Project Overview
This project is a bridge replacement and bridge overlay project on Trunk Highway (TH) 94. The bridges are over the Sauk river and are located east of Sauk Centre and west of Melrose. Bridges 73805 and 73809 (west bound TH 94) will be replaced and bridges 6896 and 6897 (east bound TH 94) will be overlayed. The successful responder will design the roadway portion of the project and work with MnDOT's bridge office to prepare a final plan-set. The project will include replacement of two bridges, overlay of two bridges, replacement of guardrail, approach panels, and roadway to facilitate the new bridge design. Traffic will be run head-to-head over alternate bridge to facilitate traffic during construction of the sister or twin bridge. The project will require construction of four crossovers, to shift traffic.

Scope of Work:
This contract is for the engineering services required to develop cross sections and construction limits, and the development of a biddable final plan-set and special provisions to accompany the final bridge plan-set and special provisions for the new bridges and overlayed bridges on I94. This project is being developed for an **October 24, 2025** letting.

Overview of Work Tasks:
1. Project Management
2. Cross sections and construction limits that identify environmental impacts
3. Hydraulic design
4. Detail Design of roadway
5. Permit Information
6. Wetland Delineations
7. Wetland Environmental Document and Aquatic Permits
8. Utility identification and coordination.
9. Traffic Management (TMP), Traffic Control, Staging, Signing, and Striping plans
10. Approach grading reconstruction plans and specifications associated with new bridge construction
11. Documentation of Design Standards in Project Design Memorandum
12. Prepare Preliminary and Final Cost Estimates
13. Special Provisions (ST)
14. Project Management tasks will include ongoing coordination with MnDOT's Bridge Office and other specialty offices during plan development
15. Deliverables
16. Consultation during construction

The successful responder will perform all tasks necessary to prepare and receive State and Federal approvals associated with the tasks below. All tasks will be prepared in accordance with State Manuals, Standards, Policy's, and Work Types included in the project. The successful responder's tasks will include:

1. Project Management [Source Type 1010]
2. Utility Identification/Coordination [Source Type 1195]
3. Construction Limits [Source Type 1200]
4. Detail Roadway Design and Division ST, Special Provisions [Source Type 1250]
5. Wetland Delineation [Source Type 1071]
6. Wetland Environmental Document [Source Type 1071]
7. Permits [Source Type 1280]
8. Project Turn-In [Source Type 1250]

TASK 1: PROJECT MANAGEMENT [Source Type 1010]

Project Management will include work necessary for communication and completion of the project tasks on time and within budget. MnDOT will provide a MnDOT Project Manager (PM) to help manage the project. The successful responder's PM or their primary duties will not be reassigned without the written consent of the MnDOT's PM. The successful responder's staff will have the training and expertise necessary for the work tasks to which they are assigned.

1.1: Project Management and Administration

It will be the responsibility of the MnDOT PM to receive the work produced by Successful responder, schedule reviews for compliance with contract requirements, and to recommend payment for such work. The successful responder will utilize MnDOT's ProjectWise project directory for project file sharing. Project directory standards and file naming standards are available upon request to the successful responder's PM.

The successful responder will maintain regular contact with the MnDOT PM to provide updates, coordinate activities, resolve project issues, and schedule project meetings. The successful responder will be expected to work through project issues cooperatively with a project team, internal specialty offices and external agencies as requested by the MnDOT PM.

The successful responder will submit monthly invoices for payment by the State. Invoices will show labor hours broken down by task and source type and will include overhead and fixed fee, as applicable. The successful responder will submit to MnDOT's PM progress reports every other week and provide monthly budget updates. Progress reports will include progress updates to MnDOT's Primavera 6 (P6) Critical Path Method (CPM) schedule.

1.2:Schedule Management

State Project (SP) 7380-260 is planned for letting on **October 24, 2025.** The successful responder will work with MnDOT's PM to propose and achieve milestones as identified in the MnDOT P6 project schedule as discussed at the Kick-off meeting. MnDOT expects 100% completion of tasks and deliverables for a final Construction Plan turn in on **June 24, 2025.** Key anticipated schedule milestones are:

Item	Due Date
1. Anticipated Contract Kick-Off	June 12, 2024
2. Anticipated Signed Preliminary Bridge Plan (MnDOT)	June 12, 2024
3. Right of Way (ROW) Construction Limits and Wetland Limits	October 7, 2024
4. 30% Submittal (Construction Plans)	December 18, 2024
5. 60% Submittal (Construction Plans, Engineer's Estimate)	February 3, 2025
90% Submittal (Construction Plans, Engineer's Estimate, Special Provisions)	March 19, 2025
6. 95% Submittal (Construction Plans, Vellum Title Sheet, Engineer's Construction Cost Estimate, and Special Provisions)	June 2, 2025
7. 100% submittals to MnDOT (Construction Plans, Title Sheet, Engineer's Construction cost Estimate, and Special Provisions)	June 24, 2025

*The successful responder will schedule Project Design Team (PDT) meetings to coincide with the above major milestones.

1.3: PDT Meetings

MnDOT will establish the PDT to assist reviews and concurrence of contract requirements. The successful responder's Key Personnel for the team meetings will include:

a. Successful responder's PM
b. Successful responder's Roadway Design Engineer
c. Successful responder's Hydraulic Engineer (as required)

1.4: Project Meetings

The successful responder will collaborate with MnDOT's PM to schedule PDT progress and other meetings. Project meetings will be held virtually via Microsoft Teams with a ½-hour duration unless noted otherwise. The successful responder will provide monthly updates and meet as needed with the PDT. The successful responder will provide agenda's two days in advance of meetings and meeting minutes within three days after meeting. The successful responder will maintain a comment log and action item list for any items requiring resolution, this list must be included in the successful responder's meeting minutes.

1.4.1: Kick-Off Meeting

The successful responder will schedule and facilitate a kick-off meeting to establish communication protocol for the design, discuss known project issues, and review the project schedule. The successful responder will receive available project information from State. Note: the successful responder must submit its list of meeting attendees to MnDOT's PM five days prior to the meeting. Assumes kick-off meeting will be remote and not in person.

1.4.2: Anticipated Meetings

The successful responder, in coordination with MnDOT's PM, will schedule and facilitate up to **2 Utility Information/Coordination Meetings**, and up to **2 traffic staging/detour meetings.** PDT meetings are to align with the major milestones described in sections 1.2 Schedule Management. Assumes the meetings in section 1.4.2 will be remote and not in person.

1.4.3: Public Outreach Activities

Public outreach activities will be led by MnDOT. The successful responder will provide support and the information necessary for public outreach activities.

1.5: Survey Coordination

1.5.1: The successful responder will make an analysis of existing survey data and information.

1.5.2: If the data are found to be incorrect or incomplete, the successful responder will bring this finding to the attention of MnDOT's Project Manager immediately with a survey request, such that district surveys can collect the additional field data needed for a quality design.

1.6: Quality Control Management

1.6.1: The successful responder will assign a key team member the title of quality control manager. The quality control manager will:

1.6.1.1 Review key submittals. Key submittals include draft plan set submittals.

1.6.1.2 Use the following basic format for quality certification: checking, back checking, and verifying format as according to MnDOT's Design-Bid-Build Quality Management Process. Refer to www.dot.state.mn.us/design/qmp/index.html for further information.

1.6.2: The successful responder will develop a TH 94 specific Quality Management Plan (QMP) detailing the quality process to be used.

1.6.3: The successful responder will submit the TH 94 QMP to MnDOT for review and approval.

1.7: Deliverables

1.7.1: The Successful Responder's Deliverables:

a. Schedule and attend meetings.
b. Hold weekly update meetings with State's Project Manager
c. Prepare meeting agendas, displays, and minutes.
d. Prepare and submit monthly progress and status reports.
e. Maintain project schedule.
f. Provide timely copies of critical correspondences and project issue data.

g. Submit refined Work Plan.
h. Submit electronic project files at the project completion.
i. Project QMP.

1.7.2: MnDOT Deliverables:

a. Review and respond to submittals.
b. Coordinate internal reviews.
c. Provide copies of project correspondences and project information.
d. Attend meetings.
e. Approve deliverables.
f. Monitor quality control.

TASK 2: UTILITY IDENTIFICATION/COORDINATION [Source Type 1195]

Utility coordination will include tasks necessary to be in compliance with MnDOT's Utility Accommodation & Coordination Manual and applicable State Statutes. This includes, but is not limited to, Gopher State-One Call (GSOC) contacts and preparing and distributing letters and plans, meetings, and individual utility contacts. For the purpose of this contract, "utility facilities" means and includes all privately, publicly, or cooperatively owned communication lines and facilities, and any system, lines, or facilities for the distribution or transmission of electrical energy, gasoline, oil, gas, water, steam, or for the exclusive collection of sewage.

2.1: Deliverables

2.1.1: The Successful Responder's Deliverables:

a. GSOC documentation.
b. Coordination Letters and attachments.
c. Utility Plans.
d. Utility Coordination Meeting agendas, materials, and minutes.
e. Phone log documentation.
f. Project Manager utility certification.
g. Meeting minutes.

2.1.2: MnDOT Deliverables:

a. Survey field data from GSOC locates.

TASK 3: CONSTRUCTION LIMITS [Source Type 1200]

This task includes all design tasks to determine whether or not construction boundaries (including all disturbed ground necessary for working space) are within existing ROW, and if not, delineate the final construction limits for ROW purposes. Includes all work which determines the preliminary typical sections and proposed cross sections, and preliminary work on special features, such as storm water treatment or discharge Best Management Practices (BMPs), and special staging. Includes all design work which shows the cross sections that exist.

3.1: Geometric Considerations

The successful responder will prepare final construction limits based on preliminary bridge hydraulic recommendations and preliminary bridge concepts to be provided by MnDOT. The successful responder will provide draft and final ROW construction limits to MnDOT. The successful responder will identify anticipated utility impacts and associated relocation lead times utilizing state provided utility survey data. MnDOT will provide ongoing coordination will be required with specialty offices such as MnDOT's Bridge Office, Bridge Hydraulics Unit, Foundations Unit, in addition to district staff. Document existing and proposed design standards through preparation of a design memorandum for the project.

3.2: Hydraulic Considerations

The successful responder will incorporate into the delineated final construction limit ditch drainage and any storm water treatment locations discharge BMPs required. The successful responder will seek consensus of the PDT and MnDOT's hydraulics staff for selection of storm water treatment or discharge BMP's that would be placed in advance of the receiving water bodies. The successful responder will design will perpetuate existing drainage patterns and provide for roadway sections meeting all current design standards or installation of safety features where constraints exist.

3.3: Environmental Impacts Limits

Construction limits will also be used as a basis for determining preliminary environmental impacts needed for further environmental coordination and documentation. The successful responder will provide MnDOT staff with excavation and construction limits as needed for any Environmental Site Assessment work or Cultural Resource Archaeologic Assessment Investigations, as requested. Tree clearing acreage will need to be provided, if any are planned.

3.4: Preliminary Wetland (2-Part Finding) Limits

Preliminary wetland construction limits and cross sections will be provided to MnDOT for preparation of the Wetland 2-Part Finding required in the Environmental Document. MnDOT will produce the Wetland 2-Part Finding.

3.5: Final Wetland Limits

The successful responder will provide final wetland construction limits and cross sections to MnDOT for permitting beginning at a 60% plan deliverable. MnDOT will produce wetland exhibits and obtain permitting.

3.6: Deliverables

3.6.1: The Successful Responder's Deliverables:

a. Construction Limits.
b. Determination of wetland impacts.
c. Tree Clearing Limits and quantities.

3.6.2: MnDOT Deliverables:

a. Review construction limits and submit comments.
b. Submit Wetland Permitting Documentation

TASK 4: DETAIL ROADWAY DESIGN [Source Type 1250, unless otherwise noted]

4.1: Detail Roadways Design

4.1.1: The successful responder will prepare portions of the construction plans for the proposed roadway improvements that are consistent with horizontal and vertical alignments, typical sections, and construction limits identified in the approved Design Memorandum. The portions of the road plans prepared under this contract will also be consistent with findings and recommendations identified in the Categorical Exclusion (CATEX) and Material Design Recommendation (MDR).

4.1.2: The successful responder will perform work in accordance with MnDOT's Transportation Project Development Process (TPDP) https://www.dot.state.mn.us/project-development/index.html, MnDOT's Computer Aided Drafting and Design (CADD) standards, and Technical Memoranda. Work must be completed using English units.

4.1.3: The successful responder Ensure that the format of the draft construction plans will comply with the MnDOT (District) provided sample plan and MnDOT's CADD Standards Manual.

4.1.4: The successful responder will perform the following Open Roads Design (ORD) plan sheets. Sheets will be combined with the prior consent of MnDOT's Project Manager:

a. Title Sheet

b. General Layout
c. Statement of Estimated Quantities (SEQ)
d. Soils & Construction Notes
e. Standard Plates
f. Alignment Tabulations
g. Typical Sections
h. Quantity Tabulations
i. Underground Utility Conflict Plan
j. Removal Plans
k. Miscellaneous Details
l. Standard Plan Sheets
m. Construction Staging Plans & Details
n. Traffic Control Plans, detour plans & tabulations
o. In-place Topography, Utility, and ROW
p. Construction Plan Sheets
q. Roadway Profile Sheets
r. Grading Plans
s. Storm Water Pollution Prevention Plan (SWPPP)
t. Environmental Management Plan
u. Drainage Plans, and Profiles
v. Temporary Erosion/Sediment Control Plans
w. Turf Establishment and Permanent Erosion/Sediment Control Plans
x. Striping Plan
y. Signing Plan
z. Earthwork Tabulations and Summary
aa. Cross-Section Sheets

4.2: Hydraulic Analysis and Design [Source Type 1141]

The successful responder will perform the following tasks according to MnDOT's District 3 Hydraulic Guidelines, the Drainage Manual, and other applicable resources with the approval of the district Hydraulics Engineer or their delegation. For this task, the successful responder will:

4.2.1: Repair, Cured-in-Place-Pipe (CIPP) line, or replace existing poor or failing condition pipe culverts.

4.2.2: Dewater and/or clean pipe culverts that could not be inspected, to allow determination of each culvert condition. Pipe inspection will be performed by the successful responder and verified by MnDOT hydraulic staff. It is assumed that the pipes requiring inspection are dry. Dewatering will be considered extra work.

4.2.3: Assemble a matrix to summarize the relevant storm water and/or environmental regulations that will apply to the project and coordinate with MnDOT early in the design process to ensure the final design meets their storm water and/or environmental requirements.

4.2.4: Perform drainage modeling and design culverts, ditches (including flumes), filtration/infiltration facilities, ponds, and storm sewer. The design computations and sizes will be delivered between the 30% and 60% plan reviews. This deliverable will include:

a. Drainage plan view sheets showing location of drainage structures, pipes, outfalls, and ponds (if any).
b. Drainage profile sheets showing the hydraulic grade line on proposed pipes and structures.
c. Hydraulic design information in a table showing any proposed drainage structures, drainage areas, runoff coefficients, time of concentration, intensity, drainage area discharge, allowed spread width, computed spread width, and bypass flow amounts.
d. Pond grading plans and details (if applicable).
e. Infiltration/filtration basin and pond modeling computations for each feature (if applicable).
f. Hydraulic design of ditches and/or flumes.

g. Incorporate necessary subsurface drainage into drainage plans, tabulations, and details as needed.
h. Evaluate storm sewer alternatives for addressing drainage deficiencies.

4.2.5: Prepare hydraulic plans that incorporate approved drainage recommendations.
4.2.6: Incorporate BMPs according to National Pollutant Discharge Elimination System (NPDES) permit for use during construction.
4.2.7: Size rip rap according to proposed pipe velocity (MnDOT Drainage Manual).
4.2.8: Update culvert guidepost to MnDOT standards.

4.3: Traffic Control Design [Source Type 1254]

The successful responder will prepare traffic control and detour plans for this project, consistent with the Minnesota Manual of Uniform Traffic Control Devices (MMUTCD), Manual for Temporary Traffic Control Zone Layouts, and MnDOT (District) practices, including the following details:

4.3.1: Confer with State regarding the staging, schedule, and detours.
4.3.2: Prepare TMP in coordination with the MnDOT (District) Traffic Engineer as guiding document for design and resource for implementation during construction.
4.3.3: Prepare traffic control and detour plans that will correspond with each construction stage. The plans will include notes, symbols and abbreviations, layout plans for each stage showing signs, pavement markings, channelizing devices, traffic barriers, delineators, temporary curbs, attenuators, and pavement marking removals as appropriate.
4.3.4: Prepare tabulations that will summarize the markings, signs, and other traffic control devices and their locations.
4.3.5: A minimum of one lane in each direction will be maintained at all times during construction.

4.4: Signing and Pavement Marking Plans [Source Type 1255]

4.4.1: The successful responder will prepare signing and striping plans for this project, consistent with MnDOT's Signing and Striping Standards and District practices, including the following details:
4.4.1.1: The salvaging and installing of existing signs, and/or replacement will be limited to the proposed regrade areas as listed in this scope of work.
4.4.1.2: Permanent striping will be quantified for new pavement surfaces and for areas impacted by construction. Striping plans will consist of notes, tabulations, and details. Plan sheets depicting the striping for the entire length of the project are not included.

4.5: Special Provisions

Under this task, the successful responder will:

4.5.1: Produce the project Special Provisions (Division ST). Deletions from, and additions to Standard Specifications will be written and included, as necessary.
4.5.2: Develop construction contract time and traffic provisions (timeline and bar chart) with input from MnDOT.
4.5.3: Submit the Special Provisions (Division ST) to MnDOT for review along with the 90%, 95% and 100% Construction Plan submittals.
4.5.4: Submit electronic copies of the final Special Provisions (Division ST) with signed cover sheet, in Microsoft Word format with the Final Construction Plans.
4.5.5: MnDOT will prepare the Special Provisions (Division S) for reviews & final submittal.

4.6: Engineer's Construction Cost Estimate

Under this task, the successful responder will:

4.6.1: Submit the Engineer's Construction Cost Estimate based on quantities and information at hand, starting with the Intermediate Design (60%), and all submittals thereafter.
4.6.2: Utilize the latest cost data available for the cost estimates.

4.6.3: Submit an electronic copy of the cost estimates in Excel.

4.7: Environmental Management Plan

4.7.1: Standards and Guidance

4.7.1.1: The Successful responder will create an Environmental Management Plan (EMP) for the project according to the following documents, which are available on the TPDP Environmental Commitments website. in accordance with:

a. Green Sheet Template
b. Green Sheet Instructions
c. Green Sheet Process

4.7.2: Items Provided by MnDOT:

a. EMP Template
b. Guidance documents
c. 30% EMP, consisting of a partial list of initial commitments based on responses to the Early Notification Memo (ENM) and other commitments that are known so far.

4.7.3: The Successful responder will:

4.7.3.1: Review all ENM responses and ensure that all relevant commitments are added to the draft EMP. Coordinate with subject matter experts on specific commitments as needed.

4.7.3.2: Ensure that commitments are updated when new information becomes available from field reviews or permit requirements. Coordinate with subject matter experts as needed to update specific commitments.

4.7.3.3: Provide a draft EMP to be included in the environmental document as the Mitigation Commitments Table.

4.7.3.4: Provide draft EMPs for inclusion in the plans at the 60%, and 90% plan review stages.

4.7.3.5: Update a copy of the EMP that displays only construction commitments to be included in the plan set for 100% plan submittal. Do this according to the description of the Construction Green Sheet in the Green Sheet Instructions document.

4.7.3.6: Provide the full spreadsheet version of the EMP as a separate Excel document upon 100% plan submittal.

4.7.4: The Successful Responder's Deliverables:

a. Draft EMP to be included in the environmental document as the Mitigation Commitments Table
b. Draft EMPs for inclusion in the plans at the 60%, and 90% plan review stages.
c. Copy of the EMP showing only construction commitments to be included in the plan set for 100% plan submittal.
d. Full spreadsheet version of the EMP as a separate Excel document upon 100% plan submittal.

4.8: Project Turn-In

4.8.1: **File format**

4.8.2: All electronic files must contain searchable text and must be submitted in the following format:

a. Digitally signed Construction Plan in electronic format (PDF)
b. Digitally signed Title Sheet in electronic format (PDF)
c. Special Provisions (Division ST) Digitally signed in electronic format (PDF)
d. Final Construction Cost Estimate (Excel)
e. Utility Certification Letter Digitally signed in electronic format (PDF)
f. Signed Quality Management Plan (QMP) form (PDF)

4.8.3: The successful responder will prepare and submit Plans and Specs (P6 Activity Code TUR1040)

4.8.4: The successful responder will provide a certified complete and final plan set in electronic format, representing all aspects of the project to the State for final proposal assembly and advertisement. The final plan set must include:
   a. All resolved and incorporated project comments and commitments.
   b. One digitally signed title sheet certified by the certifying engineer in electronic format.
   c. One complete conformed plan in electronic format digitally signed by the certifying engineer.

4.8.5: Provide a final set of project-specific special provisions for incorporation into the project proposal documents.
   4.8.5.1: Final project special provisions with digital signature of the certifying engineer required under this contract for: Division ST.

4.8.6: The Successful Responder's Deliverables:
   a. Utility certification letter
   b. Permits and/or status of permits.
   c. Digitally certified title sheet in electronic format
   d. Digitally certified and conformed plan set in electronic format.
   e. Final special provisions (ST) for project in electronic format
   f. Final design construction estimate

4.9: Software

4.9.1: Report source files must be in current versions of Microsoft Word and Microsoft Excel. Files must be delivered to MnDOT by e-mail or FTP.

4.9.2: CADD deliverable source files must meet MnDOT's Level 2 Enhanced CADD Data Delivery Specifications and be developed in ORD.

4.9.3: All applicable spatial data and maps created in Geographic Information System (GIS) software must be provided in a standard shapefile format (.shp) that is compatible with current versions of ArcMap software.

4.9.4: All source files also must be converted to Adobe Acrobat (.pdf extension), and the PDF must be searchable, with scanned pages eliminated except for signature pages.

4.10: Standards and Guidance

4.10.1: The successful responder will submit Construction Plans and documents for review and approval at the following milestones:
   4.10.1.1: All field data must be provided in GIS/Global Positioning Systems (GPS)/County Coordinates – NAD83 (1996) County Datum and NAVD 88 vertical datum, MicroStation Open roads Designer and Microsoft Excel/Word formats.
   4.10.1.2: All design work must be done in conformance with current State MicroStation ORD following Level 2 Enhanced CADD Data Delivery Specifications.
   4.10.1.3: Design and field work may need to start out in Power GEOPAK SS10 and migrate to ORD. The successful responder may be able to start in ORD if MnDOT is ready to proceed in ORD.

4.11: Plan Format

The successful responder will:

4.11.1: Ensure that the format of the Construction Plans comply with the sample plan provided, and MnDOT's current design concepts and practices.

4.11.2: Submit all sheets contained in the Construction Plans and cross sections to MnDOT in ORD format.

4.11.3: Ensure that the plans and cross sections are in compliance with MnDOT CADD Standards Manual.

4.11.4: Submit plans for reviews in PDF format created using Adobe Acrobat 8.0 or later.

4.12: Plan Review and Approval

4.12.1: Initial Design (30% Complete)

The Successful responder will submit one PDF copy of the following elements of the Construction Plan:

a. Title Sheet
b. General Layout
c. In place Utility plans with initial conflicts determined
d. Typical Sections
e. Alignment Plan
f. Alignment Tabulation
g. Topography Plans
h. Preliminary Construction Plans
i. Preliminary Intersection Details
j. Profiles
k. Superelevation Plans
l. Staging Concept
m. Cross Sections with top surface

MnDOT staff will complete review and comment on this submittal within 10 working days of the submittal date. The successful responder will make all necessary revisions required by MnDOT's (District) staff.

4.12.2: Intermediate Design (60% Complete)

The successful responder will:

4.12.2.1: Submit one PDF copy of the proposed Construction Plan elements listed in Section 4.1 of this Scope of Work.

4.12.2.2: Submit one electronic Microsoft Excel copy of the Engineer's Construction Cost Estimate for the State's review and comment along with the Construction Plan. MnDOT's (District) staff will complete review and comment on this submittal within 10 working days of the submittal date.

4.12.2.3: Make all necessary revisions required by MnDOT's (District) staff.

4.12.2.4: Conduct a constructability review in cooperation with MnDOT's (District) staff to confirm the feasibility of staging and plan implementation.

4.12.3: Detail Design (90% Complete)

The successful responder will:

4.12.3.1: Consider the 90% complete plans to be 100% complete.

4.12.3.2: Submit, one ORD copy and one PDF copy of the proposed Construction Plan, one electronic Microsoft Word copy of the Project Special Provisions, and one electronic Microsoft Excel copy of the Engineer's Construction Cost Estimate for the State's Review and Comment. MnDOT's (District) staff will complete review and comment on this submittal within 10 working days of the submittal date. Selected sheets will be sent to MnDOT's Central Office for preparation of any necessary Agreements.

4.12.3.3: Make all necessary revisions required by MnDOT's (District) staff.

4.12.4: Detail Design (95% Complete)

4.12.4.1: The 95% plan will have signatures on the plan-set. In addition to the 90% items, it will include: final submittal memo, utility project manager checklist, state quality control check process forms and final cost estimate.

4.12.4.2: Upon making the revisions to the 95% Construction Plan submittal, the successful responder will submit to the signed and certified set of Electronic PDF plan set and one ORD copy.

4.12.4.3: The successful responder will submit one electronic Microsoft Word copy of the Project Special Provisions; and one electronic Microsoft Excel copy of the Engineer's Construction Cost Estimate to the District.

4.12.4.4: MnDOT's District will submit the plan package to MnDOT's Central Office Design Liaison Unit for review and approval. MnDOT's Central Office Design Liaison Unit will make a final review and comment on the certified Construction Plan.

4.12.5: Construction Plan (100% Complete)

Under this task, the successful responder will:

4.12.5.1: Upon making the revisions to the 90% Construction Plan submittal, will submit two signed and certified set of bond prints with vellum title sheet, one ORD copy and one PDF copy of the Construction Plan. Electronic signature is acceptable for signing the plans.

4.12.5.2: Submit one electronic Microsoft Word copy of the Project Special Provisions; and one electronic Microsoft Excel copy of the Engineer's Construction Cost Estimate.

4.12.5.3: Submit the original prints to MnDOT's Central Office Design Liaison Unit for review and approval. MnDOT's Central Office Design Liaison Unit will make a final review and comment on the certified Construction Plan.

4.12.6: Construction Plan (Revisions for Bid Letting)

Under this task, the successful responder will:

4.12.6.1: Make the revisions requested by MnDOT's Central Office Design Liaison Unit.

4.12.6.2: Submit new signed and certified sheets, as necessary.

4.12.6.3: Submit an electronic copy of the project's Geopak design files and each sheet in ORD format and PDF format.

4.12.6.4: Submit one copy of the design computations and quantity calculations and associated electronic computation files.

4.13: Deliverables

4.13.1: The Successful Responder's Deliverables:

a. Submit all deliverables specified in this Exhibit, in a timely manner, in accordance with the schedule milestones listed above.
b. Provide MnDOT an electronic copy of all project files, including, but not limited to, one ORD design files, input files, design computations and quantity calculations, engineer's estimate, special provision, and hydraulic design and computation files.

4.13.2: MnDOT's Deliverables:

MnDOT will provide the following information and data:

a. Survey Mapping, Digital Terrain Model (DTM), and Orthomosaic Imagery
b. Utility Identification Survey
c. Existing ROW Mapping
d. Wetland Delineations
e. Bridge repair recommendations and bridge repair plans
f. Preliminary Bridge Concept and Staged Construction Concept
g. Culvert Hydraulic Recommendations. Recommendations based on needs of inspection reports by State.
h. Bridge Hydraulic Memorandums (Structure Determination)
i. ENM for the project and Initial ENM responses
j. Project Scoping Report
k. CATEX and Design Memo
l. MDR, soil borings and Equivalent Single Axle Load (ESAL) Traffic Forecast

m. Sample plans and sample pavement marking details.
n. Record plans of roadways.
o. State's electronic project directory standards and file naming standards.
p. State's CADD Standards at: http://www.dot.state.mn.us/caes/files/pdf/mndot-caddstandardsdocumentation.pdf

TASK 5: WETLAND DELINEATION [Source Type 1071]

The successful responder is responsible for the Level 1 and 2 wetland delineations for the project including preparation of a wetland delineation report and work necessary to obtain concurrence/approval for the level 2 wetland type and boundary delineation from the appropriate regulatory agencies. For the purposes of this contract, the study area will be defined as everything within ROW.

a. Center median wetlands will be delineated from aerial photos and no sampling will take place in the median for both level 1 or 2 wetland delineations.
b. Level 1 (off-site) delineations if required may be completed outside of the growing season.
c. Level 2 delineation and approvals will take place during the growing season (roughly May 15 to October 15) or as allowed by the United State Army Corps of Engineer (USACE) growing season constraints.
d. Pin flags will be placed and left in place for delineated boundaries on the roadway edges. No pin flags will be placed in the center median.
e. No pin flagging is required if GPS survey includes wetland boundary points and transect sample points.

5.1: Delineate Wetlands (Level 1) (WTL1010)

5.1.1: **Field Observation:** The field review may occur outside of the growing season. Level 1 on-site wetland delineation will include on-site verification of aquatic resources and type, list dominant vegetation, and include electronic boundaries map. Level 1 findings will be incorporated into Level 2 Delineation Report.

5.1.2: **The Successful Responder's Deliverables:**
a. Level 1 delineation map in Adobe pdf format.

5.2: Delineate Wetlands (Level 2 Field Work) (WTL1020)

5.2.1: The successful responder's Certified Wetland Delineator will complete on-site field investigations for wetland parameters along the project corridor. The onsite wetland delineation will be conducted per USACE 1987 Wetland Delineation Manual and appropriate Regional Supplements. The successful responder will examine soil, vegetation, and hydrology signatures to determine if the wetland criteria are met. Observations will be recorded on data sheets in accordance with the Northcentral/Northeast or Midwest Regional Supplement. When the three wetland criteria are present, pin flags will be placed in the field along the delineated wetland boundary, and GPS located with a handheld GPS unit with sub-meter accuracy. Eggers and Reed Wetland Community types should be recorded. Remarks on data sheets must be included to fully explain the summary of finds and wetland decisions.

5.2.2: **The Successful Responder's Deliverables:**
a. Level 2 delineation mapping in ORD format.

5.3: Prepare Wetland Delineation Report (WTL1030)

5.3.1: The successful responder will prepare a Wetland Delineation Report from the Office and Field Review activities. The report will be prepared in accordance with the Guidance for Submittal of Delineation Reports to the St. Paul District USACE and Wetland Conservation Act (WCA) Local Governmental Units (LGU) in Minnesota, Version 2.0. The delineated wetland boundaries will be illustrated on high resolution aerial photographs and wetland delineation forms will be included as an attachment. The successful responder will submit the wetland delineation report to both the MnDOT Office of Environmental Stewardship, which serves as the LGU responsible for implementing the WCA and the USACE for concurrence and approval of the delineated wetland boundaries and identified wetland types.

5.3.2: **The Successful Responder's Deliverables:**

a. Draft wetland report submitted to the State's Project Manager for review.
b. Draft Wetland Delineation Boundaries in GIS and ORD Format.
c. Final agency approved Wetland Delineation Boundaries in GIS format and ORD format.
d. Final Wetland Delineation Report.

TASK 6: WETLAND ENVIRONMENTAL DOCUMENT [Source Type 1071]

6.1: Aquatic Resources – Environmental Document

6.1.1: The successful responder will arrange, coordinate, and facilitate Early Coordination/ Technical Evaluation Panel (TEP) meetings, if needed, for this project. The successful responder will invite the MnDOT PM and Environmental Coordinator, MnDOT WCA LGU representative, Board of Water and Soil Resources (BWSR) TEP representative, Minnesota Department of Natural Resources (MnDNR) TEP representative, and USACE liaison for MnDOT, local WCA LGU, Soil and Water Conservation Districts (SWCD) representative.

6.1.2: The successful responder will use the USACE coordination meeting topic checklist to guide the agenda (provided by MnDOT).

6.1.3: The successful responder will evaluate alternatives in accordance with Executive Order 11990 and in accordance with Wetland Two Part Finding Document. All avoidance and minimization efforts must be documented by the successful responder and recorded in the environmental document. The result of this documentation will indicate to regulatory agencies that the Least Environmentally Damaging Practicable Alternative has been selected.

6.1.4: The successful responder will also provide exhibits for the environmental document displaying alternatives and aquatic resources impacted. The exhibits should show wetlands impacts/encroachments including temporary impacts at the time the document is completed, and construction limits in relation to wetland boundaries. The successful responder will submit files in MnDOT in ORD format. The successful responder will also prepare a table of permanent and temporary wetland impacts by amount and type of impact per impact area.

6.2: Aquatic Resources – Permitting

6.2.1: The successful responder will apply for the Section 404 Clean Water Act/Section 10 Rivers and Harbors Act permits according to Transportation Regional General Permit, Letter of Permission, or Standard Individual Permit procedures and requirements according to the USACE. The successful responder will use the "Joint Application Form" to apply for the section 404 permit. The successful responder will submit the permit application to the USACE 4 months before project letting for a Regional General Permit, 8 months in advance for a Letter of Permission, and 1 year in advance for a Standard Individual Permit. The successful responder will coordinate with the MnDOT Office of Environmental Stewardship WCA signatory to determine wetland mitigation options, which will be used to complete the permit application. The successful responder will apply for a section 408 permit/permission from the USACE if applicable for this project.

6.2.2: The successful responder will apply for the WCA approval according to the current WCA Rule. The successful responder will use the "Joint Application Form" to apply for this permit. This permit application will be submitted to the WCA LGU at the same time the Section 404 Clean Water Act permit application is submitted.

6.2.3: The successful responder will apply for the MnDNR General Permit or Individual Permit using MnDNR Permitting and Reporting System. The successful responder will apply for the permit according to current MnDNR Rule. The permit application will be submitted at the same the Clean Water Act Section 404 permit application is submitted.

6.2.4: The successful responder will also apply for an Individual Water Quality Certification, if this permit applies to this project (Section 401 Clean Water Act) according to the current Minnesota Pollution Control Agency (MPCA) Rule and current MPCA procedures. The permit application will be submitted at the same time the Clean Water Act Section 404 permit application is submitted.

6.2.5: The successful responder will apply for any necessary Minnesota Watershed District permits according to watershed district permit requirements. This permit application will be submitted at the same the Clean Water Act Section 404 permit application is submitted.

TASK 7: PERMITS [Source Type 1280]

7.1: Permit Applications

The successful responder will investigate the requirements for all permits for this project to include the MPCA and NPDES Permit. The successful responder will provide the SWPPP for MnDOT to apply for the NPDES Permit, if required.

TASK 8: CONSTRUCTION DESIGN SUPPORT [Source Type 1800]

8.1: Design Support/Plan Revision – The successful responder will be available to answer questions concerning design/plan content during the construction of the project at the request of MnDOT.

8.2: Design Support Requests – The successful responder will answer requests for information regarding the plan.

8.3: Request for Information (RFI) log – The successful responder will create and maintain a RFI log.

8.4: Hydraulics – The successful responder will provide hydraulic elevation, analysis and recommendations as needed to adjust for any unknown or unforeseen hydraulic conditions in the field. The successful responder will review all shop drawings.

8.5: Plan Revisions – The successful responder will revise plans for any unknown or unforeseen conditions in the field, as directed by MnDOT's PM. The successful responder will review and provide responses to any plan content information submitted by the construction successful responder. The successful responder will provide quantity calculations for any unknown or unforeseen conditions in the field, as directed by the MnDOT PM.

8.6: The Successful Responder's Detail Design Review Deliverables:

a. Attend Preconstruction Conference
b. Answer questions about the design/plan.
c. Provide timely deliverables. Deliverable timelines will be jointly determined by the successful responder, MnDOT Resident Engineer, and MnDOT's PM per issue.

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