT staff only) |
| Finalize Local Government Agreements (TDOT staff only) |
| Perform Letting Readiness Assessment (TDOT staff only)   * Verify required documentation is complete for the milestone. |
| Support Value Engineering Efforts (TDOT staff only) |
| Manage Consultant Contracts and Modifications (TDOT staff only)   * Ensure contract compliance. * Process invoices. * Conduct annual consultant evaluations. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4PM2 |Hold PS&E Preview Meeting

## Objective:

Organize and facilitate the Plans, Specifications, and Estimates (PS&E) Review Meeting.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Set Up Meeting and Develop Agenda   * Verify all relevant materials and documents are ready for letting and distribute all relevant materials to the meeting invitees. * Organize this meeting and develop the agenda. |
| Review and Complete Comment Form   * Distribute comment resolution form. * Complete PM-level review of the submittal (as appropriate) and add comments to the form. |
| Compile Comments and Hold Meeting   * Compile all comments received. * Attend/Lead meeting (list and count hours in the meeting list above). * If assigned, document comments, decisions, and actions and distribute/upload meeting minutes and deliverables. * Finalize all documents as needed, including uploading the final set of Construction Documents to the shared project folder. |
| Finalize Project Documentation   * Confirm that the Construction Documents are complete. * Notify the project team when the Contract Letting Milestone is complete. * Notify team members of assigned construction and post-construction support responsibilities |
| General Task Management (other than tasks outlined above)   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2PV1 |Provide Pavement Design

## Objective:

Complete the project’s pavement design and associated tasks to support advancement of other disciplines’ plans and related design work.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Provide Pavement Design   * Evaluate the structural capacity and life-cycle cost for the pavement design. * Provide a pavement design for the Functional Design Plans. * If requested, update or finalize the pavement design to confirm the original pavement recommendations, provide any needed approvals for changes to the design, and/or submit any updated pavement designs (if needed). * Review any other relevant information available to identify known resources. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1RD1 | Provide Roadway Desktop Review

## Objective:

Complete a high-level review of major roadway assumptions or design options as requested by Engineering Concepts.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Roadway Division Review   * Provide high-level project review. * Validate the feasibility of the conceptual design. * Provide comments within two weeks using the Concept Comment Resolution Form. |
| Attend Site Visit   * Review the site visit packet to determine if Roadway staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review the Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify the Engineering Concepts Lead via email. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1RD2 |Initiate Roadway Design

## Objective:

Ensure that the roadway design is consistent with the conceptual layout developed as part of the Concept Report and represents sound roadway design principles and practices.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Establish Project-Specific Design Criteria   * Prepare and submit draft design criteria. * Revise and resubmit design criteria in response to comments. * Submit final design criteria. |
| Determine Work Zone Significance   * Prepare and submit draft Work Zone Significance Determination Form. * Revise and resubmit form in response to comments. * Submit final form |
| Request Driveway Deviations   * Review the proposed locations and any needed exceptions. * Coordinate any deviation requests to the Deviation Committee. |
| Develop Line, Grade, and Cross Sections (Line and Grade Package)   * Develop/design the Line and Grade Package to include: * Set the horizontal alignment. * Set the vertical alignment. * Establish cross sections. * Set driveway profiles for key driveways. * Create the initial, proposed TIN file and display present and proposed contours. * Establish preliminary/proposed right-of-way limits and easement locations. * Incorporate environmental resource shapefiles or location details (e.g., for ecological features such as wetlands, streams, etc. or for historic or archaeological resources). * Incorporate all other elements listed in the Roadway Line and Grade Design Checklist. * Document design efforts that avoid or minimize impacts to environmental resources in the ETSA. * Finalize the Line and Grade Package, containing: * Title sheet .pdf * Survey and proposed alignment, contours, and cross section .dgn files * TIN file * GPK file * KMZ file * All other necessary MicroStation, GEOPAK, and Microsoft files * A .pdf of the proposed alignment as a roll plot, profile, and cross sections * All other elements listed in the Roadway Line and Grade Design Checklist * Submit the Package that includes proposed alignment as a roll plot, profile, and cross sections. * Validate the initial assumptions and costs from the preliminary project estimate to support establishment of the initial project estimate. * Develop and submit quantities for the major roadway items for the Line and Grade estimate. |
| Compile the Line and Grade Package and Participate in the Field Review   * Compile and notify the team that the package is available. * Lead the meeting and technical discussions (list and count hours in the meeting list above). * Compile and distribute meeting minutes. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2RD1 |Develop Functional Design Plans

## Objective:

Complete the project’s Functional Design Plans and associated roadway tasks to set the project footprint, define the data to be incorporated into the environmental document, and support advancement of other disciplines’ plans and related design work for similar ends.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop a Utility Impact/Conflict Matrix (complete in concert with SUE task)   * Develop a project-specific Utility Impact/Conflict Matrix * Revise/update as the project’s design progresses and utility details become known. |
| Identify Initial Subsurface Utility Engineering (SUE) Needs   * Perform a utility conflict analysis to identify potential subsurface conflicts with proposed design elements. * Coordinate anticipated subsurface components to further refine preliminary utility conflicts. * Establish a test hole list. |
| Request Pavement Design   * Complete and submit a Pavement Design Request Form and all required design information (see 2RD1 for list of required information). |
| Document Design Exceptions and Waivers   * Complete a Design Exception or Design Waiver Request Form * Prepare and submit the letter, checklist, and location of the design plans (i.e., plan sheets, location map, and other related information). * Revise the form and related information to address comments. * Secure approval of the Design Exception(s) or Design Waiver(s). |
| Incorporate SUE Data and Lead Internal Design Deconfliction Meetings   * Develop agenda and prepare for meeting. * Update plans/files and the Utility Impact/Conflict Matrix. * Lead the meeting. * Distribute and upload meeting minutes and action items to the project folder. * Schedule follow-up meetings, as needed. |
| Develop Utility Coordination Plans   * Develop and revise (to address comments) a .pdf and .dgn set with a “Utility Coordination Plan Phase” stamp to include all required design information (see 2RD1 for list of required information). * Submit/upload the Utility Coordination Plans to the Utility Coordinator. |
| Develop Design and Sketches for Permit Applications   * Develop and revise (to address comments) a .pdf or .dgn set with a “Permit Application Plans” stamp that includes all required design information (see 2RD1 for list of required information). * Develop and revise (to address comments) permit sketches consisting of maps and drawings on 8 ½” x 11” sheets depicting individual impact locations. * Prepare for and attend established Permit Strategy Meetings (list and count hours in the meeting list above). |
| Develop Conceptual Traffic Control Strategies   * Develop conceptual strategies or Temporary Traffic Control (TTC) concepts in accordance with the Work Zone Safety and Mobility Manual. * Review the line and grade .dgn in the Line and Grade Package. |
| Develop the Functional Design Plans   * Revise the title sheet and update the plan, profile sheets, and cross section sheets from the Line and Grade Package. * Incorporate geotechnical recommendations for slopes into the plan, profile, and cross section sheets. * Refine the typical sections to include the pavement design. * Develop conceptual traffic control strategies/TTC concepts. * Include preliminary placement of roadway safety features. * Develop a preliminary drainage design. * Develop preliminary erosion prevention and sediment control (EPSC) design. * Draft the initial Signing and Pavement Marking sheets that include:   + Location of all signs on the project   + Design of any specialty size signs as needed   + Inclusion of general pavement marking details * Include existing easements and any right-of-way, permanent easements, slope easements, and temporary construction easements. * Incorporate environmental recommendations for avoidance and minimization of impacts, labeling the environmental features on the plans. * Create pay item quantities associated with construction and generate an updated cost estimate. * Evaluate the roadway design to determine if any incompatibilities exist with other discipline’s designs. * Incorporate all other elements listed in the Roadway Functional Design Checklist. |
| Coordinate Geotechnical Analysis for Noise and Retaining Walls   * Coordinate/identify boring locations. * Develop and send request and layouts to the Lead Geotechnical Engineer/ Geotechnical Engineering Section (revise as needed). |
| Compile the Functional Design Plans and Participate in the Field Review   * Compile (from all disciplines) and notify the team that project plans/sheets and estimate are available. * Attend the meeting and lead the technical discussions (list and count hours in the meeting list above). * Compile and distribute a comprehensive list of review comments and meeting minutes. |
| Revise and Submit Updated Functional Design Plans   * Review and resolve all field review comments on the Functional Design Plans. * Submit the revised plans in accordance with the Roadway Design Guidelines. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2RD2 |Conduct Design Public Meeting

## Objective:

Determine whether a Design Public Meeting is required for the project in accordance with TDOT’s Public Involvement Plan. If needed, lead the meeting as part of Stage 2 and as the Functional Design Plans are being developed. Note: The Design Public Meeting is not the same as a public hearing process, which may be required as part of completing the NEPA action in accordance with the Environmental Procedures Manual.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Prepare for the Design Public Meeting   * Determine a tentative location and date for the meeting. * Confirm the attendance of a court reporter and TDOT Divisions. * Complete the required Public Meeting Notice Request and Public Meeting Checklist. * Prepare materials for the meeting. |
| Hold Design Public Meeting   * Lead a presentation to explain the items listed in 2RD2. |
| Process Design Public Meeting Transcript   * Review the meeting transcript, determine what actions (if any) need to be taken, and provide responses to all comments. * Send a letter, including the transcript and responses (revise materials as needed). * Distribute the final approved letter to the project team. * Coordinate design changes from comment/input received. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3RD1 |Complete Plan-In-Hand Design

## Objective:

Complete the project’s Plan-in-Hand design and the associated roadway tasks (i.e., all design complete) to facilitate a multidiscipline plan set review of the entire design at the conclusion of the stage. To be completed at any time during this stage, develop the ROW acquisition exhibits, advance the Utility Coordination Plans, coordinate the permit application design/sketches, and finalize the Transportation Management Plan (TMP).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Develop ROW Acquisition Exhibits   * Prepare exhibits/legal descriptions (revise as needed based on review comments). * Prepare for and attend ROW Strategy Meetings (list and count hours in the meeting list above). * Revise exhibits and/or plans and complete the Revision Request Form (as needed) due to optimization or negotiations. * Revise/Update as the design progresses and utility details become known encroachments (e.g., permanent easements, slope easements, temporary construction easements). |
| Finalize the TMP & Complete the Temporary Traffic Control Plans   * Finalize the TMP and associated temporary traffic control plans. * Coordinate a final compliance review of the TMP and TTC plans with Traffic Operations. |
| Complete the Plan-in-Hand Plans   * Refine and complete the roadway design based on comments received from the Functional Design Plans Field Review Meeting. * Verify geotechnical recommendations for slopes and walls are in the design, plan, profile, cross section, and retaining wall sheets. * Finalize the title sheet, plan and profile sheets, and cross section sheets. * Finalize the typical sections. * Finalize the pavement marking and signing (signing and striping) plans. * Finalize the drainage design plans. * Finalize the EPSC plans and any landscape and aesthetic plans. * Incorporate/confirm inclusion of all environmental resource boundary identifiers into the design. * Finalize the roadway design of retaining walls and sheets in coordination with the Hydraulic Lead, Lead Geotechnical Engineer, Structural Design Lead, Utility Coordinator, and ROW Lead. * Evaluate the roadway design to determine if any incompatibilities exist with other discipline's designs. * Incorporate all other elements listed in the Roadway Plan-in-Hand Design Checklist. * Finalize pay item quantities associated with construction and generate an updated cost estimate. * Coordinate with the Construction Engineer to create the project's roadway special provisions. |
| Compile the Plan-in-Hand Plans and Participate in the Field Review   * Compile (from all disciplines) and notify the team that project plans/sheets, specifications, and estimate are available. * Attend the meeting and lead the technical discussions (list and count hours in the meeting list above). * Compile and distribute a comprehensive list of review comments and meeting minutes. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4RD1 |Finalize Construction Documents

## Objective:

Compile the final set of design documents/plans, specifications, and the estimate (i.e., the PS&E package) to advertise and let the project.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Finalize the Roadway Plans for the PS&E Review Meeting   * Review comments from the Plan-in-Hand Field Review and address necessary design revisions and plan updates. * Incorporate all other elements listed in the Roadway PS&E Design Checklist. * Update/finalize the roadway quantities and cost estimate. * Prepare the plans for the PS&E Review Meeting. * Attend the review meeting (list and count hours in the meeting list above). |
| Compile the Final Construction Documents   * Resolve any last roadway comments from the PS&E Review Meeting. * Seal the Roadway Construction Documents, including the plans, specifications, and estimate. * Create a .zip of the roadway files. * Compile a final set of Construction Documents, including the sealed documents from all impacted disciplines. * Upload the final Construction Document package to the project folder and send a submittal email to the Regional Quality Team that the package is available for a final review. * Confirm the approved final set of Construction Documents has been uploaded to the project folder. * Email a submittal letter, estimate documents, and notification to the appropriate parties. * Include a copy of the email in the project folder. * Coordinate with all necessary parties to ensure the package is advertised and let. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1RR1 | Complete Concept-Level Railroad Review

## Objective:

Complete high-level railroad review to inform the conceptual layout and initial estimate.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Provide Review for Potential Railroad in the Project Area   * Review the information provided by Engineering Concepts and provide the following railroad details based on the information provided:   + Number of railroads   + Specific ownership   + Any additional information related to any railroad that could be impacted by the project * Provide a list of potentially impacted railroads or complete the Concept Comment Resolution Form with this same information. |
| Attend Site Visit   * Review the site visit packet to determine if Railroad staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review the Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify the Engineering Concepts Lead via email. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1RR2 | Begin Railroad Coordination

## Objective:

Contact the railroads in a project’s vicinity to confirm each are aware of one another’s plans, which reduces late-stage changes that can negatively impact the schedule and add unexpected costs.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Initiate Railroad Coordination   * Identify the Railroad entities involved and the impact types (also see 1RR1). * Engage in property research and search for previous agreements. * Set up the project for coordination. * Generate the required coordination initiation forms. * Identify all stakeholders. * Develop the Preliminary Engineering Agreement. * Work through the initiation requirements outlined in the *Utilities Manual.* * Assign the project to the Railroad. |
| Prepare Railroad Cost Estimate   * If a railroad is not involved, receive and sign the final Form 44 confirming no involvement. * If a railroad is involved, complete the number of railroads involved with estimates for the work. * Submit Form 44 to Programming and the Project Manager after the information is confirmed and the document is signed. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3RR1 | Perform Railroad Coordination

## Objective:

Coordinate design plan review and comment resolution with the Railroad. Receive Railroad plans and estimates. Generate the special provisions and Construction Agreement

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Receive Railroad Plans and Estimates   * Receive plans from the Roadway Design Lead or other assigned design staff. * Submit the plans for Railroad review. * Receive and review Railroad plan review comments and submit Railroad plan review comments to the Roadway Design Lead or assigned design staff to be addressed (obtain a statement from the Railroad that there are no further exceptions to the plans). * Submit the Special Provisions 105C (SP105C) to the Railroad for review and comment (obtain a statement from the Railroad that there are no further exceptions to the SP105C). * Receive a Construction Force Account Estimate from the Railroad. * Review and approve the Force Account Estimate and return to the Railroad. * Request the generation of the Construction Agreement. * Submit the Construction Agreement to the Project Manager and other stakeholders for execution. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3RR2 | Prepare and Submit Railroad Certification

## Objective:

Verify required coordination steps have been completed and secure/finalize the railroad certification for letting.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Finalize the Railroad Agreement(s)   * Confirm notification from the Railroad Office that the project is ready for certification. * Submit form SP104C as part of the Construction Documents. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2RW1 |Initiate ROW Pre-Acquisition Activities

## Objective:

Complete a right-of-way cost estimate, initiate title searches, and potentially advance Preliminary Group Inspection (PGI) field work (as property is identified) based on the Line and Grade Package and recommendations from the ROW Strategy Meetings (see 2PM3 for related information).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| ***Prepare a Conceptual Stage Relocation Plan (CSRP)***   * Review the Line and Grade Package (and related ROW Acquisition Table) to determine if there are any potential relocations related to the project’s design. (If there are no relocations, no further action is needed.) * Complete the Conceptual Stage Relocation Plan (CSRP) field study and submit the information to Headquarters, uploading to the project folder when complete and informing the Project Manager and NEPA Lead. |
| Prepare Right-of-Way Estimate   * Review the Line and Grade Package to determine the type of properties affected and research the market for data of comparable sales. * Apply market-derived values to each tract’s land acquisitions and inspect each tract for additional values. * Submit the appraisal cost estimate to the Regional ROW Manager (who also obtains Utility and Railroad estimate) to complete Form 44. * Gather the ROW, Utility, and Railroad information; generate Form 44; and obtain signatures (all completed by the Regional ROW Manager). * Submit the executed Form 44 to those listed in 2RW1. |
| Perform Title Searches   * Search the public records to identify conveyance documents, indicating current ownership of the properties needed for the project. * Obtain copies of all pertinent documents identified in the public records search, attaching this information to the completed ROW Form 49 (Title Report). * Submit the completed Form 49 to the Regional Administrative Assistant, who logs receipt, and assign review to the Regional ROW engineer or designee. * Complete a Right-of-Way Plan/Title check in accordance with Chapter VI of the ROW Policy and Procedures Manual (done by the Regional ROW engineer). * Return the completed check to the Roadway Design Lead (if corrections are needed) or Regional Administrative Assistant (if complete), who uploads completed title reports to IRIS and the project folder. |
| Initiate Private Property Owner Utility Adjustment   * Consult with local health department/TDEC to determine if suitable soils exist to repair or replace the impacted system. * Obtain estimates from contractors to repair or replace the impacted utility. * Attach ROW Form 14 and supporting documentation to the appraisal for inclusion in the approved offer. * Upload a copy of the Form 14 to IRIS and place a copy in central files/added to the tract file. |
| Initiate PGI Field Work   * Initiate field work using the Line and Grade Package. * Identify appraisal problems * Identify relocations * Determine the type of report to be requested (Enter type of report). * Establish real vs. personnel property inventory. * Advise in the selection of consultant fee appraisers. * Coordinate with, at a minimum, the ROW engineering and acquisition/relocation personnel to review the plans and perform a field inspection of the project (hours for the field visit covered in meeting and trips section above). * Work with the acquisition/relocation representative to identify relocations and determine the inventory of real vs. personal property. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2RW2 |Execute ROW Proposal

## Objective:

Execute the agreement between TDOT and all local governmental bodies having jurisdiction over the land impacted by a project on a state route. This activity is not applicable for projects on City or County roads.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Prepare/Submit ROW Proposal   * Generate the appropriate proposal and necessary resolutions. * Circulate the proposal for execution by the appropriate local governmental officials. * Send the partially executed proposal and resolutions to Headquarters for review (revise as needed). |
| Receive ROW Proposal and Distribute for Execution   * Distribute the ROW Proposal for full execution. * Upload the executed proposal to IRIS, place a copy in central and project files, and send the original signed proposal to Headquarters. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3RW1 |Complete Appraisal and Initiate Acquisition

## Objective:

Finalize the PGI Report (and complete field work if still needed), complete appraisals, appraisal reviews, and prepare a written offer of just compensation for the acquisition of needed property rights to complete the project. Update the Project Manager and project team (as applicable) on the status of the following tasks through regular team meetings or recurring ROW Strategy Meetings (see 2PM3 for related information).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Produce Preliminary Group Inspection (PGI) Report (TDOT staff only)   * Draft the PGI Report (respond to comments) * Obtain signatures from ROW Engineer and relocation agent that attended PGI on the real vs. personal property form (completed by the Regional Chief Review Appraiser). * Finalize the PGI report and submit to ROW headquarters Appraisal staff to initiate appraisal contracts (completed by the Regional Chief Review Appraiser). |
| Employ Fee Appraiser (TDOT staff only)   * Employ Fee Appraiser (TDOT staff only; ROW Headquarters Appraisal). |
| Stake ROW   * Request that the Survey Lead stake the proposed right-of-way to field. * Verify staking in the field. |
| Appraise Property   * Coordinate with Survey Lead to inform him/her of appraisal due dates to ensure staking is done at the appropriate time (typically completed by the Regional ROW Manager). * Inspect property, complete appraisal report, and submit to Regional Chief Review Appraiser. |
| Review Appraisals (TDOT staff only)   * Perform a desk audit of the appraisal and a field inspection of the parcel. * Work with the Appraiser to obtain additional information, correct errors, and provide further explanation, when necessary. * Determine if the remainder property qualifies as an uneconomic remainder and prepare ROW Form 2 accordingly. * Produce an appraisal review document and an approved offer (on ROW Form 2). |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.Example, Complete the Acquisition Stage Relocation Plan (ASRP).  2. |

# 3RW2 |Prepare & Submit ROW Certification

## Objective:

Submit the ROW Certification affirming that the land rights necessary for the construction of a project have been obtained in adherence to the State and Federal rules and regulations governing acquisition and relocation.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Perform/Finish Acquiring Property   * Continue preparing the offer (revise as needed). * Continue negotiating with the landowner. * Continue to transmit information for condemnation (if required). * Support recording of fully executed deeds. * Perform the closing and obtain the releases (done by someone other than the negotiator). * Draft the deed and order checks for payment to the property owner and for recording the deed (typically completed by Regional ROW Administrative Assistant). |
| Perform/Finish ROW Relocation   * Conduct preliminary interviews with those being displaced. * Confirm the Acquisition Stage Relocation Plan (ASRP) has been completed. * Obtain estimates and conduct market studies to determine specific relocation benefits. * Make a relocation offer and establish eligibility. * Coordinate obtaining possession of the underlying tract and timing needed on the Order of Possession. |
| Review ROW Acquisition Process, Verify/Update Schedule, and Issue ROW Certification (TDOT staff only)   * Upload copies of all required documents to IRIS for HQ to review and submit certification. * Submit a Form 10 for each letting meeting to update as to status of tracts. * Review the digital files in IRIS to verify that a fully executed and recorded deed, an order of possession, or a right of entry are included for each tract. * Certify that the ROW is available for the project prior to letting, or prepare PIJ, as needed. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1ST1 |Develop Structures Recommendations

## Objective:

Investigate proposed bridge and culvert locations and provide structure type and size recommendations to the project team to inform the conceptual layout and Concept Report.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Recommend Structure Type   * Examine any existing bridge inspection reports. * Review proposed typical section and requirements for traffic control. * Provide a recommendation for span configuration, bridge length, beam type, and out-to-out width. * Provide comments, including structural recommendations, using the Concept Comment Resolution Form. |
| Provide Hydraulic Recommendations   * Gather data on the location from existing information sources. * Initiate basic coordination with USCG or TVA if the waterway is navigable. * Review existing bridge reports for long-term issues. * Review for offset issues due to TVA or USACE reservoirs and provides offset elevations. * Provide a recommendation for span configuration and bridge length and any necessary grade changes. * Provide comments, including hydraulic recommendations, using the Concept Comment Resolution Form. |
| Attend Site Visit   * Review the site visit packet to determine if relevant staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify the Engineering Concepts Lead via email. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1ST2 |Complete Existing & No Structure Modeling

## Objective:

Complete existing and no structure modeling to inform the hydraulic design and grade selection in Stage 2.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Hydraulically Model Existing and No Structure Conditions   * Gather/confirm previously collected data on the crossings from existing information sources. * Determine flood flows through structure. * Create the existing structure hydraulic model in 1D or 2D modeling software. * Create the No Bridge hydraulic model in 1D or 2D modeling software. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2ST1 |Complete Hydraulic Design

## Objective:

Choose the preliminary structure types/sizes and provide the project team with an initial assessment on the acceptability of the horizontal and vertical alignment provided in the initial line and grade .dgn (as part of the Line and Grade Package). Choose the most appropriate structure based on in-depth hydraulic modeling and provide final hydraulic design information to the project team and other stakeholders. Note: proposed structures may change SIGNIFICANTLY from the initial assessment to the final hydraulic design completed in this stage.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Verify Proposed Grade and Estimate Hydraulic Structure Sizes   * Review the final Conceptual Layout, final digital terrain model (DTM) from the Survey Lead, the line and grade .dgn, and any other relevant information. * Initiate/continue coordination with USCG or TVA or FEMA and the local community. * Review existing bridge reports for long-term issues. * Review for offset issues due to TVA or USACE reservoirs and provide offset elevations. * Provide a preliminary estimate of span and bridge length and any necessary grade changes needed to accommodate the structure. * Coordinate the hydraulic details (e.g., preliminary structural elevations). * Draft, respond to comments, and finalize the Initial Hydraulic Grade Assessment Letter. |
| Develop Draft Hydraulic Layout   * Draft the Hydraulic Layout. * Attach layout to the Initial Hydraulic Grade Assessment Letter. |
| Hydraulically Model Proposed Conditions, Evaluate Proposals, and Select Appropriate Structure   * Create proposed hydraulic alternatives in 1D or 2D modeling software. * Calculate ultimate scour for selected structure. * Design deck drains if selected structure is a bridge. * Continue coordination with USCG or TVA or FEMA and the local community. * Continue coordination with TVA or USACE regarding reservoir and offset requirements. * Compile Hydraulic Design File consisting of all project correspondence, including what is listed in 2ST1. |
| Finalize Hydraulic Layout   * Finalize the Hydraulic Layout. * Attach layout to the Final Hydraulic Letter. |
| Finalize Hydraulic Design Information   * Write the Final Hydraulic Letter. * Submit the letter to the State Hydraulic Engineer for review and signature (if needed). * Resolve any comments and finalize/sign the letter. * Attend the field review meeting (list and count hours in the meeting list above). |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2ST2 |Develop Preliminary Bridge Plans

## Objective:

Review all projects with proposed non-hydraulics structures/crossings to evaluate clearances of the assumed structures for the proposed geometry. Develop preliminary bridge layout(s) for inclusion with the Functional Design Plans.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Review Proposed Grade and Alignment for Non-Hydraulic Crossings   * Review the proposed alignment, profile, and typical section in the initial line and grade .dgn. * Confirm and/or determine appropriate structure type and span arrangement for each crossing. * Calculate vertical and horizontal clearances for each assumed structure, evaluating whether the proposed line and grade are acceptable. * Develop draft layouts for each crossing if the line and grade are acceptable. * Draft, respond to comments, and finalize Grade Approval Letter. |
| Develop Preliminary Bridge Layouts   * Review the Final Hydraulic Layout or Draft Preliminary Layout to ensure all geometry matches the latest roadway plans and adjust the proposed structure as necessary. * Develop a typical cross section using beam type recommendations from the Hydraulics Designer or assumed beam type from the grade approval for non-hydraulic crossings. * Coordinate the design of deck drains with the Hydraulic Lead for all non-hydraulic structures. * Update notes and project information. * Develop preliminary/conservative bridge (and any known wall) estimates based on square footage and preliminary design assumptions. * Submit the preliminary bridge layouts to the Structures Division Team Lead for approval (for consultant-led design). * Attend the field review meeting (list and count hours in the meeting list above). |
| Coordinate Geotechnical Analysis for Bridges   * Establish the boring locations for all bridge foundations and wall locations. * Prepare the Foundation Data Sheets. * Finalize and submit the Structures Foundation Request to the Lead Geotechnical Engineer/ Geotechnical Engineering Section. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3ST1 |Complete Structural Design

## Objective:

Finalize the structural design (walls and bridge plans) for inclusion with the Plan-in-Hand Plans.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete Retaining/Noise Wall Sheets   * For Category One retaining walls: * Design the retaining wall. * Detail final wall drawings, which includes Structures Division drawing numbers. * Submit final plans, quantities, and calculations to the Structures Division Team Lead for review. * For Category Two Retaining Walls: * Review the wall preliminary plans, adjusting the acceptable wall types, aesthetic finishes, or other details as needed. * For Noise Walls: * Design the noise wall. * Detail final wall drawings, which includes Structures Division drawing numbers. * Submit final plans, quantities, and calculations to the Structures Division Team Lead for review. * Compile all wall drawings into a final set with ‘R’ series sheet numbers. * Submit to the Roadway Design Lead for inclusion with the Plan-in-Hand Set. |
| Complete Design and Detail Bridge Plans and Estimate   * Design the bridge * Compile design calculation notebook in .pdf format. * Prepare the structures special provisions and detailed bridge plans. * Submit calculation notebook and plans sheets to Structures Division Team Lead for review. * Prepare quantity cost estimate in the standard TDOT Excel format. * Compile all bridge drawings and submit to the Roadway Design Lead for inclusion with the Plan-in-Hand Set. * Attend the field review meeting (list and count hours in the meeting list above). |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4ST1 |Finalize Structural Design

## Objective:

Compile the final Structural Design Documents (walls and bridge plans) and estimate with any other required documentation to assist the Roadway Design Lead (as applicable for the project type) in compiling the Construction Documents needed to advertise and let the project. For structure-led projects, the Structural Design Lead finalizes the Construction Documents for turn in following the process described in in this section and 4RD1.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Finalize Retaining/Noise Wall Plans   * Review comments from the Plan-in-Hand Field Review and address necessary design revisions and plan updates. * Prepare the plans for the PS&E Review Meeting, submitting plans for inclusion with the other design plans for review. * Attend the review meeting (list and count hours in the meeting list above). * Resolve last comments from the PS&E meeting. * Submit final plans to the Structures Division Team Lead for final review. * Seal the final Category One retaining wall plans. * Update the wall cost estimate file using the standard TDOT Excel spreadsheet. * Submit sealed plans and CADD files and the estimate and special provisions to the Roadway Design Lead for inclusion with the Construction Documents. |
| Finalize Bridge Plans   * Review comments from the Plan-in-Hand Field Review and address necessary design revisions and plan updates. * Prepare the plans for the PS&E Review Meeting, submitting plans for inclusion with the other design plans for review. * Attend the review meeting (list and count hours in the meeting list above). * Resolve last comments from the PS&E meeting. * Submit final plans to the Structures Division Team Lead for final review. * Seal the final bridge plans. * Update the bridge cost estimate file using the standard TDOT Excel spreadsheet. * Submit sealed plans and CADD files and the estimate and special provisions to the Roadway Design Lead for inclusion with the Construction Documents. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1SY1 |Conduct Design-Level Survey

## Objective:

Provide survey data that covers the project limits, as requested by the Roadway Design Lead or other technical leads to aid in the development of the Line and Grade Package and Functional Design Plans.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Prepare the Ground Control for Aerial Survey   * Place aerial targets and conduct GPS occupations. * If static occupation is used, post-process static data. * Submit coordinate data and any other requested information to Aerial Survey Manager. |
| Complete the Aerial Survey   * Create a Flight and Ground Control Survey Plan that shows the proposed flight lines. * Obtain/verify ground control survey. * Upon notification of completion of the panels, coordinate with the Aeronautics Division to fly the project. * Complete aerotriangulation using the ground surveyed panel coordinates. * After the project has been flown, post-process both the aerial photography and the GNSS-IMU data that was collected during the flight. * Complete the mapping product, which includes the topographical survey and digital terrain model (DTM). * Provide planimetric mapping and ground elevation data with the mapping. |
| Set Control Ground Survey (TDOT staff only)   * Place semi-permanent monuments and conduct "to-reach" and referencing calculations, static GPS occupations, distance checks, and leveling. * Post-process static data to compute coordinates. * Produce Project Control Document containing project information, location map, and data sheets. |
| Conduct Survey Public Involvement and Ground Survey   * Conduct Survey Public Involvement and Ground Survey (i.e., the design-level ground survey). * Finalize the survey files based on comments received. * Develop and submit Property Packet (tax cards, deeds, property owner contact letters), roadway plans, One-Call tickets. |
| Incorporate SUE Request into Survey   * Contact Tennessee One Call to obtain utility markings to be located and incorporated into the ground survey. * Incorporate into the existing topography deliverable for the stage. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2SY1 |Complete SUE and Requested Staking

## Objective:

Complete requested subsurface utility engineering (SUE) and staking for proposed sounding holes and right-of-way to support the respective technical discipline’s work.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Incorporate SUE Level A and B Request into Survey   * Contact Tennessee One Call to obtain utility markings to be located and incorporated into the ground survey. * Incorporate into the deliverable for the stage. |
| Stake Sounding Holes   * Provide staking of locations identified by the Structural Design Lead or Lead Geotechnical Engineer/Geologist on the proposed Layout Sheet. * Set the field markings to complete the staking. * Update the Layout Sheet to include assigned ground elevations. |
| Stake ROW   * Stake the proposed right-of-way to field-locate parcel impacts. * Complete the field staking and mark the stakes with a description, station, and offset designations. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1TD1 |Initiate Traffic and Safety Analyses

## Objective:

Review existing traffic operational conditions and potential Transportation Systems Management (related to safety and operations) in and around the project area. Develop initial recommendations to meet traffic operational needs related to signal, lighting, and intelligent transportation systems (ITS).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Conduct Initial Safety Analysis   * Generate a Crash Summary Report and accompanying diagrams. * Determine which intersections to study. |
| Conduct Intersection and Interchange Evaluation (IIE)   * Conduct a Stage 1 Scoping as noted in the Highway System Access Manual (HSAM). * Advance the alternatives to the Stage 2 Selection Form. * Upload the summary form to the project file. |
| Alignment & Operations Review   * Organize a cross-discipline review of the conceptual layout. * Collect input from local maintaining agency and “first responder” stakeholders. * Conduct evaluation of existing systems and needs. * Comple a list of all affected signal, lighting, and ITS systems. * Evaluate the need for signal, lighting and ITS infrastructure within the project footprint. * Complete the ITS Project Identification Form. * Complete a preliminary cost estimate. * Compile a list of any relocated, upgraded or new items being proposed for the project. |
| Attend Site Visit   * Review the site visit packet to determine if staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review the Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify the Engineering Concepts Lead via email. |
| Develop RSA Generated Projects   * Create a No Plans Packet to advance to construction letting. * Request review from environmental, utility, and railroad. * Distribute the document to the TDOT Construction Division for advertisement. * Develop the Safety Report to be included in the 3-year plan. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1TD2 |Conduct Traffic Analysis, Warrants, and Significance Determination

## Objective:

Complete the project’s traffic analysis, evaluate potential signal and lighting warrants, complete the necessary safety report, scope ITS relocation and/or expansion needs, and determine work zone significance to inform the subsequent Transportation Management Plan (TMP).

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Complete the Traffic Operations Analysis   * Evaluate and model the project area to develop recommendations. * Determine the level of project complexity. * Verify the limits of the analysis and intersections for inclusion and include base year no-build, future year no-build, and future year build scenarios. * Recommend innovative operational strategies. * Evaluate the build analysis. * Incorporate the design recommendations into the roadway plans. * Compare the traffic analysis and design analysis. * Recommend strategies to address system reliability. * Finalize the Traffic and Safety Analysis Report and upload to the project file. |
| Complete the Traffic Safety Evaluation   * Evaluate different safety alternatives by applying AASHTOWARE-specific crash modification factors. * Upload the Safety Alternative Evaluation Report or the combined Traffic and Safety Analysis Report to the project file. |
| Analyze Signal Warrants   * Review conceptual layout. * Collect and analyze traffic (and bike/ped) data, crash history, and MUTCD signal warrants. * Prepare a layout sketch. * Prepare the final engineering study and warrant analysis. * Submit the final engineering study to the Signal Design Manager for approval. * Upload the documents to the project file. |
| Analyze Lighting Warrants   * Review the conceptual layout. * Analyze the current traffic data, including bicyclist and pedestrian data, if available. * Analyze crash history. * Prepare a layout sketch. * Prepare the final engineering study and warrant analysis. * Submit the final engineering study to the Lighting Design Manager for approval. * Upload the documents to the project file. |
| Prepare Signals, Lighting, and ITS Scope and Estimate   * Review the conceptual layout(s). * Coordinate with regional efforts and statewide efforts for opportunities to add traffic design elements. * Coordinate to establish equipment needs and integration into the ITS system. * Review the project area for existing ITS equipment and related components. * Prepare a scope and estimate for proposed equipment and components for inclusion in the Line and Grade Package and estimate. * Upload the documents to the project file. |
| Complete Systems Engineering Analysis   * Confirm use of SSEAF form or SEAR report based on level of project risk. |
| Determine Work Zone Significance   * Complete the Work Zone Significance Determination Form to classify all operations (highway construction projects, utility projects, maintenance work, right-of-way use permits, etc.) as significant, non-significant, or exempt. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2TD1 |Prepare ITS, Signals, and Lightning Sheets

## Objective:

Initiate preliminary design for all signal, lighting, and ITS worksheets for the Functional Design Plans, ensuring early and ongoing coordination of the project’s signal, lighting, and ITS scope and equipment locations with the Utility Coordinator, Structural Design Lead and Roadway Design Lead to mitigate potential impacts. Coordinate with the ITS Team Lead and Roadway Design Lead in meeting all design requirements and when developing the ITS sheets.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

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| --- |
| Tasks/Deliverables with Assumptions |
| Prepare ITS Sheets   * Review the line and grade .dgn and the layout sketch. * Prepare an ITS layout with ITS communication type; device, pole, and structural support locations; and power connection locations. * Develop the preliminary ITS sheets and quantities. * Coordinate to mitigate issues related to power and overhead/underground conflicts. * Coordinate with the Regional Traffic Ops (TMC) and IT section for ITS integration. * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Functional Design Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Prepare Signal Sheets   * Review the line and grade .dgn and the layout sketch. * Prepare a signal layout with the information listed in 2TD1. * Develop the preliminary signal sheets and quantities. * Coordinate to mitigate issues related to power and overhead/underground conflicts. * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Functional Design Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Prepare Lighting Sheets   * Review the line and grade .dgn and the layout sketch. * Prepares a photometric layout replicated in MicroStation. * Prepare a lighting layout with pole locations and identifies power connection locations. * Determine underpass lighting. * Develop the preliminary lighting sheets and quantities. * Coordinate to mitigate issues related to power and overhead/underground conflicts. * Verify any lighting maintenance agreement. * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Functional Design Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Oversee Development of the Conceptual Traffic Control Strategies   * Oversee development of the TTC concept plans. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3TD1 |Complete Signal, Lighting, and ITS Device Design

## Objective:

Complete all signal, lighting, and ITS design work for the Plan-in-Hand Plans, ensuring early and ongoing coordination of the project’s signal, lighting, and ITS scope and equipment locations with the Utility Coordinator, Structural Design Lead and Roadway Design Lead to mitigate potential impacts.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

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| --- |
| Tasks/Deliverables with Assumptions |
| Complete Signal Design   * Finalize and compile signal design plans and detail sheets. * Include finalized Geotechnical Report for signal foundations. * Compile signal communications plans and details (as applicable). * Complete signal timing plans as coordinated with the Local Agency (as applicable), including development of the Special Provision 730 (SP 730). * Compile signal quantities. * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Plan-in-Hand Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Complete Lighting Design   * Finalize and compile lighting design plans and detail sheets. * Include finalized Geotechnical Report for lighting foundations. * Complete lighting circuit sheets. * Complete voltage drop calculations. * Compile lighting quantities. * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Plan-in-Hand Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Complete ITS Device Design   * Finalize ITS design plans and detail sheets, ITS scope of work, and general notes. * Finalize ITS communication network design, power service details and ITS voltage calculations. * Compile ITS quantities, ITS typicals (Standard Drawings), Special Provision 725 (SP725) and traffic control (as applicable). * Submit the sheets and CADD files to the Roadway Design Lead for inclusion with the Plan-in-Hand Plans. * Attend the field review meeting (list and count hours in the meeting list above). |
| Review the TMP for Compliance   * Review TMP and TTC plans. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 4TD1 |Finalize Signal, Lighting, and ITS Plans

## Objective:

Compile the sealed signal, lighting, and ITS Design Documents and estimate with any other required documentation to assist the Roadway Design Lead in compiling the Construction Documents needed to advertise and let the project.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

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| --- |
| Tasks/Deliverables with Assumptions |
| Finalize Signals, Lighting, and ITS Design Documents   * Review comments from the Plan-in-Hand Field Review and address necessary design revisions and plan updates. * Prepare the plans for the PS&E Review Meeting, submitting plans for inclusion with the other design plans for review. * Attend the review meeting (list and count hours in the meeting list above). * Resolves last comments from the PS&E meeting. * Submit plans and quantities to the applicable Design Manager(s) for final review. * Submit sealed plans and CADD files and the quantities to the Roadway Design Lead for inclusion with the Construction Documents. |
| Finalize ITS Special Provisions   * Coordinate/create the project's ITS special provisions * Assemble the final ITS special provisions for letting. * Submits the special provisions to the Roadway Design Lead for inclusion with the Construction Documents. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1UT1 |Complete Concept-Level Utility Review

## Objective:

Complete high-level utility review to inform the conceptual layout and initial estimate.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

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| --- |
| Tasks/Deliverables with Assumptions |
| Review Project Area for Potential Utilities   * Review the information provided by Engineering Concepts and identify known utilities. * Fill out the number of utilities and any additional information related to any utility that could be impacted by the project * Complete the Concept Comment Resolution Form and upload to the project folder. |
| Attend Site Visit   * Review the site visit packet to determine if staff should attend the site visit. * Prepare for and attend site visit, if applicable. |
| Review the Concept Report   * Provide review comments using the Concept Comment Resolution Form. * Upload form(s) to the project folder and notify the Engineering Concepts Lead via email. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 1UT2 |Begin Utility Coordination

## Objective:

Contact the utility owners in a project’s vicinity to confirm all are aware of one another’s plans, which reduces late-stage changes that can negatively impact the schedule and add unexpected costs.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Make Initial Utility Contact (TDOT staff only)   * Send notice of a project to all utilities in the project area (two notices may be needed). * Compile a list of the utilities that responded and send to the Roadway Design Lead. |
| Conduct Utility Coordination Kickoff Meeting   * Prepare meeting agenda. * Attend the meeting (list and count hours in the meeting list above). * Prepare and distribute meeting minutes/actions. |
| Prepare a Utility Estimate   * Review the project’s conceptual layout, draft technical report (e.g., the draft Concept Report), and/or the Line and Grade plans to determine which existing utilities could be in conflict. * Compare projected relocations with past relocations costs. * Complete and coordinate review of the estimate from Statewide Technical Specialist. * Notify the assigned ROW Lead and the project team when the utility estimate is uploaded. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 2UT1 |Initiate Utility Pre-Acquisition Activities

## Objective:

Provide updated estimates, coordinate subsurface utility exploration (SUE) needs, and advance third-party coordination efforts from previous stages.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Coordinate/Request Needed SUE   * Support the utility conflict analysis to identify potential subsurface conflicts with proposed design elements. * Coordinate anticipated subsurface components to further refine preliminary utility conflicts. * Help establish the test hole list with the Roadway Design Lead. |
| Confirm Utility Estimate   * Compare projected relocations with past relocations costs. * Complete the estimate (determining preliminary utility costs) and upload the estimate into IRIS. |
| Develop a Utility Impact/Conflict Matrix   * Support development of the project-specific Utility Impact/Conflict Matrix. * Revise/update as the project’s design progresses and utility details become known. |
| Review SUE Data and Attend Internal Design Deconfliction Meetings   * Support the Roadway Design Lead in developing agenda and preparing for meeting. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3UT1 |Perform Utility Coordination

## Objective:

Develop and execute a plan to address how each utility on a project is addressed (avoided, relocated, protected-in-place, etc.) so construction may move forward without any delays/issues.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Distribute Utility Coordination Plans   * Review the plans and provide comments prior to sending to the utility owner. * Send the identified utility owner a complete set of plans. * Upload the submitted plans to IRIS. |
| Conduct Utility Plan Review Kickoff Meeting   * Prepare the agenda and other meeting materials. * Attend the meeting (list and count hours in the meeting list above). * Prepare and distribute meeting minutes and actions. |
| Approve Engineering Packages   * Review the applicable consultant documents. * Issue a consultant authorization letter to the utility owner. * File the information in IRIS. |
| Complete 120-day Utility Review and Process Relocation Contract Requests (TDOT staff only)   * Organize a utility review/deconfliction meeting between TDOT and the utility owners. * Receive and review A-date package from each impacted utility owner. * Generate and send the relocation contract to the utility owner. * Receive/process a contract signed by the utility owner and circulate for execution. * Draft and send the utility owner a letter with the contract attached. |
| Submit Rainbows to Environmental (TDOT staff only)   * Review Utility Relocation Plans, aka Rainbow Plans. * Forward plans to the NEPA/Environmental Lead and Environmental Permit Lead, coordinating potential environmental reevaluations, additional environmental technical studies, or changes to the permit sketches. |
| Put Utilities to Work (TDOT staff only)   * Gather all approved documents to include as an attachment to the “put to work letter”. * Draft and send the utility owner a signed letter authorizing them to commence their relocation. |
| Submit Construction Drawings to Design (TDOT staff only)   * Generate the U1 drawings from Utility Relocation Plans (aka Rainbow Plans). * Gather all utility relocation plans for each utility, including the owner’s work in the state contract. * Compile all drawings together into a .pdf portfolio. * Send the compiled drawings to the Roadway Design Lead for incorporation into the Plan-in-Hand Plans and then final Construction Documents. * Attend the two review meetings (list and count hours in the meeting list above). |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |

# 3UT2 |Prepare & Submit Railroad Certification

## Objective:

Verify required coordination steps have been completed and secure/finalize the utility certification for letting.

## Assumptions:

Fill in assumptions. Insert additional assumptions/exclusions as needed.

## Meetings and Trips:

Meetings (Insert meeting type and duplicate field for each meeting type, e.g., Scoping Meeting, ROW Strategy Meetings, Field Review Meetings, Permit Strategy Meetings):

* Insert # meetings
* Insert # staff per meeting

Site Visits/Trips:

* Insert # of trips
* Insert # staff per trip

List other required meetings, including staff per meeting:

## Tasks/Deliverables:

|  |
| --- |
| Tasks/Deliverables with Assumptions |
| Receive and Process Utility Deposits (TDOT staff only)   * Confirm utility owner has sent a check or wires money via LGIP account for the amount specified in the executed relocation contract. * If TDOT has not received the money 6 months prior to letting, send the utility owner a letter informing them that TDOT will remove their work from the state contract if funds are not received. * Upon receiving the check, deliver the funds and submit a copy of the contract to Central Accounting. |
| Verify Utility Coordination Is Complete (TDOT staff only)   * Review the project to verify all rules, regulations, and policies were followed for both utility and railroad coordination. * Check that all contracts have been executed and utilities have been put to work. * Verify deposits, if any, have been sent to the Finance Division. * Verify that U1s, U2s, etc. have been sent to the Roadway Design Lead and uploaded to the project file. |
| General Task Management   * Internal coordination and meetings * Project documentation * Administration |
| Complete QC/QA Procedures   * Perform appropriate quality reviews and complete quality checklists in accordance with the TDOT Quality Manual. |
| Insert other tasks as needed:  1.  2. |