

Northeast Region

Request for Proposals: Instructions to Proposers

Addendum #1

Town of Grand Chute, College Avenue

IH 41 – Bluemound Drive

STH 125, Outagamie County

Design-Build Project

State Design/Construction IDs: 6526-00-00/71

June 23, 2022

1.2.2 Project Environmental Status

National Environmental Policy Act (NEPA) requirements are complete. Categorical Exclusion (CE) was signed on December 21, 2021.

1.2.3 Status of Required Right-of-Way Acquisition

Existing and proposed permanent Right-of-Way and proposed Temporary Limited Easement (TLE) for the Project are as shown on the Transportation Project Plat (TPP) and the TLE Acquisition Exhibit in Book 2, Section 7, Exhibit 7-A. There are several parcels that are yet to be acquired by the Department. The Department will acquire these parcels, based on the following conditions, at no cost to the Design-Builder:

- Parcel 1 (TPP No: 6526-00-21 4.01 Amendment No. 1) is anticipated to be acquired by July 22, 2022.
- Parcel 6 (TPP No. 6526-00-21 4.02) is anticipated to be acquired by July 22, 2022.
- Parcel 12 (R/W Project Number: 6526-00-21, Sheet Number:1, TLE Acquisition Exhibit) is anticipated to be acquired by July 22, 2022.

1.2.4 Status of Utility Coordination/Relocation

The Department is continuing coordination efforts with all utilities known to be present within the Project limits. There are several utilities that will require relocation due to the Project. These relocations are scheduled to be completed by the time of Contract Award. Approved Utility Work Plans will be included in Book 2, Section 6, Exhibit 6-D when Approved by the Department. All Utility Work Plans are anticipated to be Approved by the Department by June 30, 2022.

1.3 Project Goals

The Department's primary goals for this procurement and the Project include:

- Safety
 - Provide a safe Project area for the traveling public and workers during the execution of the Project.
 - Provide a Project solution that is consistent with current Department, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO) safety practices, guidelines, policies, and standards.
- Quality
 - Provide a high-quality product that meets or exceeds Department standards and minimizes future maintenance.
 - Implement and follow the Department's Performance-Based Practical Design Principles.

2 Procurement Schedule

The deadlines and due dates shown in Table 2-1 apply to this ITP. The Department may at its discretion amend this schedule by issuing an Addendum to the RFP.

May 13, 2022	Issue RFPs
May 27, 2022	Clarification Submittal #1 and One-on-One Meeting Agenda Deadline (5:00 pm Central Time)
June 2, 2022	One-on-One Meeting on RFP and Initial Alternative Technical Concepts (ATCs)
June 7, 2022	DBE Meet and Greet (see Note 1)
June 24, 2022	Clarification Submittal #2 and One-on-One Meeting Agenda Deadline (5:00 pm Central Time)
June 28, 2022	One-on-One Meeting on RFP and Initial/Final ATCs
July 5, 2022	Initial ATC Submittal Deadline (2:00 pm Central Time) (see Note 2)
July 8, 2022	Department Initial ATC Response Date
July 15, 2022	Final ATC Submittal Deadline (5:00 pm Central Time) (see Note 3)
July 22, 2022	Department Final ATC Response Date
July 29, 2022	Final ATC Resubmittal Deadline (5:00 pm Central Time)
August 1, 2022	SOQ Modification Request Deadline (5:00 pm Central Time)
August 1, 2022	Final Clarification Deadline (5:00 pm Central Time)
August 5, 2022	Department Final ATC Final Response Date
August 10, 2022	Department SOQ Modification Request Response Date
August 10, 2022	Department Clarification Response Date
August 19, 2022	Proposal (Technical Proposal and Price Proposal) Due Date (3:00 pm Central Time) (see Note 4)
September 9, 2022	Anticipated Award Date
October 7, 2022	Anticipated Contract Final Execution Date
October 21, 2022	Anticipated Notice to Proceed (NTP1)
Notes [.]	

Table 2-1: Procurement Schedule

Notes:

- (1) All Proposers are required to attend a Meet and Greet event with DBEs. The purpose of this meeting is to inform the DBE community about the Project and provide an opportunity for DBEs and Proposers to discuss DBE opportunities on this Project. The Department will provide the meeting location and time.
- (2) No Initial ATCs may be submitted after this deadline.
- (3) Final ATCs may be submitted at any time before this date. Upon receipt of a compliant ATC submittal (Section 3.8), the Department will respond according to the dates in Table 2-1.
- (4) Technical Proposal and Price Proposal to be submitted through the Department's eSubmit website. See Exhibit 1 for instructions on the Department's eSubmit transmittal process.

3.4 Communications

All inquiries and comments about the Project and its procurement process must be emailed to the Department's Project Management (Section 3.3.).

The Department's Project Management are the sole Department contacts for receiving Proposer Requests for Clarification, and all communications about the Project including ATCs, the RFP, and Proposal submittal. Proposer must not discuss the RFP with other Department staff members or Department consultants involved with the Project before Contract award or cancellation of the RFP, except for communications expressly permitted by this ITP or delegated by the Project Manager or ACS Program Manager. The Department may, at its sole discretion, disqualify any Proposer engaging in prohibited communications.

Proposer must identify and provide contact information for a sole primary contact (name, telephone (work and mobile), and email address) who will send information to and receive information from the Department's Project Management. Information may include, but is not limited to, Proposer Requests for Clarification, information about ATCs, and Department Addenda.

3.5 One-on-One Meetings

During the Proposal preparation period, the Department will be available for two One-on-One meetings with each Proposer to help expedite clarifications and preliminary discussions of Proposer's anticipated ATCs (see Section 3.8 for more information about ATCs). Each One-on-One meeting will be limited to 1.5 hours. The Department will provide the meeting location. The following dates and times are available for these meetings:

- RFP and initial ATCs: Thursday, June 2, 2022: 8:00 am, 10:00 am, 1:00 pm, 3:00 pm Central Time
- RFP and initial/final ATCs: Tuesday, June 28, 2022: 8:00 am, 10:00 am, 1:00 pm, 3:00 pm Central Time

Proposers must reserve times, which will be filled on a first-come, first-served basis, by contacting the Department's ACS Program Manager (Section 3.3). Alternate meeting dates and times may be arranged by contacting the Department's ACS Program Manager.

To help the Department identify the Department staff who should attend One-on-One meetings, Proposers must submit an agenda of discussion topics to the Department's Project Management by the deadlines listed in Section 2, Table 2-1. Any topic not identified in a Proposer's agenda may be precluded from discussion at the meeting at the Department's sole discretion. Agendas that include initial or final ATCs must identify which disciplines are affected by the proposed ATC (e.g., geotechnical, structural, traffic). In addition, to increase the effectiveness of One-on-One meetings, Proposers are encouraged to include any drawings, exhibits, initial ATCs, or other pertinent information when submitting the agenda.

- The selection of a maintaining traffic alternative or a road closure alternative in accordance with Book 2, Section 18. Proposer shall state in the submitted narrative the number of Lane User Impacts proposed for the alternatives selected. The Proposer shall begin the Project Schedule narrative by completing the following statement:
 - Proposer commits to completing the required construction according to the alternatives selected, and described below, within # (insert number) of Lane User Impacts.
- Describe Proposer's construction approach to the selected alternatives.
- Define Proposer's schedule and the number of Lane User Impacts and Calendar Days the Design-Builder could reduce the allowable time for the selected alternatives.
- Define Proposer's approach and schedule to work within the tree removal, migratory bird, and in-stream restrictions as defined in Book 2.
- Define Proposer's approach to maintenance of adequate channel capacity of Mud Creek during high-water events to reduce/eliminate risks to the Project Schedule.

Points for Project Schedule will be determined based on the following:

- Up to 8 points for the Proposer's approach to managing the schedule constraints and risks.
- Up to 7 points for reducing the Lane User Impacts allowed in Book 2, Section 18, Table 18-1, for the traffic control alternatives selected by the Design-Builder based on the following:
 - 1 point for each reduction of the allowed Lane User Impacts by 10 Lane User Impacts

4.2.5.8 Mobility Within the Project Corridor (10 Points)

Mobility within the Project corridor during construction is vital to local and through traffic as well as providing access to area businesses. STH 125 eastbound traffic is a critical priority within this corridor and must be maintained as much as practical. Preliminary engineering performed by the Department investigated construction staging alternatives which included a full-closure option and a one lane in each direction with temporary crossovers option. Each option was viewed with the same favorability by area businesses. Describe Proposer's approach in providing efficient mobility through the Project corridor in relation to the traffic mitigation items below (items are not listed in any order of priority):

- Address/eliminate traffic back-ups onto the IH 41 off-ramp
- Open all lanes of traffic as quickly as possible by reducing the construction time frame as much as practical
- Provide access to businesses within the project corridor

- Intersection improvements anticipated at Spencer Street and Kools Street to accommodate increased turning movement volume from diverted traffic flow
- Temporary traffic signals anticipated at Spencer Street and Nicolet Road to accommodate increased volumes from diverted traffic flow
- Traffic control devices to inform and effectively utilize alternative routes near the Project.

4.2.5.9 Conceptual Design (10 Points)

Describe Proposer's basis and approach for the conceptual design. Describe design aspects that help to achieve the goals of the project. Provide drawings and/or plans of Proposer's conceptual design in Appendix D which addresses the following:

- Proposer shall provide sufficient drawings and/or plans to convey its design intent and construction of the structure and approach roadway including conceptual geometrics, alignments, and profiles. The drawings shall show structures including bridges and retaining walls.
- Proposer shall include in the drawings, in sufficient detail, all approved ATC's showing how the ATC is to be incorporated into the Project.

4.2.5.10 Design Builder Appendices

The following information (and no other information) shall be included as appendices to the Technical Proposal.

Appendix A – Provide Organizational Chart as described in Section 4.2.5.2.

Appendix B – Provide ATC Documentation as described in Section 4.2.5.3.

Appendix C – Provide Progress Schedule as described in Section 4.2.5.4.

Appendix D – Provide drawings or plans of Conceptual Design of Project as described in Section 4.2.5.9.

Appendix E – See Section 4.2.6 for required information.

4.2.6 Proposer Information, Certifications, and Documents

Proposer must provide the following forms and other information, as a separate Appendix E, per this section (Section 4.2.6):

• The full legal name of the entity making the Proposal, identifying the state in which the entity is incorporated or otherwise organized. If Proposer is a partnership or joint venture, attach full legal names and addresses of each general partner or joint venture partner, and provide the state of incorporation or organization for each general partner or joint venture partner. If Proposer is a joint venture, attach a letter from each joint venture partner stating that each joint venture partner agrees to be held jointly and severally liable for any and all of the duties and obligations of Proposer under the Proposal, and under any Contract arising from the Proposal. If Proposer is a subsidiary of any other



Wisconsin Department of Transportation Northeast Region

Request for Proposals: Design-Build Contract

Book 1

Addendum 1

Town of Grand Chute, College Avenue IH 41 – Bluemound Drive, STH 125, Outagamie County Design-Build Project State Design/Construction IDs: 6526-00-00/71

June 23, 2022

- 1. The Department has Approved the Schedule of Values required under Book 2, Section 2.
- 2. The Department has Approved the Design-Builder's Quality Manual. To expedite construction activities, the Design-Builder may request that the Department Approve a partially complete Quality Manual at the Department's sole discretion.
- 3. The Department has Approved the environmental items listed in Book 2, Section 4.
- 4. The Department has Approved the Traffic Management Plan required under Book 2, Section 18.
- 5. The Department has Approved the insurance policies, endorsements, and/or certificates required under Book 1, Section 9.
- 6. The Department has Accepted the Baseline Critical Path Method (CPM) Schedule required under Book 2, Section 2.
- 7. The Department has Approved the Safety Management Plan (SMP) required under Book 2, Section 2.

4.3 **Completion Dates**

Completion Dates are the calendar dates defined below for Substantial Completion and Final Acceptance. Open to traffic requirements for the allowed Calendar Days are defined below.

4.3.1 Seasonal Suspension

Seasonal Suspension is defined as November 15th until March 1st. Work can continue during Seasonal Suspension provided that Work can be safely accomplished using temporary, short-term shoulder closures that are removed on a daily basis. No lane, bridge, or ramp or roadway closures will be allowed during the Seasonal Suspension except as stated in the Approved Seasonal Suspension Plan described in Book 2, Section 19.4.

Work that does not impact traffic may be allowed during the Seasonal Suspension at the discretion of the Department Project Manager. The Department will not participate in extra costs associated with performing work during the Seasonal Suspension.

4.3.2 Substantial Completion Date

The Design-Builder must achieve Substantial Completion by November 1, 2023 ("Substantial Completion Date").

4.3.2.1 Open to Traffic Requirements

The Design-Builder must complete roadway and bridge construction to open all lanes of traffic within the Lane User Impacts allowed for the selected traffic control alternatives in accordance with Book 2, Section 18. The Lane User Impacts for the selected traffic control alternatives shall not be more than the number of Lane User Impacts shown in Book 2, Section 18, Table 18-1.

The Lane User Impacts allowed will be reduced if the Design-Builder's technical proposal proposes to open all lanes within a reduced number of Lane User Impacts compared with Book 2, Section 18, Table 18-1. The proposed Lane User Impacts by the Design-Builder will be the basis for assessing Lane Rental Damages shown in Book 2, Section 18.

4.3.3 Final Acceptance Deadline

The Design-Builder must achieve Final Acceptance no later than May 1, 2024. See Book 1, Section 11.3 on Limitations on Payment. Landscaping items may be exempted from Final Acceptance but will cause the Contract to remain open until the Transportation Construction General Permit, Notice of Termination, is received from the WDNR.

4.3.4 No Time Extensions

The Department is under no obligation to extend any Completion Date, except as specifically provided in Book 1, Section 12 and Section 13.

4.4 Contract Schedule

The Design-Builder must deliver the Project in accordance with the Contract Schedule, as described in Book 2, Section 2.4. The Contract Schedule will also be the basis for determining the amount of monthly progress payments to be made to the Design-Builder.

4.5 **Prerequisites for Start of Construction**

The Design-Builder must not start construction (or recommence construction following any suspension) of any portion of the Project, except Work specifically authorized under NTP1, until all the following events have occurred:

- 1. The Department has issued a Notice to Proceed authorizing such Work.
- 2. The Design-Builder has met all requirements of the Quality Manual that are a condition to commencing construction. The Department may waive this requirement in writing.
- 3. The Design-Builder has furnished the Released for Construction Documents related to that portion of the Work and has received the Department's Acceptance of those documents in accordance with Book 2, Section 5. The Design-Builder may proceed with construction of certain elements or portions of the Project in accordance with Released for Construction plans before the design of the entire Project has been completed at the Design-Builder's sole risk. Design-Builder may proceed with At Risk Work as Approved by the Department according to Book 1, Section 5.8.
- 4. The Design-Builder and the Department have obtained all Governmental Approvals necessary for construction of the relevant portion of the Project and have satisfied all conditions of those Governmental Approvals that are a prerequisite to commencing the relevant portion of construction.

- 5. The Design-Builder has delivered all required bonds and insurance policies required under Book 1, Section 8 and Section 9, respectively, and the Department has Accepted or Approved those documents.
- 6. The Department and the Design-Builder have obtained all necessary rights of access for the relevant portion of the Project.
- 7. The Design-Builder has furnished the applicable submittals set forth in Book 2, Section 14, and the Department has Accepted those submittals.
- 8. Any additional conditions for construction set forth in the Contract Documents have been satisfied.
- 9. The Design-Builder has furnished, and the Department has Approved the diversity and inclusion documents required by Exhibit D.

4.6 Limitation of Operations

The Design-Builder must not perform construction operations on Holidays or special events as set forth in Book 2, Section 18.3, Work Restrictions, unless the Department has specifically authorized those operations in writing. See Book 2, Section 4 for any applicable noise restrictions.



Wisconsin Department of Transportation

Northeast Region

Request for Proposals: Project Requirements

Book 2

Addendum #1

Town of Grand Chute, College Avenue IH 41 – Bluemound Drive, STH 125, Outagamie County Design-Build Project State Design/Construction IDs: 6526-00-00/71

June 23, 2022

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2.4.2.3.1 Schedule Narrative Report

Submit and include as an attachment in PDF format the Schedule Narrative Report. Include a narrative for each required schedule submittal as follows:

- Baseline CPM schedules will include:
 - Explanation of the overall plan to complete the Project, including where the Work will begin and how Work and crews will flow through the Project
 - The Working Days per week, number of shifts per day, number of hours per shift, the holidays to be observed, and how the schedule accommodates adverse weather days for each month or activity
 - A statement describing the status of required permits
 - The quantity and estimated production rates for critical activities
 - Activities requiring coordination with the Department and/or third parties (e.g., utilities)
 - A statement identifying constraints and an explanation of the reason for and purpose of each constraint
 - A statement describing the reason for the use of each lag or lead
- Update Schedules will include:
 - A brief description of monthly progress
 - A description of the reasons for any changes made to the schedule
 - A statement describing the status of permits
 - Status of activities requiring coordination with the Department and/or third parties (e.g., utilities)
 - A description of the status of the scheduled Milestone dates. Elaborate on any differences from the previous submission
 - A statement explaining why the scheduled Milestone dates are forecast to occur before or after the Contract Milestone date
 - A description of unusual labor, shift, equipment, or material conditions or restrictions encountered or anticipated since the previous Update Schedule
 - A statement identifying any new constraints, and an explanation of the reason for and purpose of each constraint
 - A statement describing the reason for the use of any new lag or lead
- Re-baseline Schedule Narratives will include:
 - A description of the reasons for any changes made to the schedule
 - A statement describing the status of permits

- Status of Activities requiring coordination with the Department and/or third parties (e.g., utilities)
- A description of the status of the scheduled Milestone dates; elaborate on any differences from the previous submission
- A statement explaining why the scheduled Milestone dates are forecast to occur before or after the Contract Milestone date
- A description of unusual labor, shift, equipment, or material conditions or restrictions encountered or anticipated since the previous Update Schedule
- A statement identifying any new constraints and an explanation of the reason for and purpose of each constraint
- A statement describing the reason for the use of any new lag or lead

2.4.2.3.2 Gantt Chart Submission Reports

Submit and include as attachments in PDF format the Schedule Gantt Chart Reports produced out of the P6 Software. Submit an electronic file in Primavera P6.xer format for each schedule submittal in the current Department version.

Include a narrative for each schedule submittal to include and discuss:

- A bar chart of all activities, sorted by Early Start and indicating Longest Path in red
- A bar chart sorted by Early Start for the Critical Path
- A bar chart containing only activities with Total Float less than 10 Days, sorted by Early Start, Upcoming, and Pending coordination required with the Department, or third parties
- Bar chart detailing impacts from outside schedule delays (e.g., utilities), if any

Include bar charts for each schedule submittal containing the following information:

- Activity ID and description
- Original Duration
- Remaining Duration
- Physical Percent Complete
- Early Start, Late Start, and Late Finish
- Total Float
- Include a title block and a timeline on each page. At a minimum, include the file name, revision, start date, finish date, data date, and run date in the title block.

2.4.2.4 Notice(s) to Proceed

2.4.2.4.1 Initial Work Plan Schedule(s)

As a condition of NTP1, submit an Initial Work Plan schedule to the Department as follows:

- 1. Provide a detailed plan of activities to be performed within the first 90 Calendar Days of the contract. Provide construction activities with durations not greater than 28 Calendar Days (20 Business Days), unless the Department accepts the requested exceptions.
- 2. Provide activities as necessary to depict administrative work, including submittals, reviews, and procurements that will occur within the first 90 Calendar Days of the contract. Show additional activities that require the Department's review or Approval. Activities other than construction activities may have durations greater than 28 Calendar Days (20 Business Days).
- 3. Provide summary activities for the balance of the Project. Summary activities may have durations greater than 28 Calendar Days (20 Business Days).
- 4. The Department will accept the Design-Builder's Initial Work Plan or provide comments within 10 Business Days after receipt of the Initial Work Plan. Address comments and resubmit the Initial Work Plan as necessary. Do not begin Work until the engineer accepts the Initial Work Plan. The Department will use the Initial Work Plan to monitor the progress of the Work until the Baseline CPM Progress Schedule is accepted.
- 5. Submit an updated version of the Initial Work Plan monthly until the Department accepts the Baseline CPM Progress Schedule. With each update, include actual start dates, completion percentages, and remaining durations for activities started but not completed. Include actual finish dates for completed activities.
- 6. Ensure the Initial Work Plan shows completing the Work within the interim completion dates and specified completion date.
- 7. Include activities that describe essential features of the Work and activities that might potentially delay contract completion. Identify activities that are controlling items of Work.

2.4.2.4.2 Baseline CPM Schedule

Within 21 Calendar Days following NTP1, submit a Baseline CPM Schedule. Acceptance of the Baseline Schedule by the Department is a condition of NTP2. The Department will use the schedule to monitor the progress of Work.

- 1. The Baseline CPM is the Design-Builder's committed plan to complete the Work within the time frames required to achieve the contract completion date and intermediate milestone dates.
 - 1.1. Provide a detailed plan of activities to be performed during the entire contract duration, including all administrative and construction activities required to complete the Work as described in the contract documents. Provide construction activities with durations not greater than 28 Calendar Days (20 Business Days), unless the Department accepts the requested exceptions.
 - 1.2. Provide activities as necessary to depict administrative work, including submittals, reviews, procurements, inspections, and all else necessary to complete the Work as described in the contract documents. Activities other than construction activities may have durations greater than 28 Calendar Days (20 Business Days).

- 1.3. Include activities that describe essential features of the Work and activities that might potentially delay contract completion. Identify activities that are controlling items of Work.
- 1.4. Show completing the Work within interim completion dates and the specified completion date.
- 1.5. Provide summary activities for the balance of the Project. Summary activities may have durations greater than 28 Calendar Days (20 Business Days).
- 1.6. Provide activities as necessary to depict third-party Work related to the contract.
- 1.7. Make allowance for specified Work restrictions, non-Working Days, time constraints, calendars, and weather; and reflect involvement and reviews by the Department, and coordination with adjacent contractors, utility owners, and other third parties.
- 1.8. With the exception of the Project Start Milestone and Project Completion Milestone, all activities must have predecessors and successors. The start of an activity will have a Start-to-Start or Finish-to-Start relationship with preceding activities. The completion of an activity will have a Finish-to-Start or Finish-to-Finish relationship with succeeding activities. Do not use Start-to-Finish relationships. Do not use Finish-to-Start relationships with a lag unless the engineer accepts requested exceptions.
- 1.9. Schedule all intermediate milestones in the proper sequence and input as either a "Start-No-Earlier-Than" or "Finish-No-Later-Than" date. Provide predecessors and successors for each intermediate milestone as necessary to model each Stage of the Work. Unless the Department accepts a requested exception, the schedule should encompass all the time in the contract period between the starting date and the specified completion date.
- 1.10. Develop an anticipated cash-flow curve for the Project, based on the Baseline CPM.

Within 10 Working Days, the Department will accept the Design-Builder's Baseline CPM schedule or provide comments to the contractor. The Design-Builder will address the Department's comments and submit a revised Baseline CPM schedule within 10 Working Days after the Department's request.

If the Department requests justification for activity durations, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine activity duration.

The Department will accept the Baseline CPM based solely on whether the schedule is complete as specified in this section. The Department's acceptance of the schedule does not modify the contract or validate the schedule.

The Department will not consider requests for contract time extensions or additional compensation for delay as specified in Book 1, Section 13 until the Department Accepts the Baseline CPM schedule.

2.4.2.5 Schedule Updates

Submit CPM updates monthly after acceptance of the Baseline CPM as follows:

- 1. Include actual start dates, completion percentages, and remaining durations for activities started but not completed, and actual finish dates for completed activities, through the final acceptance of the Project.
- 2. Include additional activities as necessary to depict additions to the contract by changes and logic revisions as necessary to reflect changes in the Design-Builder's plan for prosecuting the Work.
- 3. Include a narrative report that includes a brief description of monthly progress, changes to the critical path from the previous update, sources of delay, potential problems, Work planned for the next 30 Calendar Days, and changes to the CPM schedule. Changes to the logic of the CPM schedule include the addition or deletion of activities and changes to activity descriptions, original durations, relationships, constraints, calendars, or previously recorded actual dates. Justify changes to the CPM schedule in the narrative by describing associated changes in the planned methods or manner of performing the Work or changes in the Work itself.
- 4. Submit each CPM Update in a compressed (XER) format electronically, as agreed to with The Department.
- 5. If additions or changes were made to the CPM schedule since the previous update, submit an updated hard copy of the revised logic diagram.

Within 10 Business Days of receiving each CPM Update, the Department will provide comments and either accept or reject the submitted schedule update. If necessary, the Department will schedule a meeting to address comments raised in the review. If the schedule is rejected, the Design-Builder will address the Department's comments and submit a revised CPM Update within 10 Business Days. Minimize the number of changes, and state within the narrative update the reasons for any changes to the schedule. The Department may elect to allow the Design-Builder to include modifications such as adding or deleting activities or modifying activity descriptions, durations, or logic without submitting a TIA as long as, in the sole opinion of the Department, the modifications do not:

- Alter the critical path(s) or near critical path(s)
- Extend the scheduled Final Acceptance, Substantial Completion, or milestone(s) compared to those shown on the current Accepted Working Schedule
- Disrupt the integrity or comparative relationship between the last Accepted Working Schedule
- Consume an "unreasonable" amount of Total Float
- Modify budget estimates on in-progress activities
- Delete in-progress activities with budget estimates

If, in the sole opinion of the Department, any proposed changes in planned Work will result in any of the above-stated conditions, submit a TIA as described herein.

2.4.2.6 Acceptance of Schedule

The Department's review and acceptance of schedules will not waive any Contract requirements and does not relieve the Design-Builder of any obligation or responsibility for submitting complete and accurate information. By review and acceptance of the schedule, the Department does not endorse or otherwise certify the validity or accuracy of any part of the schedules. The responsibility for validity and accuracy of all schedules is the sole responsibility of the Design-Builder.

Errors or omissions within schedules do not relieve the Design-Builder from finishing all Work within the time limit specified for completion of the Contract. If, after a schedule has been accepted by the Department, and either the Design-Builder or the Department discovers that any aspect of the schedule has an error or omission, correct the schedule and indicate the effects within 10 Business Days.

2.4.2.6.1 Initial Work Plan and Baseline CPM Schedules

The Department will accept or return comments on submitted schedules within 10 Business Days after receipt. Address comments within 10 Business Days after the Department returns comments, unless directed otherwise by the Department. It is the Design-Builder's responsibility to meet with the Department as often as necessary to satisfy the Department's comments within said 10 Business Days.

2.4.2.6.2 Schedule Updates

Estimate physical percent complete and remaining duration of each activity for each schedule update.

If the Design-Builder intends to invoice for items such as materials on hand, record those costs in the "actual costs" field in the expense tab, with the "expense item" called "invoice."

Incorporate all Change Orders and costs into the schedule updates and include Change Order activity in the schedule. All Change Orders must be coded in accordance with the change management section contained herein.

Submit an updated schedule monthly, with invoices that accurately record the dates Work is started and completed.

2.4.2.6.3 *Time Impact Schedules*

The Department will accept or return comments on submitted schedules within 10 Days after receipt. Address comments within 10 Days after the Department has returned comment. It is the Design-Builder's responsibility to meet with the Department as often as necessary to satisfy the Department's comments within said 10 Days.

2.4.2.7 Weekly Look-Ahead Schedule

Submit weekly a detailed, forward-looking schedule (Look-Ahead Schedule) encompassing a period of at least 21 Calendar Days. This schedule may be a hand- or computer-generated bar chart and must specifically reference the applicable CPM activity ID. This Look-Ahead Schedule must have greater detail than the Working Schedule and define specific daily operations at each specific location to be performed during the upcoming 21-day period, including:

- Activities under way
- Planned Work for the upcoming 21 Calendar Days
- Critical requests for information (RFIs) and submittals, based on the CPM schedule
- Details on other activities not individually represented in the CPM schedule

2.4.2.8 Schedule Recovery

Whenever the current Working Schedule indicates negative Float, submit a TIA as described in the Time Impact Analysis section herein within 7 Calendar Days. Recover the negative Float regardless of fault of either party for past delays in the Time Impact Schedule. The requirement to recover negative Float regardless of fault is not a directive by the Department to accelerate the Work, but rather a directive to provide a proposal to complete Work within the available contract timeline. Any cure involving acceleration, at a cost to the Department, will be directed in writing from the Department prior to any execution of acceleration thereof.

2.4.2.9 Change Management

Provide the Department with the schedule activity(ies) affected, and document it in the Change Order. Incorporate all Change Orders into the schedule. Provide each Change Order with its own activity ID and assign to a cost account "SP#-CO." Additionally, assign each Change Order to the activity code "DETL" with the value of the DETL code equal to the CO#.

2.4.2.10 Time Impact Analysis

Determine the effect of an impact as soon as possible, and do not wait to analyze the effects of an impact; this may require estimates of the duration of the impact. Submit a TIA any time the Design-Builder is unsure whether any one event, or accumulation of events, impacts a Final Acceptance or Substantial Completion date. Failure to submit a TIA addressing the impact will be considered prima facie evidence that the Department was not afforded the opportunity to mitigate the impact. At any time, the Department may require the Design-Builder to demonstrate the impacts of any change, or proposed change, to the schedule via a TIA, and require the Design-Builder to submit the TIA within 7 Calendar Days of receiving the request, even if the Design-Builder believes that there is no impact to the schedule.

Include a statement in the TIA that there is "no effect to the schedule," or include the following in the TIA:

- Time Impact Schedule
- Any associated cost burden or savings

- A narrative report developed specifically to demonstrate effects of deviations from the current Working Schedule, to include the following:
 - A detailed factual statement of the impact, and its cause, providing all necessary dates, locations, and items of Work affected and included in each impact
 - The date or dates on which actions resulting in the impact occurred or conditions resulting in the impact became evident
 - Identification and copies of all pertinent documents relating to such impact
 - Basis for entitlement and identification of the provisions of the Contract that support the impact
 - All, if any, concurrent Design-Builder-caused delays during the timeframe of the impact
 - Affected activity ID(s) of the schedule for which the impact is to be presented and how they were affected
 - Any additional information requested by the Department

The Department may accept the Time Impact Schedule as the new Working Schedule while parties determine associated cost burden or savings. All accepted Time Impact Schedules become the next Working Schedule, and the basis for the next Update Schedule submittal.

2.4.2.11 Float Suppression/Sequestered Float/Use of Float

Do not engage in Float suppression manipulations that have the net effect of sequestering Float time. The Design-Builder is not entitled to any compensation or damages on account of delays that could have been avoided by revising activity time or logic used to sequester Float and will exclude the Design-Builder's right to recover any delay damages or compensation. Lags/leads are subject to the consent of the Department. Remove any lags/leads and replace with an activity identifying the lag/lead upon request of the Department, regardless of prior acceptance of previous schedules.

The Design-Builder acknowledges that all Float is a shared commodity available to the Project and is not for the exclusive benefit of any party but is instead an expiring resource available to accommodate changes in the Work, however originated. Contract time extensions for Contract performance will be granted only to the extent that delays or disruptions to affected Work paths exceed Total Float along those paths of the current Working Schedule in effect at the time of delay or disruption. It is understood that identified contingencies, as described in the "Calendar and Identified Contingency" section, become available Total Float as time elapses and the contingency was not used.

2.4.2.12 Calendars and Identified Contingency

The duration of each activity includes the necessary workdays to complete the Work defined by the activity; contingency is not to be built into the durations. Each activity is assigned the appropriate calendar as it relates to each major item of Work. Each calendar, except the calendar utilized for tracking Working Days, includes contingent non-workdays, with Saturday or

Sunday not allowed to be shown as a contingent non-workday. Estimate sufficient weather contingency for each activity affected by weather.

Submit a statement indicating duration (in hours) of the Design-Builder's normal workday as it relates to the Work week (e.g., M-F [10 hours] and Sat [6 hours] for each calendar). Contingency will be the number of indicated non-workdays compared to this statement.

If the Design-Builder does not submit a statement of normal Working Days, it will be considered prima facie evidence that the Design-Builder did not account for sufficient weather impacts.

2.4.2.13 Non-Compliance

The Design-Builder's refusal, failure, or neglect to diligently pursue timely acceptance of any schedule or TIA constitutes reasonable evidence that the Design-Builder is not executing the Work, or separable part, with the diligence that will ensure its completion within the applicable Final Acceptance and constitutes sufficient basis for the Department to exercise the following:

• Withhold an amount up to 100 percent of the estimated value of Work performed until the schedule is accepted.

2.4.2.14 Level of Detail

Provide two user-defined fields to track Start Station and End Station for each activity.

At a minimum, make certain that each activity meets the following criteria:

- Includes a unique activity description and contains a verb.
- Includes a duration of not more than 28 Calendar Days, unless otherwise authorized by the Department.
- Includes at least one predecessor and one successor activity, except for Project start and finish, respectively.
- Expresses activity durations in Calendar Days.

Create the Baseline Schedule with sufficient detail to accurately reflect the complexity and numerous construction operations of this Project to the satisfaction of the Department. The minimum level of detail required is described below:

- Administration
 - Schedule milestones
 - Jobsite poster installation
 - Mobilization
 - All submittals (design packages, shop drawings, permits, etc.)
 - The Department and other agency review periods
 - Utility notification and relocation, by utility
 - Material on hand (procured items) requests and payments:

- Fabrication and delivery of piling
- Structural steel fabrication and delivery, per structure
- Drainage pipe, guardrail, sign structures, and signs
- Permanent lighting facilities and permanent traffic signals
- Planned roadway, lane, or shoulder closures that have the potential of liquidated damages if delayed
- Substantial Completion
- Punchlist
- Structures
 - Test piling
 - Test holes
 - Embankment for each abutment location
 - Excavation
 - Fabrication and delivery of piling
 - Concrete beam fabrication and delivery
 - Pile Installation, per bent, per structure
 - Drilled shaft installation, per pier, per structure
 - Footings, per pier, per structure
 - Columns, per pier, per structure
 - Caps, per pier, per structure
 - End bents, per structure
 - Abutments
 - Beam or girder erection, per structure
 - Diaphragms
 - Deck placement, per structure
 - Parapets and railing, per structure
 - Erection and removal of falsework and shoring
 - Cure times
 - Retaining walls
 - Cofferdams
 - Installation and removal of temporary river access (causeways)

- Existing structure removal per structure
- Roadway
 - Traffic switches
 - Soil Erosion and Sedimentation Control Measures
 - Submission of job mix formula for asphalt pavement
 - Internal access and haul roads (location and duration in-place)
 - Clearing and grubbing by stationing and roadway
 - Excavation and embankment placed for each roadway
 - Existing embankment removal
 - Drainage by culvert or run with structures for each roadway
 - Retaining walls per location
 - Subgrade for each roadway
 - Base for roadway
 - Pavement (asphalt and/or concrete) for each roadway
 - Bridge approach slabs per location
 - Cure times
 - Guardrail for each roadway
 - Slope pavement or riprap
 - Intersection lighting for each intersection
 - Pavement marking for each roadway
 - Traffic signals per location
 - Topsoil, sodding, seeding, and mulching for each roadway
 - Landscaping
 - Finishing roadway and final cleanup

Name

2.4.3 Schedule Deliverables

Table 2-3, which lists Deliverables identified in Section 2.4, is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Table 2-3: Non-exhaustive List of Schedule Deliverables

Acceptance or Approval

Schedule Narrative Report	Acceptance
Gantt Chart Submission Reports	Acceptance
Initial Workplan Schedule	Acceptance
Baseline Schedule	Acceptance
Monthly Schedule Updates	Acceptance
Time Impact Analysis	Acceptance
Weekly Look-Ahead Schedule	Acceptance

2.5 Human Resource Management

2.5.1 General

This section describes the requirements of human resource management, including identifying Key Personnel, co-location, facilities, and equipment requirements.

2.5.2 Administrative Requirements

2.5.2.1 General

Ensure all personnel performing Work on the Project have the experience, skill, and knowledge to perform the Work assigned to them. Ensure all personnel performing Work on the Project also have appropriate required professional licenses and certifications.

2.5.2.2 Key Personnel (Level A)

Key Personnel for the Project and minimum requirements are as follows.

2.5.2.2.1 Design-Build Project Manager

- Will be responsible for the design, construction, and contract administration for the Project.
- Will have full responsibility for the execution of the Work
- Will act as the single point of contact (POC) in all matters
- Will have the authority to represent the Design-Builder on all Project related matters
- May also serve as the Design-Build Construction Manager
- Must be on-site at least 1 day per week and must be available to be on-site at the Department's request

Required Qualifications

• Five years of recent experience managing the design or construction of projects of similar scope and complexity or has served in the same capacity on two similar, completed projects in the State of Wisconsin

Preferred Qualifications

- Experience with both design and construction
- Record of quality results
- Experience beyond the minimum
- Highly similar experience
- Design-Build experience

2.5.2.2.2 Design-Build Construction Manager

- Will be responsible for ensuring that the Project is constructed in accordance with the Project requirements
- Must be on-site for the duration of the construction of the Project
- Must coordinate with the design team during the design of the Project
- Must either work under the direct supervision of the Design-Build Project Manager or serve as the Design-Build Project Manager

Preferred Qualifications

- Five years of recent experience managing the construction of projects of similar scope and in the State of Wisconsin
- Record of quality results
- Experience beyond the minimum
- Highly similar experience
- Design-Build experience
- Record of quality communication with designers (or design experience)

2.5.2.2.3 Design-Build Design Manager

- Will be responsible for ensuring that the Project design is complete and that design criteria requirements are met
- Will serve as the primary representative of the Project's design
- Will make certain that the functional designs are completed on schedule, collaboratively, and in accordance with Contract requirements
- Must have authority to be in direct contact with Department staff during all phases of the Project
- Must attend the weekly meetings
- Must work under the direct supervision of the Design-Build Project Manager

- The Design-Build Design Manager may also serve as the Roadway Engineer
- The Design-Build Design Manager may also serve as the Maintenance of Traffic Engineer

Required Qualifications

• Registered Professional Engineer in the State of Wisconsin

Preferred Qualifications

- Five years of recent experience managing the design of projects with similar scope and complexity, or has served in the same capacity on two similar completed projects
- Record of quality results
- Experience beyond the minimum
- Highly similar experience
- Design-Build experience

2.5.2.2.4 Construction Quality Manager

- Will be responsible for the construction quality of the Project
- Will develop the construction quality program, train the Design-Builder's personnel on their roles, attend the weekly meetings, and manage the construction quality program
- Will be responsible for checking that the requirements of Controlling item(s) of work are satisfied prior to requesting the Department's Acceptance
- Must report directly to the Design-Build Project Manager and be independent of Project construction
- Has the authority to stop construction work
- Must manage staff required for any applicable testing in accordance with the Highway Technician Certification Program

Required Qualifications

- Recent experience developing, implementing, and managing construction quality programs on similar transportation projects
- Availability on request by the Department

Preferred Qualifications

- Record of quality results
- Experience beyond the minimum
- Highly similar experience
- Design-Build experience

• Experience with Critical Path Method (CPM) scheduling

2.5.2.2.5 Design Quality Manager

- Will be responsible for the design quality of the Project
- Will develop the design quality program, train design personnel on their roles, and manage the design quality program
- Must report directly to the Design-Build Project Manager and be independent of Project design
- Has the authority to stop the advancement of Project design

Required Qualifications

- Recent experience developing, implementing, and managing design quality programs on similar transportation projects
- Registered Professional Engineer in the State of Wisconsin

Preferred Qualifications

- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.6 Lead Bridge Design Engineer

- Will be responsible for ensuring that the structure design is completed in accordance with Contract requirements
- Will be the Engineer of Record for the structure design
- Must either report directly to the Design-Build Design Manager or serve as the Design-Build Design Manager

Required Qualifications

- Registered Professional Engineer in the State of Wisconsin
- Five years of recent experience as a Professional Engineer including having served as the Engineer of Record or lead design engineer on at least one project of similar scope and complexity

Preferred Qualifications

- Record of quality results
- Experience beyond the minimum
- Highly similar experience
2.5.2.2.7 Roadway Engineer

- Will be responsible for ensuring that the roadway design is completed in accordance with Contract requirements
- Will be the Engineer of Record for the roadway design
- Must either report directly to the Design-Build Design Manager or serve as the Design-Build Design Manager
- May also serve as the Maintenance of Traffic Engineer

Required Qualifications

• Registered Professional Engineer in the State of Wisconsin

Preferred Qualifications

- Five years of recent experience as a Professional Engineer in final design
- Experience designing highways
- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.8 Geotechnical Engineer

- Will be responsible for ensuring that the geotechnical designs are completed in accordance with the Contract requirements
- May occasionally be asked to review construction in the field
- Must report directly to the Design-Build Design Manager

Required Qualifications

- Registered Professional Engineer in the State of Wisconsin
- Five years of recent experience involving structure foundations, ground improvement, reinforcement, and slope stabilization in the State of Wisconsin

Preferred Qualifications

- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.9 Maintenance of Traffic Engineer

- Will be responsible for ensuring that the maintenance of traffic designs are completed in accordance with the Contract requirements
- May occasionally be asked to review construction in the field
- Must report directly to the Design-Build Design Manager or serve as the Design-Build Design Manager
- May also serve as the Roadway Engineer

Required Qualifications

• Registered Professional Engineer in the State of Wisconsin

Preferred Qualifications

- Five years of recent experience designing maintenance of traffic and staging plans on projects of similar scope and complexity
- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.10 Traffic Engineering Team

- May be a person or team of individuals
- Will be responsible for ensuring that the traffic designs are completed in accordance with Contract requirements (except for the maintenance of traffic requirements)
- May occasionally be asked to review construction in the field
- Will report to the Design-Build Design Manager
- If composed of more than one member, may be led by one Traffic Engineering Manager who reports directly to the Design-Build Design Manager, or the members may report to the Design-Build Design Manager individually
- May also serve in Level A Personnel position

Required Qualifications

- If the team is composed of one person, that person must be a Registered Professional Engineer in the State of Wisconsin
- If the team is composed of more than one person, at least one person must be a Registered Professional Engineer in the State of Wisconsin
- Collective experience in signing design, pavement marking design, and signal design

Preferred Qualifications

- Five years of recent experience in their area(s) of specialization
- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.11 Contract Environmental Compliance Officer (CECO)

- Will be responsible for ensuring compliance with all permits and Project environmental requirements and commitments
- Must have the authority to stop all Work, if necessary, to comply with permits and requirements and therefore must be able to work directly with the Department, independent from design/construction personnel and the Design-Build Project Manager
- Must report directly to the Department's Project Manager
- Must be on-site as necessary during construction to ensure compliance with the Contract (including the Environmental Documentation) and permits
- Must be available to the Project site within 24 hours during all phases of the Project

Required Qualifications

- Must have recent experience in environmental compliance
- Must be familiar with permitting requirements in Wisconsin related to watershed districts, National Pollutant Discharge Elimination System, Section 404 and Section 401 of the Clean Water Act, contaminated materials, groundwater, and similar requirements

Preferred Qualifications

- Record of quality results
- Additional breadth of experience
- Highly similar experience

2.5.2.2.12 Public Information Coordinator

- Will be responsible for updating Project stakeholders regarding the Project at regularly scheduled meetings, coordinating with the Region Communications Manager, drafting press releases, drafting responses to stakeholder questions, and providing information to several parties regarding traffic control changes
- Must attend the weekly Project meetings and be available to attend several other events onsite as necessary
- Must report directly to the Design-Build Project Manager

• May also serve in another Level A Personnel position

Required Qualifications

- Experience leading a wide range of public information activities for transportation projects
- Experience responding to stakeholder comments and concerns

Preferred Qualifications

- Record of quality results
- Highly similar experience

2.5.2.2.13 Utility Coordination Manager

- Will be responsible for ensuring that the Project utility coordination is carried out in accordance with Contract requirements
- Must be available to attend meetings on-site as necessary
- Must report directly to the Design-Build Design Manager
- May also serve in a Level A Personnel position

Preferred Qualifications

- Five years of recent experience identifying utility impacts and coordinating the relocation of utilities on highway projects
- Record of quality results
- Experience beyond the minimum
- Highly similar experience

2.5.2.2.14 Approval of Key Personnel

The Department has the right to approve or not approve the Design-Builder's Key Personnel prior to their participation on the Project. Approval is based on the qualification requirements set forth above (as duplicated from the RFQ) and elsewhere in the Contract Documents for all Key Personnel.

2.5.2.2.15 Replacement of Key Personnel

Notify the Department in writing of any proposed changes to Key Personnel and include a detailed resume summarizing the items set forth above and elsewhere in the Contract Documents. Do not replace any Key Personnel without the prior written approval of the Department. The changes will only be approved if the replacement Key Personnel are equally qualified or more qualified than the original Key Personnel.

2.5.2.2.16 Directory of Key Personnel

Prepare a directory of Key Personnel that includes the following information for each: name, Project title, Project office address, Project office location, email address, and telephone numbers (office and mobile). Keep the directory current throughout the course of the Project and submit an updated directory to the Department when personnel are added or replaced or contact information has changed. Identify a Person and phone number that will be available at all times while Work is being performed.

Submit the directory of Key Personnel within 7 Days of NTP1.

2.5.2.3 Additional Personnel (Level B)

• The following provides a brief job description and minimum requirements of additional personnel required for various contractual Work efforts. The personnel below may have other roles on the Project.

2.5.2.3.1 Water Resources Team

- May be a person or a team of individuals
- Will be responsible for ensuring that the water resource designs are completed in accordance with Contract requirements
- Will address Project considerations including temporary erosion control, permanent erosion control, hydrology, hydraulics, surface water, seepage flow, infiltration, ponding, and other related aspects of the Work
- Will report to the Design-Build Design Manager
- If composed of more than one member, may be led by one Water Resources Manager who reports directly to the Design-Build Design Manager, or the members may report to the Design-Build Design Manager individually

Required Qualifications

- Collective experience on all aspects of urban and rural drainage on similar transportation projects, including ponding design, culvert design, open channel design, bridge hydraulic design, groundwater flow, erosion control, and water-related permitting
- If the team is composed of one person, Registered Professional Engineer in the State of Wisconsin now or by the time the first Notice to Proceed is issued
- If the team is composed of more than one person, at least one person must be a Registered Professional Engineer in the State of Wisconsin now or by the time the first Notice to Proceed is issued

Preferred Qualifications

- Five years of recent experience in their area(s) of specialization
- Record of quality results

- Experience beyond the minimum
- Highly similar experience

2.5.2.4 Field Facilities

Field Office

Supply a field office near the project site meeting the requirements of Standard Specification 642, Field Office Type D. Provide field office and networking equipment within 30 days of NTP2.

2.5.3 Human Resources Deliverables

Table 2-4, which lists Deliverables identified in this section, is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Table 2-4: Non-exhaustive List of Human Resources Deliverables

Name	Acceptance or Approval
Changes in Key Personnel	Approval
Directory of Key Personnel	Acceptance

If the Design-Builder proposes changes to Key Personnel, submit a request in writing setting forth the qualifications of the replacement(s) as required by Section 2.5.2.3 to the Department for approval.

2.6 Safety Management

2.6.1 General

Conduct all Work necessary to meet the requirements of safety management.

2.6.2 Administrative Requirements

Submit the Safety Management Plan (SMP) within 30 Calendar Days of NTP1.

Provide and maintain a safe and sanitary work environment in accordance with Standard Specifications.

Respond to and resolve any safety concerns raised by the Department or the Occupational Safety and Health Administration (OSHA).

2.6.3 Design Requirements (Not Used)

2.6.4 Construction Requirements

Ensure all Work under this Contract complies with the requirements and standards specified by the Williams-Steiger Occupational Safety and Health Act of 1970, 29 USC 651, et seq., Public

Law 91-596, as well as other applicable federal, state, and local laws. Do not require any laborer or mechanic to Work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to his/her health and safety as determined under construction safety and health standards promulgated by the U.S. Secretary of Labor.

2.6.4.1 Jobsite Posters

All jobsite posters and employment notices required by State and Federal regulations and the Contract Documents are to be posted as instructed in the Special Provision for Labor Compliance and must be in place at least 7-days prior to commencement of any field Work.

If at any time during the Project the Department documents that the required jobsite posters and employment notices are not posted appropriately, the Department will provide documented instructions to the Design-Builder that corrective action is required. Posting of jobsite posters and employment notices (posted display, foreman vehicle binder, etc.) for short term or mobile operations will be as approved by the Department. Upon receipt of the notification of corrective action, the Design-Builder has 24 hours to correct the deficiency. If the issue cannot be corrected within the 24-hour time period, the Design-Builder will develop a documented implementation schedule for the corrective action and submit the schedule to the Department for approval within 24 hours of receiving the original documented notification. If the schedule is not approved, or if the schedule is approved, but is not followed, the Department will adjust the Contract according to this Section. If the implementation schedule is not followed, the Department will document notification to the Design-Builder that they are in violation of this Section.

The Department will give documented notification to the Design-Builder as identified above. Failure to make corrections within the timeframe required will result in the following actions by the Department:

- The Department may stop Work on the Project until the Design-Builder completes corrective action.
- The Department will process a Contract Price Adjustment in the amount of \$1,000 per Calendar Day or portion thereof that the corrective action remains incomplete or the implementation schedule is not followed. The Contract Price Adjustment will continue to be assessed until jobsite posters and employment notices are posted appropriately, the Department has been notified of the corrective action and the Department has verified the correction.

2.6.5 Safety Deliverables

Table 2-5, which lists safety Deliverables identified in this section, is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Table 2-5: Non-exhaustive List of Safety Deliverables

Name Acceptance or Approval

Safety Management Plan Approval

2.7 Business Opportunity and Equity Compliance Management

2.7.1 General

This section contains management requirements associated with DBE businesses, contractor workforce, and other Civil Rights issues in addition to the goals and other requirements elsewhere in the Contract.

2.7.2 Administrative Requirements

Submit annual Federal Highway Administration (FHWA) 1391 forms, as included in Book 1, Exhibit D, for the Design-Builder (including all Subcontractors) to the Department's Office of Business Opportunity and Equity Compliance (OBOEC) no later than August 28 of each full construction season throughout the Project. Provide the Department OBOEC with the necessary assistance in obtaining FHWA 1391 forms from noncompliant Subcontractors. This requirement is separate from the FHWA 1391 form submission required at the time of award, although the award submittal satisfies the requirement for the calendar year in which it is submitted.

Prepare a DBE Plan and submit within 30 Days of NTP1.

Include in the DBE Plan how the Design-Builder will commit to:

- Meet or exceed the DBE participation goal included in ITP Form 7.
- Broadcast opportunities that arise during the construction of the Project to DBE businesses.
- Mentor DBE businesses.
- Assist DBE businesses in overcoming challenges such as obtaining bonding, lines of credit, insurance, equipment, supplies, materials, etc.
- Assign one direct contact for the DBE businesses for questions on the Project.
- Incorporate DBE business development organizations and business associations into the effort to solicit DBE businesses.
- Ensure prompt payment to DBE business subcontractors following the receipt of payments from the Department, including methods to make these payments visible to the Department.
- Provide dispute resolution with DBE business Subcontractors in the event of Contract performance issues.

The Department will review the plan for acceptance and comment on the effectiveness and transparency of the Design-Builder's approach to small business inclusion and the elimination of traditional barriers to their successful participation.

2.7.3 Meeting Requirements

The Design-Builder, as well as any Subcontractor performing 10 percent or more of the total Contract value, must attend monthly workforce monitoring meetings during the construction season. It will be the sole responsibility of the Design-Builder's Design-Build PM or specific designee to organize and chair each of the workforce monitoring meetings and to invite a representative from the Department's OBOEC. The agenda for the meetings must include:

- Performance regarding established workforce participation goals
- Review of the employees hired
- Opportunities for future employment on the Project
- Identification of potential recruitment sources

2.7.4 Construction Requirements

Follow and implement the DBE Plan for the Project.

2.7.5 Civil Rights Management Deliverables

Table 2-6, which lists Deliverables identified in this section, is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Table 2-6: Non-exhaustive List of Deliverables

Name	Acceptance or Approval	
DBE Plan	Acceptance	

4.4.2.14.2 Surface Water Impacts

Unless otherwise agreed upon prior to construction, no in-stream disturbance of Mud Creek will be allowed between March 1 and May 31, with both dates inclusive, to minimize impacts to fish and other aquatic organisms during sensitive time periods such as spawning and migration.

Structures should be set and sized to avoid or minimize impacts to stream morphology, aquatic organism passage and water quality.

Either alternative must be designed and constructed consistent with the standards contained in Chapters NR 103 and NR 299, Wis. Adm. Code, and wetland protection objectives, and the DNR/DOT Cooperative Agreement. Additionally, the selected alternative must be shown to be in compliance with Ch. 283, Wis. Stats.

Work with the WisDOT PM and REC to ensure on-going design coordination with DNR, review of the 90% Plans and Special Provisions, final Bureau of Structures (BOS) Hydraulics Summary, and a finalized Wetland Information Tracking Form (WITF), with an adequate alternatives analysis showing wetland impact avoidance and minimization.

Include the item Removing Structure Over Waterway Minimal Debris in project quantities.

If temporary water diversion is required during any stage of construction adhere to the Department's special provision, Temporary Water Diversion B-44-0010 Station 13+00 EB, found in Book 3, Exhibit 3-A.

For the Bridge Replacement with Single Slab Span Bridge Alternative, incorporate the following:

- Any areas of the stream that will be excavated or disturbed as part of structure removal and are not proposed to be under rip rap, should be filled in or restored with extra light rip rap up to the original stream bottom elevation.
- A wildlife passage will be accommodated by adding Select Crushed Material for Travel Corridor, in accordance with the special provision in Book 3, at the top of the berm adjacent to the abutment on both sides of the structure as shown in Exhibit 4-B.
- Stormwater discharge from the bridge deck shall not be discharged directly to the stream, rather, shall be directed to a swale or rip rap prior to entering the waterway unless approved by the Department.
- Mud Creek has been on EPA's 303d impaired waters list since 1998 for Total Suspended Solids. Mud Creek is part of the Lower Fox River Total Phosphorus (TP) and Total Suspended Solids (TSS) Total Maximum Daily Limit (TMDL) that was approved by the EPA in 2012. This TMDL uses loading limit calculations to either approve or deny additional sources being discharged that would increase TP and TSS. If new stormwater discharge points are to be introduced with this structure, coordinate with the REC and DNR to determine necessary conditions for concurrence.

For the Bridge Replacement with Concrete Box Culvert Alternative, the Wisconsin Department of Natural Resources (DNR) did not grant preliminary concurrence but is willing to explore this further as the project progresses. Coordinate with the Department's PM and REC to address these concerns:

EXHIBITS

- Exhibit 4-A Wetland and Waterway Impacts
- Exhibit 4-B Wildlife Passage Location B-44-482

EXHIBIT 4-B WILDLIFE PASSAGE LOCATION B-44-482



6.3.2 Department Supplied Information

The Department has compiled information regarding known utility facilities and their approximate locations within the Project area and has held two Utility Coordination Meetings (August 2021 and January 2022). Known utility contact information has been summarized in Exhibit 6-A; and Exhibit 6-B summarizes the Project Specific Utility Coordination, which describe the approximate locations of existing facilities and the anticipated conflicts, relocations, and constraints of those facilities within the Project improvement area.

The Department's draft Utility Status Report (USR) is attached as Exhibit 6-C.

Utility Work Plans will be provided in Exhibit 6-D for the Design-Builder when complete and Approved by the Department. All remaining Utility Work Plans are anticipated to be Approved by the Department by June 30, 2022. Portions of these work plans, utility agreements, utility permits, and some correspondence may be identified by the utility owners as being subject to homeland security provisions and confidential and so should not be shared.

If the Design-Builder discovers an unknown utility, a utility not accurately identified or located, or additional utility coordination requirements, immediately notify the Department and the utility. The Design-Builder's responsibilities regarding additional unknown utility relocations are provided in Book 2, Section 6.4.

6.4 Design-Builder Responsibilities

6.4.1 Utility Coordination

The Design-Builder shall hold a Utility Coordination Meeting with the Department and the utilities within 4 weeks of Award of the Contract, and as often as needed thereafter. Notify and invite the Department's Central Office and Region Utility Units at least five working days in advance of any utility meetings. This meeting will confirm utility locations, potential conflicts, and coordination requirements with the Design-Builder's design. The Design-Builder shall confirm Utility Work Plans for known utilities and begin scheduling Utility Work Plans for any recently discovered unknown utility conflicts. All Utility Work Plans shall first be reviewed and accepted by the Design-Builder and then sent to the Department for approval.

The Design-Builder shall use best efforts to minimize relocations and costs to utilities and be consistent with other requirements of the Contract Documents.

No additional compensation will be allowed for any delays, inconveniences, or damage sustained by the Design-Builder or its Subcontractors due to interference from utilities or the operation of relocating utilities when the circumstances are a result of the Design-Builder's design.

The Design-Builder's obligations with respect to each utility will include the following:

 Identify, locate, and verify all utilities located within the right-of-way and/or otherwise impacted by the Project. These utilities may be different than those indicated in the Known Utilities Contact Information, attached as Exhibit 6-A.

EXHIBIT 6-D APPROVED UTILITY WORK PLANS



Utility Company Name	PLEASE RETURN THIS WORKSHEET BY
ANR Pipeline Co - Gas/Petroleum	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Wisconsin Department of Transportation has been provided with Piling placement and Shoring guidelines near TC Energy pipelines. Relocation of TC Energy pipelines is not required because WisDOT is following Piling placement and Shoring guidelines provided to them.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

N/A

3. Anticipated Start Date

N/A

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

TC Energy pipelines are correctly shown on plans.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name	
Todd Brister	
Address	
W3925 Pipeline Lane	
City, State, ZIP Code	
Eden, WI 53019	
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)
920 - 477 – 2235	920 – 979 - 0060
E-mail Address	
todd brister@tcenergy.com	

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.		
Yes	No	
	x	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

	x	Does the line have any remaining product?
x		Does the line have any asbestos wrap or any other hazardous materials associated with it?
	x	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.

Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

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Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address	
312 – 521 - 9780	Benjamin_acheampong@tcenergy.com	
	Benjamin Acheampong	04/02/2022
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

Note:

8" TC Energy pipeline is coated with Coal Tar. Please call TC Energy representative to be around when working within 25ft of pipeline.

Concrete Removal Over/Adjacent to ANR Pipeline

- If concrete pillars must be removed over ANR Pipeline, they shall be cut below final grade and removed.
- If concrete footer adjacent to ANR pipeline needs to be removed, it shall be cut no closer than 2 ft from the edge of pipeline.
 - Cuts shall be made regardless if adjacent concrete is to be removed within 10 ft from the edge of pipeline using a hydraulic breaker/hammer
- No concrete footer shall be removed from over pipeline
- Cut off saw is recommended for making cuts
- During concrete removal no loads shall be suspended above an exposed pipeline



Piles Installed Adjacent to ANR Pipeline

- Piles shall not be suspended above an exposed pipeline
- Piles shall be adequately restrained with the use of taglines to prevent uncontrolled movement while the piles are being hoisted, placed, removed or withdrawn.
- Offsets in locations where piling pins have potential to be obscured shall be installed and documented.
- Ground vibration must be limited to that permitted by the state's blasting regulations where the pipeline is located, or a maximum of 2 in./sec PPV.
- The hand excavation or hydrovac pilot hole shall be a minimum of 4 in. greater in diameter (2 in. on the radius) than the driven piles.
 - Pilot holes shall be backfilled prior to commencement of piling
- Driven piles installed adjacent to gas pipeline shall be pilot holed to a depth which will launch the piling at a distance of 5 ft below the bottom of the pipe. See figure below.



Note:

1. Pilot hole minimum 4"/ 100mm width than piling.

2. Launch piling 1.5m / 5 ft. below BOP elevation if pile is within 1.5m / 5 ft. from edge of pipe

• The pile driver derrick (leads) shall not be maneuvered within 600 mm (2 ft) horizontal distance from the edge of gas pipeline.

Temporary Shoring Adjacent to ANR Pipeline

- Driven shoring shall conform to requirements for piling
- If temporary shoring is required directly above the pipeline, adequate protection shall be installed, and shoring shall not be installed closer than 2 ft from the pipeline.



Wisconsin Department of Transportation

UTILITY WORKSHEET Need SMA to include water valve Wi DT2236 6/2009 s.84.063 Wis. Stats. adjustment as part of the project - PDS PM

Utility Company Name to complete	PLEASE RETURN THIS WORKSHEET BY
Grand Chute Sanitary District 1 - Water	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Relocation plan listed below is based on preliminary project plans dated 12/15/2021.

Grand Chute Sanitary District 1 has potential conflicts with the existing watermain on the north side of the existing box culvert, during excavation for the new structure. No conflicts, depends on means/methods of D-B

Grand Chute Sanitary District 1 has potential conflicts with the water valve box in the southeast quadrant of the intersection of S Kools Court and W Spencer Street.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

Depending on the limits of excavation required, the watermain may be in conflict. If adjustments are required, final adjustments can be made to the watermain at the time of construction without the need for relocation. D-B to coordinate unknown conflict as necessary

Final adjustments can be made to the valve box at the time of construction without the need for relocation.

3. Anticipated Start Date

N/A

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

Grand Chute Sanitary District 1 facilities appear to be shown correctly.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

N/A

	-	
Name		
Mark Van Der Wegen		
Address		
1900 W Grand Chute Boulevard		
City, State, ZIP Code		
Crond Chuta W/I E4012		
Grand Chute, WI 54913		
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)	
920-832-1581 920-422-6674		
E-mail Address		
mark vanderwaren @arendebute net		
mark.vanderwegen@grandcnute.net		

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.		
Yes	No	
*	*	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

*	*	Does the line have any remaining product?
*	*	Does the line have any asbestos wrap or any other hazardous materials associated with it?
*	*	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.
*	*	Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address	
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

UTILITY WORKSHEET

DT2236 6/2009 s.84.063 Wis. Stats.



project - PDS PM to complete

Utility Company Name	PLEASE RETURN THIS WORKSHEET BY
Grand Chute Sanitary District 2 - Sewer	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Relocation plan listed below is based on preliminary project plans dated 12/15/2021.

Grand Chute Sanitary District 2 may require vertical adjustment of the sanitary manhole in the northeast corner of the structure replacement, on STH 125/W College Avenue at STA 113'WB'+00, LT, based on the grading and sloping limits. In addition, the sanitary manholes at STA 128+75, RT and STA 131+50 may require vertical adjustment based on the finished pavement grades when the roadway is widened and surfaced.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

Adjusting sanitary sewer manholes to the proposed grades can be completed during construction to avoid multiple mobilizations. If adjustments are required, the work will be completed under the WisDOT contract and Contractor as a Special Provision and will be compensable.

3. Anticipated Start Date

N/A.

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors, In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

Grand Chute Sanitary District 2 facilities appear to be shown correctly.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

N/A

Name	
Mark Van Der Wegen	
Address	
1900 W. Grand Chute Boulevard	
City, State, ZIP Code	
Grand Chute, WI 54913	
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)
920-832-1581	920-422-6674
E-mail Address	
mark.vanderwegen@grandchute.net	

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

Manhole adjustment/reconstruction is a Special Provision item. To reduce delays in the Town obtaining a Contractor, the WisDOT Contractor will have control of that work, in to do the work while under construction.

11.		
Yes	No	
*	*	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

*	*	Does the line have any remaining product?
*	*	Does the line have any asbestos wrap or any other hazardous materials associated with it?
*	*	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.
*		Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

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Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address	
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

APPROVED Wisconsin Department of Transportation UTILITY WORKSHEET

DT2236 6/2009 s.84.063 Wis. Stats

Utility Company Name	PLEASE RETURN THIS WORKSHEET BY
Level 3 Communications LLC - Communication Line	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Lumen does not anticipate conflicts with the proposed improvements under WisDOT Project 6526-00-00 and our existing facilities. We have one fiber optic cable that runs along the North side of STH 125, approximately 100 ft north of the Westbound centerline. Lumen has provided the DOT with a survey file of our exact location and depth along the north. Therefore, we do not anticipate any conflicts with the proposed slab.

We recommend that best practices and DIGGER procedures be followed to protect cables in place prior to performing any excavation work. If locates vary from those shown, please reach out to Lumen. This project is being tracked as P-155370.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

N/A

3. Anticipated Start Date

N/A

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

Yes. A DWG file has also been provided to the DOT, following our surveyed findings. This includes the location and depth of our existing fiber optic cable.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name		
Brahim Gaddour		
Address		
3235 Intertech Dr. Suite 600		
City, State, ZIP Code		
Brookfield, WI 53045		
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)	
(414) 908-1027	(414) 704-1026	
E-mail Address		
Brahim gaddour@lumen.com		

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

N/A

 \square

11.		
Yes	No	
	\oslash	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

\Diamond	Does the line have any remaining product?
\otimes	Does the line have any asbestos wrap or any other hazardous materials associated with it?
0	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.

Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address	
(708) 415-0568 evizcaino@hbkengineering.com		
	Edward Vizcaino	01/11/2022
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.



PLEASE RETURN THIS WORKSHEET BY Utility Company Name Spectrum - Communication Line April 14, 2022 Project Description **RETURN TO** Design Project ID: 6526-00-00 Beckv Reese Division of Transportation System Development Construction Project ID: 6526-00-71 T. GRAND CHUTE, COLLEGE AVE Northeast Region **IH41 - BLUEMOUND DRIVE** 944 Vanderperren Way Green Bay WI 54304 STH 125, Outagamie County

- 1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.
- A. Charter Communications anticipates no conflicts with this project.
- B. Any unforeseen conflicts will need to be adjusted during construction.
- 2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

NA

3. Anticipated Start Date

NA

4. Estimated construction time required (In working days)

NA

5. List the approvals required and the expected time schedule to obtain those approvals.

NA

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

NA

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

YES

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

NA

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name	
Vince Albin	
Address	
3520 Destination Dr	
City, State, ZIP Code	
Appleton WI 54915	
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)
920-831-9249	920-378-0444
E-mail Address	
Vince.albin@charter.com	

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.		
Yes	No	
	ullet	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

\bullet	Does the line have any remaining product?
ullet	Does the line have any asbestos wrap or any other hazardous materials associated with it?
\bullet	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.
ullet	Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address	
920-831-9249	Vince.albin@charter.com	
		4-4-2022
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.



Vince Albin Digitally signed by Vince Albin DN: cn=Vince Albin gn=Vince Albin c=US United States I=US United States o=Charter Communications e=vince.albin@charter.com Reason: I am the author of this document Location: Date: 2022-04-04 14:46-05:00

UTILITY WORKSHEET s.84.063 Wis. Stats.

Utility Company Name PLEASE RETURN THIS WORKSHEET BY WIN Technology - Communication Line April 14, 2022 Project Description **RETURN TO** Design Project ID: 6526-00-00 **Becky Reese** Division of Transportation System Development Construction Project ID: 6526-00-71 T. GRAND CHUTE, COLLEGE AVE Northeast Region **IH41 - BLUEMOUND DRIVE** 944 Vanderperren Way STH 125, Outagamie County Green Bay WI 54304

Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway 1. stationing whenever possible. Attach extra sheets if needed.

No utility conflict anticipated

DT2236 6/2009

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

No utility conflict anticipated

- 3. Anticipated Start Date No utility conflict anticipated
- 4. Estimated construction time required (In working days) No utility conflict anticipated
- 5. List the approvals required and the expected time schedule to obtain those approvals. No utility conflict anticipated
- 6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

No utility conflict anticipated

- 7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities. WIN facility map previously provided
- 8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them? No utility conflict anticipated
- 9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name Ken Whiting	
Address 4955 Bullis Farm Road	
City, State, ZIP Code Eau Claire – WI - 54701	
Area Code - Telephone Number NMC – 866-206-2027	Area Code - Telephone Number (Mobile) 920-376-2996
E-mail Address ken.whiting@wintechnology.com	

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations. No utility conflict anticipated

11. Yes	No	
		Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?
		No
		Does the line have any remaining product?
		Does the line have any asbestos wrap or any other hazardous materials associated with it?

	Does the line have any aspestos wrap of any other hazardous materials associated with it?
	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.

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 \square

Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address		
920-376-2996	ken.whiting@wintechnology.com		
Ken Whiting	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	18 March 2022	

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

UTILITY WORKSHEET

DT2236 6/2009 s.84.063 Wis. Stats.

Utility Company Name	PLEASE RETURN THIS WORKSHEET BY	
Windstream KDL, LLC - Communication Line	April 14, 2022	
Project Description	RETURN TO	
Design Project ID: 6526-00-00	Becky Reese	
Construction Project ID: 6526-00-71	Division of Transportation System Development	
T. GRAND CHUTE, COLLEGE AVE	Northeast Region	
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way	
STH 125, Outagamie County	Green Bay WI 54304	

APPROVED Wisconsin Department of Transportation

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

NO CONFLICT ANTICIPATED. See attached network map. This isn't pinpoint accurate as to the location but it is enough to determine we are on the pole line on the North side of Spencer for the length of the project with exception of a buried section under the interstate. Assuming there will be no relocations with that pole line.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

N/A

3. Anticipated Start Date

N/A

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

N/A

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name				
Address				
314 N DANZ AVE				
City State 7IP Code				
Oily, State, ZIF Goue				
GREEN BAY, WI 54302				
Veg Code - Telephone Number				
920-461-9825 OR 920-410-6902				
E-mail Address				
<u>Eric.Becker@windstream.com</u> or Lori.Ketter@windstream.com				

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.		
Yes	No	
	х	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

х	Does the line have any remaining product?
Х	Does the line have any asbestos wrap or any other hazardous materials associated with it?
x	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.

× Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address		
920-461-9825	Eric.becker@windstream.com		
	Eric Becker	3-15-22	
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)	

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

UTILITY WORKSHEET

DT2236 6/2009 s.84.063 Wis. Stats.

Utility Company Name	PLEASE RETURN THIS WORKSHEET BY
Windstream KDL, LLC - Communication Line	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Windstream does not have facilities along College Ave between IH 41 and Bluemound Drive, therefore no relocation will be required.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

NA

3. Anticipated Start Date

NA

4. Estimated construction time required (In working days)

NA

5. List the approvals required and the expected time schedule to obtain those approvals.

NA

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

NA

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

NA

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

NA

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan

Name		
Lori Ketter		
Address		
314 N. Danz Avenue		
City, State, ZIP Code		
Green Bay, WI 54302-3526		
Area Code - Telephone Number	Area Code - Telephone Number (Mobile)	
(920) 410-6902	(920) 410-6902	
E-mail Address		
Lori.Ketter@Windstream.com		

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.		
Yes	No	
		Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

	Does the line have any remaining product?
	Does the line have any asbestos wrap or any other hazardous materials associated with it?
	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.

Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code-Telephone #, Ext.	Preparer E-Mail Address	
(920) 410-6902	Lori.Ketter@Windstream.com	
	Lori S. Ketter	04/16/2022
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

Windstream - W SPENCER ST - APPLETON WI



UTILITY WORKSHEET APPROVED Wisconsin Department of Transportation

DT2236 6/2009 s.84.063 Wis. Stats.

Utility Company Name	PLEASE RETURN THIS WORKSHEET BY
CenturyLink - Communication Line	April 14, 2022
Project Description	RETURN TO
Design Project ID: 6526-00-00	Becky Reese
Construction Project ID: 6526-00-71	Division of Transportation System Development
T. GRAND CHUTE, COLLEGE AVE	Northeast Region
IH41 - BLUEMOUND DRIVE	944 Vanderperren Way
STH 125, Outagamie County	Green Bay WI 54304

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

Lumen does not anticipate conflicts with the proposed improvements under WisDOT Project 6526-00-00 and our existing facilities. We have one fiber optic cable that runs along the North side of STH 125, approximately 100 ft north of the Westbound centerline. Lumen has provided the DOT with a survey file of our exact location and depth along the north. Therefore, we do not anticipate any conflicts with the proposed slab.

We recommend that best practices and DIGGER procedures be followed to protect cables in place prior to performing any excavation work. If locates vary from those shown, please reach out to Lumen. This project is being tracked as P-155370.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

N/A

3. Anticipated Start Date

N/A

4. Estimated construction time required (In working days)

N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

Yes. A DWG file has also been provided to the DOT, following our surveyed findings. This includes the location and depth of our existing fiber optic cable.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan
| Name | | |
|------------------------------|--|--|
| Name | | |
| Brohim Coddour | | |
| | | |
| Address | | |
| | | |
| 3235 Intertech Dr. Suite 600 | | |
| City, State, ZIP Code | | |
| | | |
| Brookfield WI 53045 | | |
| Brookleid, W135045 | Anna Oasta - Talankana Number (Makila) | |
| Area Code - Telephone Number | Area Code - Telephone Number (Mobile) | |
| | | |
| (414) 908-1027 | (414) 704-1026 | |
| E-mail Address | | |
| | | |
| Drehim neddeur@lumen.com | | |
| Branim.gaddour@iumen.com | | |

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

N/A

11.		
Yes	No	
	\oslash	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?

\Diamond	Does the line have any remaining product?
\oslash	Does the line have any asbestos wrap or any other hazardous materials associated with it?
0	Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.
\otimes	Is there any reason the highway contractor cannot remove portions of the line left in place?

If you answered "Yes" to any of the questions above, please attach additional pages.

Preparer Area Code – Telephone #, Ext.	Preparer E-Mail Address				
(708) 415-0568	evizcaino@hbkengineering.com				
	Edward Vizcaino				
	(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font)	(Date)			

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

UTILITY WORKSHEET

DT2236 07/2016 s.84.063 Wis. Stats.

Wisconsin Department of Transportation

PLEASE RETURN THIS WORKSHEET BY Utility Company Name We Energies Gas 2/4/2022 Project Description - Include Project ID, Title, Subtitle, Highway, County **RETURN TO** Project: I.D. 6526-00-71 **Becky Reese** Project Location: College Ave/STH 125 Wisconsin Department of Transportation Northeast Region (WI-41-Bluemound Dr) Town of Grand Chute Attention: Becky Reese County: Outagamie Utility Coordination Engineer Becky.Reese@dot.wi.gov

APPROVED

1. Describe your proposed relocation plan for the above project, as requested in the enclosed letter, using highway stationing whenever possible. Attach extra sheets if needed.

We Energies – Gas relocation plan listed below is based on project plans date 12-13-2022. Plans reviewed under WR4682022.

We Energies has no relocations and/or adjustments for this project.

Contact 1-800-261-5325 for gas emergencies, to identify if gas facilities are live, and gas valve box adjustments.

2. Conflicting utility facilities will need to be relocated prior to construction. If this is not feasible, provide an explanation and an indication of what work will require coordination with the highway contractor during construction.

N/A

3.	Anticipated Start Date: N/A
4.	Estimated construction time required (In working days): N/A

5. List the approvals required and the expected time schedule to obtain those approvals.

N/A

6. Include a list of the real estate parcels that the Wisconsin Department of Transportation (DOT) must have acquired to enable your company to complete the necessary facility installations and relocations prior to construction.

N/A

7. Review the enclosed plans for the above project. Are your facilities correct as shown? If not, list the errors. In some cases, it may be easier to return a marked up copy of the plan. It is very important that your facilities are shown correctly because all construction field personnel will use this information. Uncorrected location errors could create construction delays or damage to utility facilities.

Utility facilities that are missing and/or not shown correctly are described per the attached drawings. Highway stationing has been used where possible to locate new facilities.

The attached drawing shows We Energies gas facilities at the intersection of Kools St and Spencer St which were not shown on plans.

8. Is this work dependent on work by other utilities? If so, which other utilities, and what time schedule has been coordinated with them?

N/A

N/A

9. Please provide the name, address, and telephone number of the field contact person for this project, so that we may place this information on the highway plan.

Name Jesus Victoria	
Address 800 S Lynndale Dr	
City, State, ZIP Code Appleton, WI 54914	
Area Code - Telephone Number 920-380-3314	Area Code - Telephone Number (Mobile) 920-470-3812

10. List any other relevant information that may impact the ultimate goal of preventing construction delay due to uncertain scheduling of utility facility relocations.

11.	Yes	No	
		V	Do you have any facilities that are no longer in use but have been left in place in the project area? If "Yes", approximately where are the facilities located and what type and size of facility is involved?
		v	Does the line have any remaining product?
		•	Does the line have any asbestos wrap or any other hazardous materials associated with it?
			Does any part of the line conflict directly with the proposed highway project? If so, what arrangements have been made to remove those portions? This should be mentioned as part of your work plan in question number 1 on this form.
		•	Is there any reason the highway contractor cannot remove portions of the line left in place?
			If you answer "Yes" to any of the questions above, please provide us with additional information. Attach additional pages if necessary.

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification.

We Energies Electric Dispatch #1-800-662-4797 We Energies Gas Dispatch #1-800-261-5325

920-380-3314

(Area Code – Telephone #, Ext. – Preparer)

Jesus Victoira

01|31|2022

(Name of Person Who Prepared this Worksheet) (If completed electronically, Brush Script Font) (Date)

NOTE: DOT will be sending to you a Trans 220 Work Plan Approval letter and a Start Work Notice after we complete the review of your Work Plan.

WEC NaviGate



Lat: 44.259 Lon: -88.461 Municipality: GRAND CHUTE - WEGO (T), TRSQ: T21N R17E Sec. 32 NE

WARNING: Do not use for construction purposes. For underground facility locations call Diggers Hotline in Wisconsin at 1-800-242-8511 or Miss Dig in Michigan at 1-800-482-7171. This document, in whole or in part, may not be reproduced in any form or by any means without the written consent of We Energies - 333 W. Everett St., Rm. A259, Milwaukee, WI 53202

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EXHIBIT 6-E UTILITY COORDINATION TASK LIST

NORTHEAST REGION CUSTOMIZED UTILITY COORDINATION TASK LIST

Tasks with Target Date of "If needed" are not anticipated to be required for the Project. "Surveyor" and "Plat P" are responsibilities of WisDOT's surveyor and plat preparer for the Project.

Target Dates for plat-related tasks are for Utility Coordination only; other WisDOT sections may have earlier target date requirements for plat completion.

All tasks will be done in accordance with the *WisDOT Guide to Utility Coordination* unless otherwise noted.

Project Description – Include Design Project ID, Title, Limits, Highway, County						
6526-00-00						
Town of Grand Chute, College Aven	nue					
IH 41 – Bluemound Drive						
STH 125						
Outagamie County						
Construction ID		E/PS&E date	LET date			
6526-00-71		8/1/2023	11/14/2023			
WisDOTProjectManager (PM)		Telephonenumber	Email address			
Jesse Hansen		920-492-5630	Jesse.Hansen@dot.wi.gov			
Design-Builder Name (D/B Firm)	Contact	Telephonenumber	Email address			
WisDOT Utility Coordinator (UC)						
Becky Reese						
<u>I</u>						

☑ This is a Trans 220 project

☐ This is <u>NOT</u> a Trans 220 project

(i.e., connecting highway)

	TASK	R	Responsible F	Town of Doto	
		РМ	UC	D/B Firm	Target Date
1	Provide Concept Definition Report (CDR) and copies of any subsequent revisions to region utility coordinator.	x			DONE
2	Create list of known utilities in the project area (UIN).		Х		DONE
3	Verify all utility facilities located within the right-of-way of the proposed improvement, according to Trans. 220.04(1) and <i>FDM Procedure 18-10-10</i> .		x		DONE
4	Participate in project kick-off meeting.	X	Х	Х	If needed
5	Monthly : Send copies of all correspondence with utilities and utility-related documents to the PDS-Project Manager (and/or region utility coordinator). <i>FDM Procedure 18-1-15 Note: update TUMS.</i>			X	
6	Enter utility milestone dates in TUMS.		х		
7	Prepare and send project notification (DT1077), along with cover letter and exhibits, to all utilities with a potential for facilities in the project area. <i>Trans. 220.04; FDM Procedure 18-10-10. Note: update TUMS.</i>		х		DONE
8	Obtain system maps from utilities. Provide copies of new system maps to the region utility coordinator and Design-Builder. Compare the system maps with the highway plan information to confirm that all utility facilities are shown properly. Trans. 220.05(1) FDM Procedure 18-10-10		х		DONE
9	 Coordinate field locates of all utility facilities within project area. <i>FDM Procedure 18-10-15</i> Remove manhole covers. Determine flow line elevations and pipe sizes. Expose existing utility facilities and obtain elevations (pothole) at the following locations. <i>Note: Coordinate this with the utility facility owner.</i> 	Surveyo r			DONE
10	Show existing utility facilities on plat, plans, and cross-sections. Note: plot the horizontal locations of all underground and overhead utility facilities on mainline and side road cross sections.			x	
11	Provide 30% plan to region utility coordinator for review prior to 30% Plan Review Meeting.	x			DONE
	Determine titlework requirements for TLE Acquisition Maps		Х		DONE
12	Invite utilities to all Public Information Meetings.			X	
13	Provide information of hazardous material sites to the region utility coordinator, as it is associated with this Project. With this information clearly state what hazardous material has been found, where it has been located, other potential sites, who will be responsible for the removal, handling of the removal, storage of material that has been removed, and the cost associated with remediation of the hazardous material on this Project.	x			DONE
14	Provide information of environmental conditions to the region utility coordinator, as associated with this Project. This includes wetlands, bedrock, historical and archaeological sites, endangered species, underground storage tanks, etc.	×			DONE

	TASK		Responsible P	Tana (Data	
	IASK	РМ	UC	D/B Firm	Target Date
	Provide Utility Easement Exhibit FDM Procedure Reference 12-1 General, 5.2 Easements	х			DONE
	Review utility easements and determine if affected by acquisition		X		DONE
	Review existing plats for previous conveyances		Х		DONE
	Provide tax IDs for acquisition areas		X		DONE
15	Provide a preliminary plat to the region utility coordinator for review after all existing utility information, including compensable and non-compensable utility facilities and easements have been identified.	Х			DONE
	Provide utility facility owner names for plat		X		DONE
	Review utility prescriptive rights		Х		DONE
	Determine compensable utilities		Х		DONE
	Determine if service is compensable		Х		DONE
	Verify if utilities on RR by license or easement		Х		DONE
	Determine if any long-term leases create compensability		Х		DONE
	Review existing PLE/LHE on plats for necessary UTLs		Х		DONE
16	Provide a copy of the approved DSR to the region utility coordinator.				
17	Provide a final recorded plat to the region utility coordinator, including compensable and non-compensable utility facilities and easements.	х			DONE
18	Prepare DT1078 plans, plats, and cross-sections, which are all complete enough for use by utility companies in evaluating potential conflicts and developing a relocation design. Depending on utility preference, these can be in paper or electronic format (.dwg files). Provide to region utility coordinator.	х			DONE
19	Provide DT1078 plans, plats, and cross-sections, which identify all "groundbreaking activities," to the region utility coordinator for review prior to 60% Plan Review Meeting.		X (DONE)	(X if additional utility conflicts discovered)	
20	Identify potential utility conflicts. If done by consultant, provide copy to region utility coordinator. <i>FDM Procedure 18-10-20</i>		X (DONE)	(X if additional utility conflicts discovered)	
21	Hold utility coordination meeting before DT1078 packages are submitted to utility companies.		X (DONE)	(X if additional utility conflicts discovered)	

	TASK	F	Responsible P	Target Date	
		РМ	UC	D/B Firm	Target Date
22	NO PLAT: Prepare and submit Project Plan Transmittal (DT1078) package, along with all DT1078 plans and related exhibits, to each utility within the projectarea. Include cover letter, potential utility conflict list, utility contact list, and Utility Worksheet (DT2236), according to <i>Trans. 220.05; FDM</i> <i>Procedure 18-10-30.</i> Note: update TUMS.				N/A
23	PLAT: Prepare and submit Project Plan Transmittal (DT1078) package, along with all DT1078 plans, recorded plat, and related exhibits, to each utility within the project area. Include cover letter, potential utility conflict list, utility contact list, Utility Worksheet (DT2236), Buy America (DT2249), utility agreements, waivers, and release of rights. According to Trans. 220.05, <i>FDM Procedure 18-10-30 and 18-15-15.</i> Note: update TUMS.			(X if addtional utility conflicts discovered)	
24	Provide to the region utility coordinator all plan changes from previous utility plans submittals, as required. <i>Trans. 220.05(12); FDM Procedure 18-10-</i> 45. <i>Note: repeat task 22 and/or task 23 as described above, if necessary.</i>			Х	ASAP
25	Hold utility coordination meetings after the DT1078 packets have been submitted to utilities, but before the Utility Work Sheets (DT2236) are due. <i>Trans. 220.05(04); FDM Procedure</i> <i>18-10-35 and 18-20-5</i>			(X if additional utility conflicts discovered)	lf needed
26	Send notice to utilities of having received their Utility Worksheet (DT2236), utility relocation cost estimate, release of rights, waiver letter, and utility agreement. An email notice is acceptable. (cc: the region utility coordinator.)			(X if additional utility conflicts discovered)	
27	Review utility work plans as they are received, include review by the region utility coordinator. Recommend corrective action if necessary. <i>FDM Procedure 18-10-35</i>		(X if additional utility conflicts discovered)	(X if additional utility conflicts discovered)	
28	Resolve with each utility any conflicts among the various utility work plans. <i>Trans. 220.05(4)</i>			(X if additional utility conflicts discovered)	
29	Review utility relocation cost estimate, agreements/waiver, and release of rights, as they are received <i>FDM Procedure18-15-20</i> and 18-20-1. Note: Only the Utility Coordinator is to negotiate utility compensation.		Х		
30	Submit the utility relocation cost estimates, agreements/waiver, and release of rights, to the region utility coordinator as they are received. Note: Only the Utility Coordinator is to negotiate utility compensation.		Х		
31	Submit utility relocation cost estimates, original agreements, and recorded release of rights to Central Office for review and approval.		х		

	TASK	F	Responsible P	Town of Doto	
	IASK	РМ	UC	D/B Firm	Target Date
32	Record releases of rights.		Х		
33	Consult with and recommend work plan approval from region utility coordinator. <i>FDM Procedure</i> 18-10-35; <i>Trans.</i> 220.05(7)			(X if additional utility conflicts discovered)	
34	Submit work plan approval to utility. <i>Trans. 220.05(7)</i>		х	X (if additional utility conflicts discovered)	6/10/22 (UC)
35	Provide monthly updates to the region project manager and the utility coordinator regarding land acquisition, including early acquisition, as it is associated with this project.			x	
36	Provide RFC plans and plat to region utility coordinator for review prior to RFC Plan Review Meeting.			x	
37	Review Utility Permit (DT1553) applications for compatibility with RFC plans and resolve corrective action if necessary.		(X		
38	Approve Utility Permit (DT1553) applications.		(X		
39	Conduct field meetings with utilities, as required.			Х	lf needed
40	Write the utility section of the highway contract special provisions, based upon approved work plans provided by the utility owners.		x	X(if additional utility conflicts discovered)	
41	Submit the utility section of the highway contract special provisions to the region utility coordinator for review and approval.		х	X(if additional utility conflicts discovered)	
42	Update utility notes and utility contacts on the General Notes sheet based upon information provided by utilities from work plans.			(X (if additional utility conflicts discovered)	
43	Prepare Utility Status Report (DT1080), obtain digital signature from region utility coordinator prior to RFC plan submittal		X		
44	Provide field staking for utilities, as needed. Right-of-way staking is needed only in the areas where utility facilities will be placed, not the entire project. Estimate this will be needed 1 time.			x	
45	Send final plan set and copy of the utility portion of the highway contract special provisions to each utility with facilities in the project area just prior to or soon after the RFC plan submittal			X ?	
46	Conduct a utility coordination meeting after all work plans have been approved but before utility relocations begin. <i>Chapter</i> <i>Trans. 220.05(04); FDM Procedure 18-10-35 and 18-10-45</i>			X	lf needed

	TASK	Responsible Person	Torret Doto		
	IASK	РМ	UC	D/B Firm	Target Date
47	Monitor and report to the region utility coordinator regarding the status of all compensable and non-compensable utility relocations.				
	X Including all utility relocations that will be started and DONE prior to construction (i.e., Pre-Construction Meeting).			x	
	X Including all utility relocations that will be started prior to construction and DONE during construction.				
	Including all utility relocations started and DONE during construction.				
48	Conduct a Pre-Construction Utility Meeting with the construction contractor and all affected utilities to discuss the status of utility relocations and utility coordination necessary during construction.			x	
49	Prior to the Pre-Construction meeting, contact each utility to discuss status of relocation effort, and be prepared to discuss the status of the relocation effort at the Pre-Construction Meeting.			x	
50	Process utility agreement change orders.		Х		
51	Process utility second moves.		Х		
52	Process utility billings.		Х		

investigations are required, refer to the Department's *Geotechnical Manual* to determine the number and type of additional soil borings and tests required to assess the subsurface conditions for pavements and roadway materials.

10.2.2 Permanent HMA Pavement Design Requirements

Construct pavement types and minimum thicknesses as shown in Table 10-1 and Table 10-2 and as identified in the Department's PDR. If additional major soil types (textural classes) are encountered during construction that were not identified in the Department's soils report, consult the Department's Regional Pavement Engineer and Soils and Materials Engineer for any pavement layer thickness changes or subgrade stabilization recommendations. [PM: Add additional descriptions as required, add additional locations as different pavement sections dictate]

Location	Detailed Description	Pavement Layer Description	Minimum Thickness (inches)
STH 125	3 MT 58-28 S (lower layer) 4 MT 58-28 S (upper layer)	HMA Pavement	10-inch total thickness 8-inch lower layer 2-inch upper layer
	1 1/4 Inch	Base Aggregate Dense	10 inches
	See Notes 1.	Subgrade Improvement	
Auxiliary/Turning Lanes	Match Mainline	Match Mainline	Match Mainline
Shoulders	Match Mainline	Match Mainline	Match Mainline
Auxiliary/Turning Lanes	1 1/4 Inch See Notes 1. Match Mainline Match Mainline	Base Aggregate Dense Subgrade Improvement Match Mainline Match Mainline	10 inches Match Mainline Match Mainline

NOTES:

1. Subgrade Improvement is not required for reconstructed STH 125.

Location	Detailed Description	Pavement Layer Description	Minimum Thickness (inches)
Spencer Street	3 MT 58-28 S (lower layer) 4 MT 58-28 S (upper layer)	HMA Pavement	5.5-inch total thickness 3.5-inch lower layer 2-inch upper layer
	1 1/4 Inch 3 Inch	Base Aggregate Dense See Note 1.	6 inches 12 inches
	See Note 2.	Subgrade Improvement	
Auxiliary/Turning Lanes	Match Mainline	Match Mainline	Match Mainline
Shoulders	Match Mainline	Match Mainline	Match Mainline

1. Conform Base Aggregate Dense 3-Inch and Base Aggregate Dense 1 1/4 Inch to FDM 14-5 and Standard Specification 305.

2. Place Geotextile, Type SAS on surface of subgrade construction and under 3 Inch Base Aggregate Dense. Overlap the existing and new geotextile at least 18 in ches and conforming to Standard Specification 645.

10.2.3 Temporary HMA Pavement Design Requirements

Develop and submit to the Department for acceptance a technical memo detailing the pavement structure for any temporary pavements required for construction of the Project. Refer to the Department's FDM, Chapter 14 for report requirements.

10.2.4 Concrete Pavement Approach Slab Requirements

Structural approach slabs and concrete pavement approach slabs will be required at B-44-482. Use the concrete pavement section as shown in the Department's FDM standard detail drawing SDD 13B02-b.

10.2.5 Concrete Curb & Gutter

Design and construct Concrete Curb & Gutter, 30-Inch, Type D at locations shown in Book 2, Section 11, Exhibit 11-A.

Furnish all materials for concrete curb & gutter conforming to the *Standard Specifications*.. Construct curb & gutter as shown in the Department's FDM SDD 8D01.

10.2.6 Concrete Sidewalk

Design and construct Concrete Sidewalk, 5-Inch at locations shown in Book 2, Section 11, Exhibit 11-A. Construct Sidewalk 5-Inch over 6 inches Base Aggregate Dense 1 ¹/₄-Inch.

10.2.7 Local Roadways and Standards

Design and construct widened pavement on eastbound Spencer Street at Kools Street as shown in Book 2, Section 11, Exhibit 11-A. Construct HMA pavement and base on Spencer Street as shown in Table 10-2.

Remove existing HMA pavement on Kools Court to the extent necessary to accommodate intersection design of widened Spencer Street. Grade and shape existing base aggregate to designed profile and slope. Add Base Aggregate Dense, 1 ¼ Inch and add Base Aggregate Dense, 3 Inch. Construct new HMA pavement on Kools Court as follows:

- 3.5 inch lower layer 3 MT 58-28 S
- 2.0 inch upper layer 4 MT 58-28 S

10.3 Construction Requirements

10.3.1 General Construction Requirements

Avoid variation greater than 1/8 inch as tested with a 10-foot straightedge for all pavement tieins, both lateral and longitudinal. Account for total surfacing thickness, settling, compaction, minimum structural requirements, unbound base/subbase thickness, frost-free characteristics, and other appropriate factors. Roadways and driveways adjacent to the Project that are disturbed by construction activities shall be restored by matching the in-place surface type and structure of the existing roadways or driveways.

Construct roadway embankment fill placed under this Contract meeting the requirements of Standard Specification 205 Roadway and Drainage Excavation, 207 Embankment, 208 Borrow, and 209 Granular Backfill. Provide Borrow, Excavation Common, Select Borrow, or Excavation Rock for all new embankment and embankment-widening Material.

Construct base and subbase material following Standard Specification 211, Preparing the Foundation, and meeting the requirements of Standard Specifications 301 Base, Subbase, and Subgrade Aggregate 305 Dense-Graded Base, 312 Select Crushed Material, and 350 Subbase.

When connecting new surfacing adjacent to any existing pavements, saw-cut vertically to the bottom of the existing surfacing or to the bottom of the new surfacing design, whichever is deeper; then at a 0.1:1 (H:V) slope to the bottom of the recommended subgrade excavation.

When connecting to existing roadways at the termini of proposed construction, saw-cut vertically to the bottom of the existing surfacing or to the bottom of the new surfacing design, whichever is deeper, then at a 0.1:1 (H:V) taper to the bottom of the recommended subgrade excavation.

Where matching in-place crossroads, cut vertically to the bottom of the in-place surfacing, then at a 0.25:1 (H:V) slope to the bottom of the recommended subgrade excavation.

Provide for 0.1:1 (H:V) tapers when changing sub-cut depths.

Provide for 0.1:1 (H:V) tapers when changing subgrade materials.

Provide a saw cut where placing new pavement next to in-place pavement to ensure a uniform joint.

10.1.2 Test Rolling

Perform test rolling on the bottom of sub-cuts and the top of the subgrades in accordance with Standard Specification 205.3.13.

The embankment must be constructed in accordance with Standard Specification 207. Use backfill behind abutment walls for bridges that consists of Structure Backfill Type A meeting the gradation requirements in Standard Specification 210.2.2. For placement and compaction of the backfill, comply with Standard Specification 206.3.13.

10.3.2 Soils Materials/Testing Requirements

If additional major soil types (textural classes) are encountered during construction that were not identified in the site investigation report, take at least two representative samples of each additional major soil type (textural class) encountered. Retain, test, and compile data on samples. Refer to Section 8.3.

Perform laboratory soils tests of sufficient number and type to ascertain the nature, strength, conditions, stability, and consolidation characteristics of soil conditions existing at the Site that

influence the proposed design and construction activities. At a minimum, perform the following laboratory tests: Atterberg limits, particle size (percent sand, silt, and clay), and Proctor density.

Compile all completed lab test data in an electronic document for submittal to the Department.

10.1.3 Pavement Section Drainage

Design drainage of new subsurface pavement layers by daylighting materials to in-slopes. If subsurface drainage is used, design and construct subsurface pavement section drainage compliant with the requirements of Section 12 (Drainage) and the following:

• Daylight the bottom of the drainage layer a minimum of 1 foot above the bottom of the ditch. Ensure that topsoil is excluded from the finished surface in these areas.

10.1.4 Concrete

10.3.2.1 Concrete Mix Design

Produce concrete mix designs following mix design procedures stated in Standard Specification 501 as required for the type of concrete used.

10.3.2.2 Concrete Construction and Staging

Construct concrete curb and gutter and sidewalks in accordance with applicable sections of the CMM section 400, Standard Specifications section 400, FDM Chapter 14, and SDDs.

10.1.5 HMA

Construct HMA pavements in accordance with applicable sections of the CMM section 400, Standard Specifications section 400, FDM Chapter 14, and SDDs.

10.3.2.3 HMA Mix Design

Produce HMA mix designs following mix design procedures stated in Standard Specification 450 as required to produce HMA pavements specified in Table 10-1 and Table 10-2.

10.3.3 Grading Requirements

10.3.3.1 Reusing Existing Materials

If materials that currently exist on the Project will be disturbed and re-used on the Project, these materials must be stockpiled for the Department to properly sample, test, and accept. Other means besides stockpiling may be acceptable and can be proposed by the Design-Builder for Department Approval.

10.3.3.2 Disposal of Excess Materials

Dispose of surplus excavated materials in accordance with the Standard Specifications.

10.3.3.3 Disposal Site Plan

If the Design-Builder proposes to dispose of surplus excavated materials on Department R/W, submit a Disposal Site Plan to the Department for Approval.

10.4 Deliverables

Table 10-3 lists Deliverables identified in this section and is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Name	Approval
Supplemental Roadway Soils Report	Approval
Temporary Pavement Technical Memo	Acceptance
Supplemental Laboratory Testing Data	Approval
Concrete Mix Design	Approval
HMA Mix Design	Approval
Disposal Site Plan	Approval

Table 10-3: Non-exhaustive List of Deliverables

Design Standards	Roadway Name: STH 125
Federal Oversight Project	
RoadwayType	□ IH □ USH ⊠ STH □ CTH □ Local
Jurisdictional System	🛛 State 🛛 County 🗆 Town 🗆 Municipal 🗆 Tribal
Highway Type	🛛 Rural 🛛 Urban
Functional Classification	🛛 Principal Arterial 🗆 Minor Arterial 🗆 Collector 🗆 Local
Corridors 2030	□ Backbone □ Connector ⊠ None
NHS Route	⊠ Yes □ No
Long Truck Route	□ Federal □ State ⊠ None
Access Control	□ Tier 1 □ Tier 2A □ Tier 2B □ Tier 3 ⊠ Tier 4
Bicycle/Pedestrian Plans	□ Bicycle □ Pedestrian ⊠ None
Terrain	⊠ Level □ Rolling
Design Criteria Application	□ S-1 ⊠ S-2 □ S-3
Improvement Strategy	Rehabilitation – Bridge Replacement
Design Class	Urban 4
Median type	Raised Median, width varies 9.5 feet to 28 feet
Lane Width	12 feet
ShoulderWidth	3 to 10 feet (full width paved)
Design Vehicle	WB-62
AADT— (current year)	30,700 (2025)
AADT— (design year)	32,100 (2045)
Posted speed	35 MPH
Design speed	40 MPH
Special Features:	None

Table 11-1: Project-Specific Design Standards for Roadways

11.3.2 Design Criteria

11.3.2.1 Clear Zone

Establish a 18-foot typical clear zone width on each side of STH 125 within the Project limits.

Prior to submitting any roadway RFC packages, prepare a plan view that graphically displays proposed clear zone limits for that RFC package. Identify all hazards, both within the clear zone and in a 5-foot band outside each clear zone. A Roadside Hazard Analysis (RHA) will be completed in accordance with FDM 11-45-20. Hold an over-the-shoulder review with the Department, as described in Section 5 (Quality Management), and discuss whether actions are necessary to remove or protect any of the hazards. Upon completion of the process, update the RFC Documents as necessary.

11.3.2.2 Vertical Curves

Apply the minimum vertical curve length defined in Section 11-10-5.4.2 of the FDM to vertical curves on State Trunk Highways. The extent of the roadway construction required for the structure replacement shall be minimized and allow the smooth transition of the structure approaches to the existing pavement per the FDM.

11.3.2.3 Grades

The maximum grades for roadways are provided in FDM 11-10 (Attachment 5.3) and FDM 11--15 (Attachment 1.4).

11.3.2.4 Horizontal Alignment

The horizontal alignment for STH 125 shall be designed in accordance with FDM 11-10-5.

11.3.2.5 Intersections

The geometric layout of the roadway improvements at the intersection of Spencer Street and Kools Street shall be designed to avoid impacts to the existing box culvert located west of the intersection and to match back in before the existing driveway located east of the intersection.

The geometric layout will undergo a review by the Department and is subject to their approval. See Book 2, Section 5.4.9.4.1 regarding review timeframes.

11.3.2.6 Slopes

Construct slopes 4:1 (H:V) or flatter within clear zone unless slopes are located behind guard rail or concrete barrier installations as listed in Section 11.4.2.7. No slopes steeper than 3:1 (H:V) are allowed outside the clear zone on this Project except slopes 0.5:1 (H:V) will be allowed in areas of rock cut. Round slopes on the Project so that they tie naturally into adjacent slopes or the existing ground line.

Design slopes to eliminate the need for traffic barrier, unless otherwise Approved by the Department or allowed in Section 11.4.2.7. Evaluate if any portion of a fill slope prior to the toe of slope is not recoverable, even beyond the clear zone, to determine if there is a hazard at the bottom of the slope, such as a deep pond or other hazards, which would require a traffic barrier.

Book 2, Section 8 (Geotechnical) describes how to transition from structures to slopes.

11.3.2.7 Roadside Design

All roadside design must follow FDM 11-45.

Construct standard MGS installations with MGS thrie beam structure approaches and end terminals at the following locations:

• NE, NW, and SWI corners of B-44-0482

11.3.2.8 Cross-Slope

• Cross-slopes will conform to FDM 11-15-1.

11.3.3 Reports

11.3.3.1 Design Justifications

Design all the elements associated with mainline highway and other roadways in accordance with the design criteria established in the Contract Documents. Develop a Design Justification in accordance with FDM 11-1-20 for any element that falls outside of design criteria for both controlling and non-controlling criteria. Controlling criteria on Department projects are established as per FDM 11-1-20.3.

There is no assurance that Design Justifications created by the Design-Builder will be Approved by the Department. If the Design-Builder's design creates Design Justifications, demonstrate on a case-by-case basis that substantial benefits to the Project and the public would result from the recommendation. Any justifications requested will be subject to Department approval prior to release of RFC Plans. Comply with the Design Justification process per FDM 11-1-20.

11.3.3.2 Alignment and Profile Design Package

Submit all alignments and profiles for acceptance as a design package. Include alignment plans, tabulations, profile sheets, and computer output. Obtain acceptance for the alignment and profile design package prior to submittal of any design packages that use those alignments and profiles.

11.3.3.3 Design Study Report

Develop and submit for review and approval by the Department a Design Study Report for the Project in accordance with FDM 11-4-10.

11.3.3.4 Borrow Site Plan

If borrow material is required for the Project, develop a Borrow Site Plan in accordance with Standard Specification 208 and submit to the Department for Approval.

11.4 Roadway Plan Submittals

Develop roadway plan submittals in accordance with the requirements of Book 2, Section 2. Submit in electronic format in accordance with FDM 15-5 for all submittal milestones listed below.

11.4.1 Base (30%) Roadway Plan

Base roadway plans shall be submitted for Department and FHWAAcceptance and shall in general, at a minimum, meet the requirements as stated in FDM 15-1-4. The removal and construction plans shall utilize field survey for the base mapping.

11.4.2 Preliminary (60%) Roadway Plan

Preliminary roadway plans shall be submitted for Department Acceptance and shall in general, at a minimum, meet the requirements as stated in FDM 15-1-4. The deliverables include the same sheets as the Base Plans, except that the level of detail shall be at approximately 60%. The removal and construction plans shall utilize field survey for the base mapping.

Submit cross-sections at a minimum of 50-foot intervals and include existing ground, the proposed surface of the roadway, the proposed side slopes, and plan grade elevations. Indicate vertical and horizontal scales used.

11.4.3 RFC (100%) Roadway Plan

RFC roadway plans shall be in general conformance with the requirements for Final Plans as stated in Chapter 15 of the FDM, as well as all other requirements for Released for Construction Documents in Book 2, Section 5.5.2.

11.5 Construction Requirements

11.5.1 General

Remove all existing pavement, curb and gutter, sidewalk, trails, steps, drainage facilities, soil, rock, and other obstructions within the Project limits necessary to construct the Project. Remove all other unused pavements and sidewalks, including temporary facilities, within the Project Site, and grade to match the adjacent grading. When removing such items, saw-cut pavement or sidewalk with neat lines at the removal terminations.

11.5.2 Construction Criteria

11.5.2.1 Removal of Miscellaneous Objects

Remove and properly dispose of all objects encountered within the R/W that are not otherwise designated for removal, salvage, or reuse, such as abandoned automobiles, furniture, appliances, garbage, and other waste materials.

Remove all concrete cable barrier post sockets, anchorages, unnecessary sign footings, and other subsurface concrete that no longer provides function.

11.5.2.2 Disposal of Excess Materials

Dispose of surplus excavated material in accordance with the Standard Specifications.

EXHIBIT 11-A TYPICAL FINISHED SECTIONS





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- FHWA Hydraulic Engineering Circular No. 17 (HEC-17), *The Design of Encroachments on Flood Plains using Risk Analysis*
- FHWA Hydraulic Engineering Circular No. 18 (HEC-18), Evaluating Scour at Bridges
- FHWA Hydraulic Engineering Circular No. 21 (HEC-21), *Design of Bridge Deck Drainage Systems*
- FHWA Hydraulic Engineering Circular No. 22 (HEC-22), Urban Drainage Design Manual
- FHWA Hydraulic Engineering Circular No. 23 (HEC-23), Bridge Scour and Stream Instability Countermeasures: Experience, Selection and Design Guidance, Volumes 1 and 2
- Remaining standards set forth in Book 3

12.2.2 Equipment/Software

Use spreadsheet output formats that are consistent with output described in the WisDOT *FDM Chapters 10 and 13*.

See Exhibit 12-A for a list of acceptable software programs.

12.2.3 Permits/Authorizations

12.2.3.1 Coordination with Other Agencies and Disciplines

Coordinate all water resource issues with affected interests and WDNR as described in Section 4.2. Submit the 401 Water Quality Certification and TCGP NOI as part of the RFC plans. Coordinate this Work with Section 4 Environmental Compliance. Coordination with other agencies must include the following:

- Floodplains –WDNR/DOT Cooperative Agreement Waterway Crossing and Encroachment Attachment
- County Consistent with the requirements of the WDNR/DOT Cooperative Agreement for Waterway Crossings and Floodplain Encroachments, notify the county zoning authority of final calculated water surface elevations.

12.3 Design Requirements

12.3.1 General

Design facilities to be compatible with existing drainage systems adjacent to the Project and preserve existing drainage patterns wherever possible unless directed otherwise in this section or approved by the Department. Where drainage patterns must be changed from the existing and easements and/or R/W is needed and approved by the Department, the Department will secure easements and/or R/W.

Design drainage to accommodate construction staging and provide drainage during all stages of construction. Update the Stormwater-Drainage-Water Quality Report and all associated background information with each stage and phase of construction.

12.3.2 Investigations/Supplemental Work

12.3.2.1 Data Collection

Identify water resource issues including areas with historically inadequate drainage (flooding or citizen complaints), Areas of Environmental Sensitivity, localized flooding, and maintenance problems associated with drainage and areas known to contain contaminated soil or water. Identify watershed boundaries, WDNR-regulated public waters, county and jurisdictional ditches, areas classified as wetlands, impaired waters (based on Total Maximum Daily Load (TMDL)), and floodplains. This includes the degree of vulnerability of each of these areas and of karst areas throughout the Project area. Acquire existing storm drain plans and survey data, including all data on culverts, drainage systems, drain tile, and storm sewer systems within the Project area. Determine existing drainage areas that contribute to the highway drainage system, and the estimated runoff used for design of the existing system.

Obtain additional photogrammetric and geographic information system (GIS) data for the Project area that depicts the outstanding resource value waters and impaired waters. Conduct surveys for information not available from the Department or other sources.

12.3.3 Design Criteria

12.3.3.1 **Project-Specific Requirements**

The stream channel beneath the structure should reflect the typical stream cross sections upstream and downstream of the structure as much as possible and should match the streambed elevations, both downstream and upstream, of the structure.

12.3.3.2 Stormwater Control Practices (SCPs)

The Project is constructed on existing alignment. Per TRANS 401, the Project will not need to reduce the total suspended solids pollutant load from the Project by 40% for the existing alignment from the no-controls condition. However, if there is existing sheet flow from undeveloped land being converted to concentrated flow in a swale, culvert or storm sewer pipe conveyance, or if there is a new storm sewer draining to the creek that discharges directly into the creek, attach exhibits that depict the existing and proposed conditions. Include the extent of the drainage basin that drains to the newly created concentrated flow discharge location on both exhibits. Refer to the conditions outlined in TCGP 4.4.4 for Impaired Waterbodies or within a TMDL. Develop post-construction BMPs to meet the applicable standards. Contact the regional SWECE for assistance. Consult with the DNR Transportation Liaison. If SCPs are required, analyze the SCPs based on the average annual rainfall year series for Green Bay, WI.

12.3.3.3 Hydrologic Design Criteria

- Design the drainage system so as to not increase the potential for property damage as compared to the pre-Project conditions.
- Note that Book 1 defines the level of Design-Builder risk regarding Extreme Rainfall Events.
- Permanent dewatering is not allowed.

- Design culverts, storm sewer systems and spread, including local roadways, based on FDM Chapter 13.
- Design BOS Hydraulic Structures for a minimum of a 100-year flood frequency event. Hydrologic flows will be calculated in accordance with the Department's Bridge Manual Section 8.2. Note that flows are subject to approval by BOS as defined in Section 12.3.4 of this document. At a minimum, scour must be evaluated for the 100-year and check flood events per HEC-18.
- All encroachments (culverts, bridges, fills, cuts, excavations) in mapped floodplains must be approved by the Department.

11.2.1.1.1 Temporary Drainage

Maintain drainage to accommodate construction staging and provide drainage during all stages of construction meeting Project and permit requirements. Address installation of temporary storm sewers and inlets for crossovers and temporary lanes.

12.3.3.4 Bureau of Structures (BOS) Hydraulic Structures

 BOS is responsible for the review and approval of hydraulic and structural adequacy of all cast-in-place and precast box culverts and bridges as defined in the Department Bridge Manual Section 2.5. Hydraulic design criteria for these hydraulic structures are covered in the Department Bridge Manual Chapter 8.

All other culverts are covered under FDM Chapter 13 and submitted as part of the Stormwater-Drainage-Water Quality Report.

12.3.3.4.1 Bridges

Hydraulic design criteria for bridges shall conform to Chapter 8 of the WisDOT Bridge Manual.

Prevent erosion at discharge locations in vegetative areas.

Use the USACE HEC-RAS Water Surface Profile Program (current released version) for performing the hydraulic analyses.

The structure should be set and sized in such a manner to avoid or minimize adverse impacts to stream morphology, aquatic organism passage and water quality.

Design the bridge to maintain or reduce the calculated surface water elevation for the regulatory flood event compared to existing conditions.

Follow US Coast Guard and WDNR requirements (whichever is applicable or most conservative) to provide sufficient clearance.

Evaluate and ensure adequate deck drainage in accordance with Chapter 29 of the WisDOT Bridge Manual. Foundations for new bridges must be designed to account for potential scour. Scour calculations and evaluation must be performed in accordance with the guidelines in FHWA Hydraulic Engineering Circular No.18, Evaluating Scour at Bridges, Fifth Edition, April 2012. Scour shall be computed using FHWA Hydraulic Toolbox software or other appropriate methods as approved by the Department. Evaluate scour for the temporary condition during construction and design the necessary countermeasures to mitigate.

Riprap placement at bridge abutments must be in accordance with Chapter 15 and Standard Drawing 15.01 of the WisDOT Bridge Manual.

12.3.3.5 FDM Drainage Structures

Complete Stormwater-Drainage-Water Quality Report as defined in FDM Chapter 13. Submit this report, corresponding figures, and all supporting hydraulic models and computations to the Department for acceptance.

Refer to FDM 13-1-15 and 13-1-17 for allowable pipe materials under different classifications of roadways.

12.3.3.5.1 . Storm Drains and Sewer

Design pipes with a minimum flow velocity of 3 feet per second (fps) and a maximum of 15 fps. If geometric constraints prohibit the minimum velocity from being achieved, design pipes with flow velocities less than 3 fps for full flow at 80 percent of the internal diameter to account for sedimentation in the pipe. Design other storm drain pipes using the full internal diameter. Do not design storm drains for greater than full-flow capacity at the design flow rate.

Provide pipe outlets with temporary or permanent energy dissipation within 24 hours after connecting the pipe to any new or existing surface waters.

Locate storm sewer manholes outside of the driving and bicycle lanes. Place drainage structures at all changes in pipe size, pipe grade and direction.

Design and construct storm sewers without the use of inverted siphons, lift stations, or other mechanical conveyance systems.

12.3.4 Reports and Plans

12.3.4.1 Drainage Overview Map

Submit a Project Drainage Overview Map to the Department, prior to initiating detailed design, in AutoDesk Civil 3D and pdf format. The Project Drainage Overview Map serves as the base plan for final drainage design. Show the existing drainage features and proposed Project drainage Master Plan, including drainage areas and contributing flows of existing and proposed drainage to each point of inflow and outflow from the Project. Show impacts from the Project and proposed mitigation within the map extents, as well as all waters of the State, outstanding resource value waters, special waters, and impaired waters within 1 mile of the Project that receive Project runoff.

12.3.4.2 Drainage Plans

Produce plans in a format that facilitates design review by the Department according to Section 5 Quality Management. In addition, submit the following documents with the RFC Plans:

- 1. Drainage area maps showing each storm drain inlet with pertinent data, such as boundaries of the drainage area for that inlet, topographic contours, runoff coefficients, times of concentration values and paths, and land use and soil types with design curve number and design runoff coefficient.
- 2. Location and tabulation of all existing and proposed pipe and drainage structures, including all pipe and drainage structures proposed to be removed or left in place, out of service. These will include size, class or gauge, inlet spacing, detailed structure designs, and any special designs.
- 3. Complete pipe profiles, including pipe size, type, gradient, and station offsets from the centerline of the roadway, length of pipe, class/gauge of pipe, and numbered drainage structures with coordinate locations and elevations.
- 4. Drainage Plan sheets showing the location and design of all SCPs and drainage features. If an existing structure or pipe/culvert was removed or abandoned, indicate on the Plans.
- 5. Drainage calculations and all hydraulic and water quality models used to develop RFC Plans. Provide all models clearly matching the drainage area maps. Submit calculations as a pdf and in native electronic format.

12.3.4.3 Drainage Design Report

- Prepare a preliminary Drainage Design Report, signed by a Wisconsin-licensed Professional Engineer. This report will be submitted to the Department Regional Stormwater and Erosion Control Engineer (SWECE) for review and comment. Prepare a final Drainage Design Report incorporating the comments from the SWECE. Include all electronic models, modeling files, and the following within the Drainage Design Report:
 - Stormwater Management Plan (SWMP) form.
 - Environmental Document Stormwater Factor Sheet.
 - Written Narrative. Provide a narrative in addition to the spreadsheets to describe complex issues such as protected areas, sensitive areas, addressing special considerations and circumstances from the Environmental Document Factor Sheet, stormwater facilities, drainage issues, region-specific or Project-specific peak flow reduction strategies, stormwater quality alternatives explored, MS4 or TS4 information, TMDL considerations, weighted TSS blending calculations and discussion, and Maximum Extent Practicable (MEP) justifications.
- TS4 Location Map.
- Drainage Summary Spreadsheet (FDM 13-1, Attachment 10.1).
- Drainage Data Spreadsheet (FDM 13-1, Attachment 10.2).
- Water Quality Results Discussion Spreadsheet (FDM 10-30, Attachment 1.1).
- Grass Lined Channel design (FDM 13-30, Attachment 15.2).
- Riprap Channel design (FDM 13-30, Attachment 25.2).

- Pre- and Post-Construction peak flow rate comparisons.
- Summary of pond or other hydraulic calculations.
- Hand or computer-generated calculations (Rational Formula, TR-55, HydroCAD, PondPack, etc.).
- Culvert sizing calculations.
- Soils information (NRCS Web Soil Survey), soil testing and infiltration testing information.
- Pre-Construction and Post-Construction Tributary Area Watershed Maps. Typically the maps are 11-inch by 17-inch at an easily readable scale. Include labeled contours, Tc lines, drainage areas, surface features, outfall locations, etc., on these maps.
- Protective Area Exhibits. Show proposed roadway, protective area limits, normal water elevation lines, ordinary high-water elevation lines, top of channel lines, etc. Show new discharge locations (pipes, grading, etc.) that impact protective areas.
- Long-term inspection/maintenance plan for stormwater control practices.
- Hydraulic notes, models (input and output files), and tabulations.
- Pond designs and calculations, infiltration device designs and calculations, and structural pollution control device designs and calculations, including graphic display of treatment areas and detailed maintenance guidelines for operation.
- Complete set of calculations and detailed drainage area maps detailing pre- and postdrainage conditions, including native electronic files.
- Correspondence files.

Prior to Final Acceptance, submit an electronic copy of the Drainage Design Report, including all stormwater models organized by design topic.

12.3.4.4 BOS Hydraulic Structures Hydrology Report

Prior to finalizing hydraulic design and submitting Hydraulic/Site Report (per Section 12.3.4.5), prepare a Hydrology Report signed by a Wisconsin-licensed Professional Engineer, and submit to the Department BOS for their review and concurrence, including the following:

- Drainage area maps with watershed characteristics in ArcView shapefile format (UTM coordinates). Locate the structure on the maps.
- Hydrologic calculations (where computer software is used, include electronic input and output files).
- Historical or site data used to review computed flows.

12.3.4.5 BOS Hydraulic Structures Hydraulic/Site Report

Refer to Section 13 Structures for submittal requirements.

12.3.4.6 Stream Crossing Structure Survey Report

Update the Department provided hydrologic and hydraulic information and waterway design recommendations to the Department on the Stream Crossing Structure Survey Report form "DT1698," with the appropriate Hydraulic Data shown on the bridge plan as defined in Bridge Manual Section 6.2.2.3.

12.4 Construction Requirements

12.4.1 Construction Criteria

Maintain drainage to accommodate construction staging and provide drainage during all stages of construction meeting Project and permit requirements. Construct temporary culverts to bypass runoff around the site or route excessive runoff through the site rather than let the runoff accumulate in the Work zone and then be filtered by dewatering. Obtain the Department's approval for abandonment methods for all existing drainage features that are being abandoned with this Project.

If by-pass pumping is required, submit the means and methods proposed to be used during construction for approval as part of the Erosion Control Implementation Plan. The submittal shall include how the intake will be managed to not cause an increase in the background level turbidity during pumping; equipment pumping rate capabilities; discharge energy dissipation; and erosion controls. For by-pass pumping that will extend beyond one working day, the submittal should also include how the work zone will be managed and protected should the pump fail; be shut down due to unacceptable water quality; or storm water flows exceed the pumping rate of equipment. After setup of the approved by-pass pumping operation, the contractor shall demonstrate that the means and methods will pump the water at an acceptable water quality before starting work that necessitates the by-pass pumping.

12.5 Deliverables

Table 12-1 lists Deliverables identified in Section 12 and is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

13 Structures

13.1 General

Conduct all Work necessary to meet the requirements for design and construction of the following:

Removal of the following bridges:

• B-44-10 (STH 125 over Mud Creek)

Construction of the following bridges:

• B-44-482 (STH 125 over Mud Creek)

13.2 Administrative Requirements

13.2.1 Standards

In the event of a conflict between the standards set forth in Book 3 relating to structures, follow the order of precedence set forth below, unless otherwise specified.

13.2.1.1 Bridges

- WisDOT Bridge Manual
- WisDOT Bridge Manual Standard Drawings
- WisDOT Facilities Design Manual (FDM)
- WisDOT Geotechnical Manual
- WisDOT Standard Specifications
- AASHTO LRFD Bridge Design Specifications
- AASHTO LRFD Bridge Construction Specifications
- AASHTO Guide Design Specifications for Bridge Temporary Works
- AASHTO Construction Handbook for Bridge Temporary Works
- AASHTO/ National Steel Bridge Alliance (NSBA) Steel Bridge Fabrication Guide Specification
- AASHTO/NSBA Guide Specification for Application of Coating Systems with Zinc-Rich Primers to Steel Bridges
- FHWA Post-Tensioning Tendon Installation and Grouting Manual
- AASHTO Guide specifications for Design and Construction of Segmental Concrete Bridges
- Post-Tensioning Institute (PTI) Acceptance Standards for Post-Tensioning Systems

- CEB-FIP Model Code for Concrete Structures (For Time Dependent Behavior of Concrete)
- Remaining standards set forth in Book 3

13.3 Design Requirements

13.3.1 Design Method

Design all structural elements for bridges carrying highway traffic using the American Association of State Highway and Transportation Officials (AASHTO) *LRFD Bridge Design Specifications* and the Department Standards. Design requirements are defined in the Department's LRFD Bridge Manual and the Department's Bridge Manual Standard Drawings. The material in this RFP is supplemental to these specifications. Prepare final plans, and design and construct structures and structure removals at the locations provided in the tables below.

13.3.1.1 Structure Removals

Existing Number	Structure	Proposed Structure Number	Existing Structure Configuration
B-44-10		B-44-482	2-Cell Three-Sided Concrete Box Culvert

13.3.1.2 Structure Construction

Proposed Structure Number	Proposed Structure Configuration
B-44-482	Single Span Reinforced Concrete Flat Slab

13.3.2 Design Criteria

13.3.2.1 Geometrics

The lane layout, shoulder width, and clear roadway width must be in accordance with Exhibit 13-A Typical Bridge Cross Sections.

13.3.2.2 Bridge Type

The following bridge types are acceptable for use on this Project:

• Concrete Slab Structure

13.3.2.3 Loads and Forces

Loads and configurations will be applied to the structures in accordance to the Department's LRFD Bridge Manual.

13.3.2.4 Load Combinations

Follow the Department's LRFD Bridge Manual for approved load combinations for each structural component.

13.3.2.5 Structural Components

13.3.2.5.1 Foundations

Allowable foundation types for Structure Number B-44-482 (unless precluded by existing conditions defined elsewhere in the Contract Documents) are as follows:

• Steel H-Piles

A Site Investigation Report is required for all structures, in accordance with Section 8 Geotechnical.

13.3.2.5.2 Abutments

Abutment type selection should be in accordance with the Department's LRFD Bridge Manual Chapter 12, and standard abutment types should be used whenever sites allow. Special designs of abutments require prior approval by the Department's Bureau of Structures Design Chief. The abutment design must accommodate spanning over the ANR Pipeline high-pressure gas line location in accordance with the requirements of Book 2, Section 6, Exhibit 6-B.

The following abutment types are acceptable for use on this Project:

• Sill Abutment (Type A1)

13.3.2.5.3 Wing Walls

The following wing wall types are acceptable for use on this Project:

• Wings Parallel to Roadway

Do not use MSE walls in front of abutments unless Approved by the Department.

13.3.2.5.4 Slope Protection

Provide slope protection for all slopes under the bridge in accordance with the Department's Bridge Manual Chapter 15.

13.3.2.5.5 Joints and Bearings

Limit the number of bridge expansion joints to the extent possible. Design bridges preferably to be continuous with integral or semi-integral abutment diaphragms without deck expansion joints.

Compression seals are not allowed on new bridges.

13.3.2.5.6 Slabs or Slab Spans

Design all slabs using cast-in-place concrete.

13.3.2.5.7 Bridge Barriers

Provide a modified vertical faced parapet. The parapet height shall allow a final height of 42inches above a future 6-inch raised sidewalk. Provide Anchor Assemblies for Steel Plate Beam Guard at all four corners of B-44-482.

13.3.2.5.8 Structural Approach Slabs

Structural Approach Slabs will be required on the following structures: B-44-482.

Concrete Approach Slabs are required on the following structures: B-44-482. Comply with requirements of Book 2, Section 10 (Pavements and Roadway Materials), subsection 10.2, for required concrete approach slabs at each structure.

13.3.2.6 Additional Design Requirements

13.3.2.6.1 Vertical Clearance

Comply with freeboard requirements stated in the Departments LRFD Bridge Manual

13.3.3 Reports and Plans

Submit Preliminary Structure Plans for all structures to the Department for Acceptance by the Bureau of Structure s before RFC Documents will be Accepted. Comply with requirements of Books 2, Sections 5.4 & Sections 5.5.

Submit a Structure Inventory Form for each structure prior to the start of bridge construction with RFC plans. RFC plans shall include all items listed in Book 2, Section 5.4.

13.3.4 Bridge Load Rating

Complete a WisDOT Load Rating Summary Form for each bridge on the Project and submit 6 weeks before the associated bridge is opened to vehicular traffic.

With each report, submit load rating calculations. Base ratings on the final configuration of the bridge.

If a refined analysis is required, submit the Refined Analysis Rating Form in addition to the Load Rating Summary Form.

13.4 Construction Requirements

13.4.1 General

All necessary permanent and temporary structures including excavation, slopes, and embankment must be constructed within the Department's R/W.

Locate all active Utilities on the structures and in the vicinity of the Project prior to construction and conduct operations in such a manner as to ensure that those utilities not requiring relocation will not be disturbed.

For construction work near ANR high-pressure gas line see requirements in Book 2, Section 6, Exhibit 6-B.

Construct all structures according to the Standard Specifications and applicable special provisions provided in Book 3 as required for the Project.

There shall be no in-stream disturbance of Mud Creek between March 1 and May 31, with both dates inclusive of the timeout period.

13.4.2 Construction Criteria

13.4.2.1 Removal of Existing Structures

The removal of the existing structure shall be in accordance with Standard Specification 203. Removal shall conform to the requirements of item Removing Structure Over Waterway, Remove Debris.

13.4.2.2 Pile Driving Operations

Pile driving operations shall follow restrictions and requirements as stated in Book 2, Section 6, Exhibit 6-B, pertaining to the ANR Pipeline high pressure gas line.

13.4.3 Materials/Testing Requirements

13.4.3.1 Concrete

Do not use lightweight concrete or self-consolidating concrete.

Comply with the Department's standards and specifications.

13.4.3.2 Reinforcing Steel

Comply with the Department's standards and specifications.

13.5 Deliverables

13.5.1 General

Table 13-1, which lists Deliverables identified in Section 13, is not intended to be exhaustive. It is the Contractor's responsibility to determine and submit all Deliverables, as required by the Contract.

	Acceptance or Approval	
Name		
Preliminary Structure Plans	Approval	
RFC (Final) Structure Plans, Structure Inventory Form	Acceptance	
Special Provisions – RFC	Approval	

Table 13-1: Non-exhaustive List of Deliverables

EXHIBITS

Exhibit 13-A Typical Bridge Cross Sections

18 Traffic Control

18.1 General

Conduct all Work necessary to meet the requirements associated with traffic control, including providing for the safe and efficient movement of people, goods, and services through and around the Project while minimizing negative impacts to residents, commuters, and businesses. This Section 18 also describes allowable road/lane closures, requirements for a Transportation Management Plan (TMP), and the duties of the Design-Builder's Traffic Control Supervisor (TCS).

18.2 Administrative Requirements

18.2.1 Standards

In the event of a conflict between the standards set forth in Book 3 relating to traffic control, follow the order of precedence set forth below, unless otherwise specified:

- 1. WisDOT Standard Specifications
- 2. Wisconsin Manual on Uniform Traffic Control Devices (WMUTCD)
- 3. WisDOT Sign Plates
- 4. WisDOT Facilities Development Manual (FDM), Chapter 11
- 5. WisDOT Traffic Engineering, Operations and Safety Manual (TEOpS)
- 6. Remaining standards set forth in Book 3

18.2.2 Meeting Requirements

Conduct a preliminary staging meeting to discuss goals, preliminary concepts, and associated timelines within 30 days of NTP1. Attendees must include the Design-Build Design Manager, Design-Build Construction Manager, Design-Build Traffic Control Supervisor, the Department's Construction Project Manager, the Department's Region Work Zone Engineer, and the Department's Region Traffic Signal Engineer.

Establish a traffic control task force, inviting representatives of the Design-Builder (including the Public Information Coordinator), the Department, villages, towns, county, law enforcement agencies, emergency response providers, school districts, and other agencies whose operations affect or are affected by the Project construction or traffic control.

Hold traffic control task force meetings bimonthly and prior to traffic stage shifts from NTP1 to Project completion. The meeting schedule and frequency may be adjusted upon the agreement of the traffic control task force members. Address the following objectives at these meetings:

• Further refine and develop the traffic control plans.
- Review the Design-Builder's traffic control details.
- Two weeks prior to traffic stage shifts disseminate Project traffic control information to task force meeting attendees.
- Obtain traffic control input from task force meeting attendees.
- Review all crashes that occur within the Project limits and upstream of the Project temporary traffic control devices. Review detour route and alternate route. Review any crashes that occur on the detour route and on the alternate route.

Prior to invitations being sent for the first meeting, submit a list to the Department for review and acceptance of all members proposed to be invited to join the traffic control task force

18.2.3 Software Requirements

Design-Builder may request sign plates per FDM 11-50-55 at <u>DOTBTOSignDetails@dot.wi.gov.</u> <u>A minimum of three weeks of lead-time is required by the</u> Department's Bureau of Traffic Operations for the preparation of sign details.

Design-Builder will be provided access to the Department's TMP System: <u>https://transportal.cee.wisc.edu/tmp/</u>

18.3 Design Requirements

18.3.1 Design Criteria

The Design-Builder will have the option to construct the Project maintaining a single through lane of traffic in each direction or closing the road to traffic. The alternative selected must construct the Project and have all lanes of traffic open within the allowable durations. See Section 18.3.1.8 for the maintaining traffic requirements and Section 18.3.1.9 for the road closure requirements. All other requirements listed in Book 2, Section 18, will apply to both alternatives.

18.3.1.1 Design Vehicle

Traffic control shall accommodate a WB-62 design vehicle. STH 125 is not a designated long truck route. STH 125 is not an oversize overweight truck route, high clearance route, or wind tower corridor.

18.3.1.2 Temporary Guardrail, Barrier, Attenuators, Glare Screen, Drums, Barricades, and Signs

Use temporary guardrail, barrier, attenuators, glare screen, drums, barricades, and signs to protect the traveling public from the following:

- Fixed objects within the clear zone
- Drop-off protection conforming to Standard Specifications 104.6 and 305.3

- Drop-off protection conforming to SDD Concrete Barrier Temporary Precast
- Follow pavement drop-off protection guidance *WisDOT FDM, Section 11-50-35 and Section 11-50-21.6.*

18.3.1.3 Pedestrian Access

The existing STH 125 corridor does not accommodate pedestrian traffic. The Spencer Street and Kools Street intersection does not accommodate pedestrian traffic. The Spencer Street and Nicolet Road intersection does accommodate pedestrian traffic and shall be maintained during construction.

18.3.1.4 Local Road and Private Access

Maintain all local road and private access during construction.

18.3.1.5 Intersection Control

All existing signal controlled intersections will remain signal controlled during construction. Coordinate and schedule maintaining authorities to implement re-timing plans at the following existing permanent traffic signals within two weeks of the start of the selected traffic control alternative. All locations listed below are owned/maintained by the Department unless otherwise noted:

- STH 125 (College Avenue) and Westhill Boulevard
- STH 125 (College Avenue) and Bluemound Drive
- STH 125 (College Avenue) and Lilas Drive
- STH 125 (College Avenue) and CTHA (Lynndale Drive)
- CTHA (Lynndale Drive) and STH 96 (Wisconsin Avenue)
- CTHA (Lynndale Drive) and CTH OO (Northland Avenue) Outagamie County
- CTH OO (Northland Avenue) and Bluemound Drive Outagamie County
- CTH OO (Northland Avenue) and I-41 northbound ramps
- CTH OO (Northland Avenue) and I-41 southbound ramps
- STH 125 (College Avenue) and I-41 northbound ramps
- STH 125 (College Avenue) and I-41 southbound ramps
- CTH CA (College Avenue) and Mall Drive/Nicolet Road Outagamie County

Provide maintaining authorities re-timing-plans based on traffic counts and volume projections provided by the Department. Re-timing plans shall include four plans:

• Off peak running free

- Morning Peak with time-based coordination along STH 125 (College Avenue) and CTH OO (Northland Avenue)
- Mid-day Peak with time-based coordination along STH 125 (College Avenue) and CTH OO (Northland Avenue)
- Afternoon Peak with time-based coordination along STH 125 (College Avenue) and CTH OO (Northland Avenue)

18.3.1.6 Off-site Intersection Improvement Requirements

Analyze traffic operations at the Spencer Street and Nicolet Road intersection and Spencer Street and Kools Street intersection based on traffic counts and volume projections provided by the Department. Analysis shall reflect Spencer Street and Nicolet Road intersection and Spencer Street and Kools Street intersection operating with temporary signal control. The Spencer Street and Nicolet Road temporary signals shall include pedestrian phasing. Analysis shall conform to procedures of TEOps Chapter 16.

At the Spencer Street and Kools Street intersection, include the permanent improvements in accordance with Book 2, Section 10, and determine the signal timing, necessary temporary pavement widening, and lane configuration necessary to provide LOS E or better for each movement. If the improvements required to meet LOS E are not feasible within the permanent right of way, design for lanes that can be constructed within the permanent right of way that optimizes the traffic operations.

At the Spencer Street and Nicolet Street intersection, determine the signal timing and any lane designation changes necessary to provide LOS E or better for each movement. If LOS E is not attainable for lanes that fit within the existing roadway limits, optimize the LOS for priority movements within the existing roadway limits.

Submit the traffic analysis and proposed lane configurations to the Department for review and approval before proceeding with final design. Construct the required pavement widening, pavement markings, advance warning signs, and temporary traffic signals prior to any lane closures on STH 125. Submit temporary pavement designs to the Department. See Section 10 (Pavements and Roadway Materials) for temporary pavement design details and requirements.

The existing stop sign and solar flashing beacon assemblies at the Spencer Street and Nicolet Road intersection shall be removed and salvaged. The existing stop signs at the Spencer Street and Kools Street intersection shall be removed and salvaged. Deliver the stop signs and stop sign assemblies to the Town of Grand Chute Public Works Department for storage during the Project.

After all lanes of traffic are open on STH 125, reinstall the stop signs and stop sign assemblies on the existing concrete foundations and remove the temporary traffic signals. Remove any temporary pavement widening at the Spencer Street and Kools Street intersection and restore the areas to match the existing conditions. The intersection improvements defined in Section 10 shall remain in place. For any pavement marking modifications that were done at the Spencer Street and Nicolet Street intersection, remove and replace with epoxy pavement markings to match existing conditions.

18.3.1.7 Work and Pre-Stage/Post-Stage Closure Restrictions

Pre-stage/Post-stage closures are allowed for the purposes of setting up or removing the traffic control required in advance of the start of the Design-Builder's selected traffic control alternative described in 18.3.1.8 and 18.3.1.9. Work under the pre-stage/post-stage closures may include temporary construction or removal of temporary pavement, temporary pavement markings, temporary traffic signals, traffic signal modifications, or traffic staging setup or removal related work. Ten short-term single through lane closures on STH 125 are allowed to be implemented. Six short-term full ramp closures at the IH 41 and STH 125 interchange ramps are allowed to be implemented. Single through lane closures are allowed on STH 125 from 7 pm to 8 am, Sunday to Thursday. Full ramp closures are allowed at the IH 41 and STH 125 interchange ramps are not allowed to be closed at the same time. No marked detour route is required during the short-term ramp closure is for 3 consecutive nights or less. The applicable short-term ramp closure signing and standard details apply. Provide certified flaggers for any required flagging operations. Construction Work zone access locations must be approved by the Department.

Work may not be performed on and all lanes of traffic open and in their existing configurations on STH 125, IH 41 Ramps, Spencer Road, and all surrounding local roads from November 15 to December 31. Do not haul materials of any kind along or across any portion of the highway carrying traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special events:

Holiday/Special Event	Begin Date and Time	End Date and Time
LaborDay	September 2, 2022 12:00 p.m.	September 6, 2022 6:00 a.m.
Easter	April 7, 2023 12:00 p.m.	April 10, 2023 6:00 a.m.
Memorial Day	May 26, 2023 12:00 p.m.	May 30, 2023 6:00 a.m.
Independence Day	July 3, 2023 12:00 p.m.	July 5, 2023 6:00 a.m.
LaborDay	September 1, 2023 12:00 p.m.	September 5, 2023 6:00 a.m.

18.3.1.8 Traffic Staging Alternatives

18.3.1.8.1 Allowed Staging Alternatives

The Design-Builder has the option to use one or more of the following staging alternatives up to the maximum Lane User Impacts allowed based on the formula below. If the Design-Builder proposes to use fewer Lane User Impacts than the maximum allowed, the maximum Lane User Impacts will be determined in accordance with Book 1, Section 4.3.2.1.

Alternative A = Maintaining three through lanes (two eastbound lanes plus one westbound lane or two westbound lanes plus one eastbound lane) on STH 125 within the work zone of the structure replacement. Alternative A must meet the requirements of Book 2, Section 18.3.1.8.2.

Alternative B = Maintaining a single through lane in each direction on STH 125 within the work zone of the structure replacement. Alternative B must meet the requirements of Book 2, Section 18.3.1.8.3.

Alternative C = Maintaining two eastbound or two westbound through lanes on STH 125 within the work zone of the structure replacement. Alternative C must meet the requirements of Book 2, Section 18.3.1.8.4.

Alternative D = Maintaining a single eastbound or a single westbound through lane on STH 125 within the work zone of the structure replacement. Alternative D must meet the requirements of Book 2, Section 18.3.1.8.5.

Alternative E = Closing all lanes of traffic on STH 125 within the work zone of the structure replacement. Alternative E must meet the requirements of Book 2, Section 18.3.1.8.6.

Maximum Lane User Impacts allowed shall be calculated using the formula below by entering the Calendar Days used for each alternative:

1.50A + 2.00B + 3.20C + 3.68D + 4.99E ≤ 364 Lane User Impacts

AND, meet the condition of $A + B + C + D + E \le 182$ Calendar Days

A = Number of Calendar Days that Alternative A is in operation

B = Number of Calendar Days that Alternative B is in operation

C = Number of Calendar Days that Alternative C is in operation

D = Number of Calendar Days that Alternative D is in operation

E = Number of Calendar Days that Alternative E is in operation

18.3.1.8.2 Alternative A: Maintaining Three Through Lanes

STH 125

Maintain a single through lane in one direction and two through lanes in the opposing direction through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through the work zone if desired.

For maintaining two eastbound lanes and one westbound lane, follow the requirements of Alternative C for eastbound traffic and impacted ramps and the requirements of Alternative B for westbound traffic and impacted ramps.

For maintaining two westbound lanes and one eastbound lane, west of the new structure, provide a lane drop and crossover between the new structure and the I-41 southbound ramp intersection. Maintain all lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures and at the I-41 interchange ramps as allowed below.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right-turn lanes, one existing length left-turn lane. Westbound: Two through lanes, one existing length left-turn lane. Eastbound: One through lane, one existing length look-ahead left turn lane, one existing length right-turn lane.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: One existing length right-turn lane, two existing length left-turn lanes. Westbound: Two through lanes, one existing length right turn lane. Eastbound: One through lane, one 200-foot minimum left turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Alternate Routes

See Exhibit 18-A for the alternate routes to be implemented during STH 125 lane closures. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures, except replace any "DETOUR" sign wording with "ALTERNATE" sign wording.

18.3.1.8.3 Alternative B: Maintaining a Single Through Lane in Each Direction

STH 125

Maintain a single through lane in each direction through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through the work zone if desired. East of the new structure, provide a lane drop and crossover, as required, between the new structure and the Kools Street/Westhill Boulevard intersection. West of the new structure, provide an eastbound lane drop between the STH 125/Casaloma Drive and STH 125/N Mall Drive/S Nicolet Road intersections. Provide a crossover, as required, between the new structure and the I-41 southbound ramp intersection. Maintain all lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures and at the I-41 interchange ramps as allowed below.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right-turn lanes, one existing length left-turn lane. Westbound: Two through lanes, one existing length left-turn lane. Eastbound: One through lane, one existing length look-ahead left turn lane, one existing length right-turn lane.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: One existing length right-turn lane, two existing length left-turn lanes. Westbound: One through lane, one 100-foot minimum right-turn lane. Eastbound: One through lane, one 200-foot minimum left turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Alternate Routes

See Exhibit 18-A for the alternate routes to be implemented during STH 125 lane closures. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures, except replace any "DETOUR" sign wording with "ALTERNATE" sign wording.

18.3.1.8.4 Alternative C: Maintaining Two Eastbound or Two Westbound Through Lanes

Maintaining Two Eastbound Through Lanes:

STH 125

Maintain two eastbound through lanes through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through the work zone if desired. East of the new structure, detour westbound traffic as defined below under Detour Routes. Close westbound STH 125 to local traffic west of the Kools Street/Westhill Boulevard intersection. Provide a westbound lane drop between the STH 125/Kools Street/Westhill Boulevard intersection and the STH 125/North Bluemound Drive intersection and channelize the single through lane into the existing right and left turn lanes. West of the new structure, maintain all existing lanes or provide a crossover, as required, between the new structure and the I-41 northbound ramp intersection. Maintain all lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures and at the I-41 northbound interchange ramp as allowed below.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: Maintain all existing lanes. Westbound: Closed to traffic. Eastbound: Two through lanes, one 200-foot minimum left turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Detour and Alternate Routes

See Exhibit 18-B for the detour route and alternate route to be implemented during STH 125 westbound lane closures. Post a detour for STH 125 that utilizes CTHA (Lynndale Drive) to CTH OO (Northland Avenue) to I-41 to STH 125 (College Avenue). Posted detour shall follow SDD Detour Signing for Mainline closures. The detour must be signed for the direction of STH 125 that is closed. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures signing shall follow SDD Detour Signing for Mainline Closures.

Maintaining Two Westbound Through Lanes:

STH 125

Maintain two westbound through lanes through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through

the work zone if desired. East of the new structure, maintain all existing lanes or provide a crossover between the new structure and the STH 125/Kools Street/Westhill Boulevard intersection. West of the new structure, detour eastbound traffic as defined below under Detour Routes. Close eastbound STH 125 to local traffic east of the I-41 northbound ramp intersection. Provide an eastbound lane drop between the STH 125/Casaloma Drive and STH 125/N Mall Drive/S Nicolet Road intersections. Channelize the single eastbound through lane into the I-41 northbound turn lane at the approach to the I-41 southbound ramp intersection. Maintain all lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures and at the I-41 interchange ramps as allowed below.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: Two existing length left turn lanes. Eastbound: Closed to traffic except the left-turn lane to northbound I-41. Westbound: Two through lanes, one 100-foot minimum right turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right turn lanes. Eastbound: Existing length right turn lane, existing length left turn lookahead lane. Westbound: All lanes open. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Detour and Alternate Routes

See Exhibit 18-B for the detour route and alternate route to be implemented during STH 125 eastbound lane closures. Post a detour for STH 125 that utilizes CTH A (Lynndale Drive) to CTH OO (Northland Avenue) to I-41 to STH 125 (College Avenue). Posted detour shall follow SDD Detour Signing for Mainline closures. The detour must be signed for the direction of STH 125 that is closed. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures, except replace any "DETOUR" sign wording with "ALTERNATE" sign wording.

18.3.1.8.5 Alternative D: Maintaining a Single Eastbound or Westbound Through Lane

Maintaining a Single Eastbound Through Lane:

STH 125

Maintain one eastbound through lane through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through the work zone if desired. East of the new structure, detour westbound traffic as defined below under Detour Routes. Close westbound STH 125 to local traffic west of the Kools Street/Westhill Boulevard intersection. Provide a westbound lane drop between the STH 125/Kools

Street/Westhill Boulevard intersection and the STH 125/North Bluemound Drive intersection and channelize the single through lane into the existing right and left turn lanes. West of the new structure, provide an eastbound lane drop between the STH 125/Casaloma Drive and STH 125/N Mall Drive/S Nicolet Road intersections. Provide a crossover, as required, between the new structure and the I-41 northbound ramp intersection. Maintain all lanes of traffic at STH 125 intersections except at the I-41 interchange ramps and STH 125/Kools Street/Westhill Boulevard intersection as allowed below.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right-turn lanes, one existing length left-turn lane. Westbound: Two through lanes, one existing length left-turn lane. Eastbound: One through lane, one existing length look-ahead left turn lane, one existing length right-turn lane.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: One existing length right-turn lane, two existing length left-turn lanes. Westbound: Closed to traffic. Eastbound: One through lane, one 200-foot minimum left turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Detour and Alternate Routes

See Exhibit 18-B for the detour route and alternate route to be implemented during STH 125 westbound lane closures. Post a detour for STH 125 that utilizes CTHA (Lynndale Drive) to CTH OO (Northland Avenue) to I-41 to STH 125 (College Avenue). Posted detour shall follow SDD Detour Signing for Mainline closures. The detour must be signed for the direction of STH 125 that is closed. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures, except replace any "DETOUR" sign wording with "ALTERNATE" sign wording.

Maintaining a Single Westbound Through Lane:

STH 125

Maintain one westbound through lane through the Project limits. The posted regulatory speed will remain at 35 mph and advisory plaques can be used to reduce the speed to 25 mph through the work zone if desired. East of the new structure, provide a lane drop and crossover, as required, between the new structure and the Kools Street/Westhill Boulevard intersection. West of the new structure, detour eastbound traffic as defined below under Detour Routes. Close eastbound STH 125 to local traffic east of the I-41 northbound ramp intersection. Provide an eastbound lane drop between the STH 125/Casaloma Drive and STH 125/N Mall Drive/S Nicolet Road intersections. Channelize the single eastbound through lane into the I-41 northbound turn lane at the approach to the I-41 southbound ramp intersection. Maintain all

lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures and at the I-41 interchange ramps as allowed below.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: Two existing length left turn lanes. Eastbound: Closed to traffic except the left-turn lane to northbound I-41. Westbound: One through lane, one 100-foot minimum right turn lane. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right turn lanes. Eastbound: Existing length right turn lane, existing length left turn lookahead lane. Westbound: All lanes open. Modify existing signals or provide temporary signals to align with new lane locations and in accordance with Traffic Signal Design Manual. All signal modifications for traffic staging purposes need to be approved by the Regional Traffic Signal Engineer including signal head layout and signal timing plans.

Detour and Alternate Routes

See Exhibit 18-B for the detour route and alternate route to be implemented during STH 125 westbound lane closures. Post a detour for STH 125 that utilizes CTHA (Lynndale Drive) to CTH OO (Northland Avenue) to I-41 to STH 125 (College Avenue). Posted detour shall follow SDD Detour Signing for Mainline closures. The detour must be signed for the direction of STH 125 that is closed. Establish alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Alternate route signing shall follow SDD Detour Signing for Mainline Closures and "DETOUR" sign wording with "ALTERNATE" sign wording.

18.3.1.8.6 Alternative E: Closing All Lanes

STH 125

Close STH 125 to all traffic between the I-41 northbound ramps and the Kools Street/Westhill Boulevard intersection. West of the new structure, detour eastbound traffic as defined below under Detour Routes. Close eastbound STH 125 to local traffic east of the I-41 northbound ramp intersection. Provide an eastbound lane drop between the STH 125/Casaloma Drive and STH 125/N Mall Drive/S Nicolet Road intersections. Channelize the single eastbound through lane into the I-41 northbound turn lane at the approach to the I-41 southbound ramp intersection. East of the new structure, detour westbound traffic as defined below under Detour Routes. Close westbound STH 125 to local traffic west of the Kools Street/Westhill Boulevard intersection. Provide a westbound lane drop between the STH 125/Kools Street/Westhill Boulevard intersection and the STH 125/North Bluemound Drive intersection and channelize the single through lane into the existing right and left turn lanes. Maintain all lanes of traffic at STH 125 intersections except turn lanes impacted by lane closures at the I-41 interchange ramps as allowed below.

STH 125 and I-41 Southbound Ramp Intersection

Southbound: Two existing length right-turn lanes, one left-turn lane. Westbound: Two through lanes, one existing length left-turn lane. Eastbound: One existing length look-ahead left turn lane, one existing length right-turn lane.

STH 125 and I-41 Northbound Ramp Intersection

Northbound: Two existing length left-turn lanes. Eastbound: One existing length left turn lane. Westbound: Closed to traffic. Cover existing signals heads as required.

Alternate Routes

See Exhibit 18-B for the alternate route to be implemented during STH 125 lane closures. Post an alternate route for I-41 northbound traffic beginning south of the US 10/STH 441 interchange. Establish I-41 northbound alternate route signing 3 calendar days in advance of any STH 125 lane or shoulder closures. Posted alternate route shall utilize I-41 northbound to STH 441 northbound to STH 47 northbound. The alternate route shall end at the STH 47 and STH 125 intersection. Alternate route signing shall follow SDD Detour Signing for Mainline Closures, except replace any "DETOUR" sign wording with "ALTERNATE" sign wording.

Detour Routes

See Exhibit 18-B for the detour route to be implemented during STH 125 lane closures. Post a detour for STH 125 that utilizes CTH A (Lynndale Drive) to CTH OO (Northland Avenue) to I-41 to STH 125 (College Avenue). Posted detour shall follow SDD Detour Signing for Mainline closures. The detour must be signed for each direction of STH 125 that is closed.

18.3.1.9 Lane Rental Damages

Open all lanes of travel on STH 125 and I-41 ramps within the Lane User Impacts allowed in Table 18-1 or in accordance with Book 1, Section 4.3.2.1. Lane User Impacts assessed will begin upon the first use of traffic control devices to close lanes for any of the allowed traffic control alternatives beyond the allowed short-term closures defined in Book 2, Section 18.3.1.7. Lane rental damages will be assessed in accordance with Table 18-1 based on the Design-Builder's traffic control alternative in operation at the time the Lane User Impacts allowed is exceeded. Lane rental damages will be assessed in 15-minute increments.

	•	<u> </u>
Roadway	Lane User Impacts Allowed	Lane Rental Damage (Per hour, per lane, per direction of travel)
STH 125 & I-41 Ramps (1)	364	\$475

Table 18-1: Lane Use	r Impacts Allowed and	Lane Rental Damages
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.(1) Lane Rental Damage for lane closures on I-41 Ramps will only be charged if the ramp lane closure is not in relation to a lane closure on STH 125.

18.3.1 Reports and Plans

18.3.1.9 Transportation Management Plan

- Refer to FDM 11-50. Complete Type 2 Transportation Management Plan (TMP). TMP completion includes 60% TMP, 90% TMP, and any amendments required by the Department.
- An Incident Management Plan (IMP) is not required for the Project.
- Communicate TMP information to the Design-Builder's public information personnel and notify the public of Traffic Control issues in conjunction with the requirements of Book 2, Section 3 (Public Involvement).

Use the procedures developed in the TMP to create the Traffic Control Plans, including details of all stages and phases, and all required switching procedures.

Obtain approval of the 90% TMP prior to issuance of NTP2. The Department will respond to the submittal within 15 Working Days. Update the TMP throughout the Project and revise as conditions or situations may arise that will change the Project staging or traffic control.

18.3.1.10 Traffic Control Plans

Prepare and submit Traffic Control Plans and Plan revisions in compliance with FDM 11-50. The Department will respond to the Traffic Control Plan submittals within 15 Working Days. Distribute the Accepted Traffic Control Plans to stakeholders at least 15 Working Days prior to implementation, or as directed by the Department.

18.4 Construction Requirements

18.4.1 General

Provide traffic control devices, markings, and signing starting on the day Work begins on the Project meeting the requirements of Standard Specification 643. Refer to Section 18.4.2 for requirements prior to beginning work. Refer to Standard Specification 643.3 for requirements pertaining to monitoring and maintaining traffic control devices. The Department may, in writing, temporarily suspend such responsibility in conjunction with an official suspension for weather or other reasons.

The turning of traffic control devices when not in use to obscure the message will not be allowed under this contract.

Conduct operations in such a manner that causes the least interference and inconvenience to the free flow of vehicles on the roadways. This includes the following:

Do not park or store any vehicle, piece of equipment, or construction materials on the right of way, unless otherwise specified in the traffic control article.

All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic.

Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1000 feet. Activate the beam when merging into or exiting a live traffic lane.

Do not disturb, remove or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer. Immediately repair or replace any damage done to the above during the construction operations at contractor expense.

The traffic requirements are subject to change in the event of an emergency.

18.4.1.9 Traffic Control Supervisor

The Design-Builder will appoint a Traffic Control Supervisor (TCS) who will manage and monitor all traffic control operations for the duration of the Project. The duties set forth below in this section are all responsibilities of the TCS.

Perform drive-through inspections as required in Standard Specification 643 and immediately after any change in traffic control setup. Perform at least one of the traffic control inspections at peak traffic time. Perform an additional inspection at night so the arrangement and condition of the traffic control devices can be reviewed for the effectiveness of the retroreflective sheeting and lighting.

Document drive-through inspection results in a written report that details any defects and resulting corrective actions. Certify in written report that all traffic control devices are in substantial conformance with the Contract requirements.

18.4.1.10 Staging Areas

Staging areas are sites where construction equipment, vehicles, and materials can be stored and have reasonable and safe access to the construction zone. Staging areas shall meet the following requirements:

- Provide ingress and egress to/from the Work zones at locations approved by the Department.
- Review the proposed work operation with the Department before proceeding with work.
- Park equipment and store materials, including stockpiles, a minimum of 15-feet from the edge of the traveled way unless protected by concrete barrier temporary precast.
- The Design-Builder's Project-related staging locations outside the Department's R/W must be in accordance with ECIP and local ordinances.

18.4.1.11 Vertical Clearances and Width Restrictions

Maintain existing effective widths at all times. Temporary width restrictions must be approved by the Department. Refer to TEOpS 6-3 for information on width restrictions procedures.

The Design-Builder must notify the Department in accordance with Table 18-2 for any approved vertical or width restrictions. The Department will enter closures and restrictions into LCS as required.

18.4.2 Construction Criteria

18.4.2.9 Project-Specific Items

Notify the Region Traffic Signal Engineer five (5) working days in advance of any lane closures being placed to ensure construction signal timings can be reviewed at the State-owned signalized intersections.

A minimum of 14 Days prior to beginning Work on the Project and prior to traffic stage changes, place up to ten (10) PCMS boards in advance of the construction area in all directions approaching the work zone. Coordinate locations of PCMS and display messages with the Department. Include in Traffic Control Plans a sheet showing locations of PCMS boards. Include a separate PCMS display message sheet with message sequencing.

Notify the Northeast Region Traffic Section at 920-366-8033 (secondary contact number is 920-360-3107) 3 business days before deploying or changing a message on a PCMS to obtain approval of the proposed message. The Northeast Region Traffic Unit will review the proposed message and either approve the message or make necessary changes. PCMS boards must be deployed 7 days before any closure.

Provide the following advance notification to the Department for incorporation into the Wisconsin LCS (Table 18-2). All necessary RFC Documents and Traffic Control Plans shall be Approved or Accepted (as required by the Contract Documents) by the Department prior to providing notification. Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	Minimum notification
Lane and shoulder closures	7 Calendar Days
Full roadway closures	7 Calendar Days
Ramp closures	7 Calendar Days
Full ramp closures	7 Calendar Days
Detours	7 Calendar Days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16 feet)	Minimum notification

Table	18-2:	Traffic	Control	Notifications
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Lane and shoulder closures	3 Business Days
System and service ramp closures	3 Business Days
Modifying all closure types	3 Business Days

The Design-Builder will not restrict traffic beyond the allowances of Section 18.3.1.8 or 18.3.1.9. The Design-Builder will not restrict traffic during Work restrictions detailed in Section 18.3.1.7.

Maintain access to all properties within the Project limits at all times.

18.4.2.10 Pavement Markings During Construction

Provide temporary pavement markings per Standard Specification 649. Use epoxy pavement markings for temporary markings that will be in place from November 15 to April 15. Schedule work operations to preclude the need for epoxy pavement markings on any permanent surface.

Any permanent surface that requires temporary markings shall utilize temporary marking tape. Do not grind or use any other method that may damage the new pavement during removal of the temporary markings.

18.4.2.11 Access

Provide temporary access to all properties if the existing access is closed.

18.4.3 Instrumentation/Monitoring Plan

18.4.3.9 Video Record

Before the start of construction, video-record the entire STH 125 and Spencer Road Project Site, posted detour route and alternate route. Provide an electronic copy of the video to the Department prior to the commencement of construction Work.

Video-record all potential detour and haul routes prior to routing construction traffic on these routes.

18.4.3.10 Design-Builder Response Time

At all times, the Design-Builder shall have at least one employee on call who can be on-site of an incident within 60 minutes. Upon arrival at the incident site, that employee must be able to access equipment and resources to repair traffic control devices, set up temporary traffic control, or otherwise aid in incident resolution.

18.5 Deliverables

Table 18-3, which lists Deliverables identified in this section, is not intended to be exhaustive. It is the Design-Builder's responsibility to determine and submit all Deliverables, as required by the Contract.

Name	Acceptance or Approval	
List of task force invitees	Acceptance	
Transportation Management Plan 60%, 90%, and amendments as needed	Approval	
Traffic Control Plans	Acceptance	
Traffic Signal Timings	Acceptance	
Traffic Control inspection report	Acceptance	
Advance written notice of traffic closures	Approval	
Preconstruction video	Acceptance	

Table 18-3: Non-exhaustive List of Deliverables

EXHIBITS

- Exhibit 18-A Alternate Route Map
- Exhibit 18-B Detour and Alternate Route Map

EXHIBIT 18-A ALTERNATE ROUTE MAP

EXHIBIT 18-B DETOUR AND ALTERNATE ROUTE MAP



Wisconsin Department of Transportation

Northeast Region

Request for Proposals: Applicable Standards

Book 3

Addendum #1

Town of Grand Chute, College Avenue IH 41 – Bluemound Drive, STH 125, Outagamie County Design-Build Project State Design/Construction IDs: 6526-00-00/71

June 23, 2022

2 Design-Build Manual Modifications

2.1 General Information

This document contains contractual modifications to manuals and standards necessary for their use on Department Design-Build projects. This document is divided into three sections:

- 1. Applicability. This section lists the manuals and standards modified by this document.
- 2. **General Modifications**. This section contains general modifications that may apply to any or all of the manuals and standards listed under "Applicability."
- 3. **Specific Modifications**. This section contains specific modifications that apply to one manual or standard listed under "Applicability." These modifications take precedence over the "General Modifications" when in conflict.

2.2 Applicability

This document applies to the following Department manuals and standards:

- 1. Standard Specifications
- 2. Bridge Manual
- 3. Bridge Manual Standard Detail Drawings
- 4. Construction and Material Manual (CMM)
- 5. Facilities Development Manual (FDM)
- 6. Geotechnical Manual
- 7. Local Program Real Estate Manual (LP RE) Manual
- 8. Highway Maintenance Manual (HMM)
- 9. Wisconsin Manual on Uniform Traffic Control Devices (WMUTCD)
- 10. Real Estate Program Manual (REPM)
- 11. Structures Inspection Manual
- 12. Structures Preservation Manual
- 13. WisDOT Guide to Utility Coordination (WGUC)
- 14. Traffic Engineering, Operations and Safety Manual
- 15. ITS Design and Operations Guide
- 16. Ramp Meter Retiming Manual
- 17. Sign Plate Manual
- 18. Sign Code Manual

- 19. Traffic Signal Design Manual
- 20. Wisconsin Bicycle Facility Design Handbook

2.3 General Modifications

The following modifications apply to all manuals listed under "Applicability" unless modified in the Specific Modifications:

- 1. Most of these manuals were created as internal guidance documents for use by the Department and its consultants on design-bid-build projects. As such, they are often written to provide guidance as opposed to setting mandatory, contractual requirements. For the purposes of design-build projects, all provisions in these manuals are mandatory and all guidelines are requirements. All words such as "should," "may," "could," and "can" are replaced by "shall" unless the context requires otherwise, as determined at the sole discretion of the Department. Disregard qualifying words such as "usually," "normally," and "generally." The Department has the sole discretion to determine when the context does not require a provision to be mandatory.
- 2. All words such as "necessary," "needed," "preferred," or "recommended," when applied to actions or other provisions, indicate that those actions and provisions are required unless the context requires otherwise as determined at the sole discretion of the Department.
- 3. Do not conduct activities described with phrases such as "is not normally used," "is not good practice," "should never be done," "cannot be used," or "should be avoided." The Department has the sole discretion to determine when the context either requires or does not require a provision to be mandatory.
- 4. In situations where a Department practice or policy is referenced, the requirements of the practice or policy are mandatory requirements unless the context requires otherwise. The Department has the sole discretion to determine when the context does not require a practice or policy to be mandatory.
- 5. In situations where a manual refers to the "Engineer," "designer," "project manager," an employee of the Department, etc., the term refers to the Design-Builder when it relates to design responsibilities or other technical issues. The term refers to the Department when it relates to administrative issues. The Department has the sole discretion to determine when the context refers to technical or administrative responsibilities.
- 6. When a manual includes statements that are required unless Approved by the Engineer (or equivalent wording), the Design-Builder must comply with the requirements unless a Change Order is Approved by the Department.
- 7. References to "approved" mean "Approved by the Department."
- 8. Disregard references to "Method of Measurement," "Measure," "accept quantities," "will pay for," and similar phrases. Payment will be at the Contract Price for the completed Project, irrespective of the quantities of various components incorporated in the Work.

- a. Disregard references to "Basis of Payment," "Payment," "unit price," "adjustment," and similar phrases except as identified in the Contract, such as statements applicable to incentives or disincentives for completed Work.
- b. Disregard references to "additional work," "adjustment to compensation," "Extra Work," "pay extra," "at the expense of the Department," or similar phrases. Payment of the Contract Price will be full compensation for all Work performed pursuant to the Contract unless specific provisions for additional payments are contained in the Contract Documents.
- c. Actions and items referred to as "incidental" will be included in the Project. Payment of the Contract Price will be full compensation for this Work.
- d. All references to specific Department regions, divisions, or personnel are removed and replaced by "the Department." All project communication must pass through the Department's Project Manager.
- e. Items referred to in the "plans" or "special provisions" mean the Design-Builder's plans or special provisions unless the Contract includes applicable plans or special provisions.
- f. When a manual refers to standard specifications or other manuals, the version of these specifications or manuals applicable to this design-build project is the version current at the time of RFP Release Date unless specifically addended.

If, despite the guidance in this document, the Design-Builder is uncertain whether a manual requirement applies or does not apply under the Design-Build Project Contract, ask the Department for clarification. The Department will make a determination at its sole discretion.

2.4 Specific Modifications

The following modifications apply only to the manuals listed below. Any "Specific Modifications" in this section take precedence over the "General Modifications."

No.	Section	Subheading	Modification
1	General		Replace "Consultants," "Contractor," and "Engineer" with "Design-Builder"

Bridge Manual and Bridge Manual Standard Drawings

Construction and Material Manual (CMM)

No.	Section	Subheading	Modification
1	165.14	As-Built Plans	Replace "Project Engineer" with "Design-Builder"

EXHIBIT 3-A: SPECIAL PROVISIONS

STSP'S Revised January 7, 2022 SPECIAL PROVISIONS

1. Environmental Protection, Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice before discharge. The means and methods proposed to be used during construction shall be submitted for approval as part of the Erosion Control Implementation Plan for dewatering at each location it is required. The submittal shall also include the details of how the intake will be managed to not cause an increase in the background level turbidity before treatment and any additional erosion controls necessary to prevent sediments from reaching the project limits or wetlands and waterways. Guidance on dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061, "Dewatering". This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

2. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

http://dnr.wi.gov/topic/invasives/disinfection.html

Use the following inspection and removal procedures:

- 1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
- 2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
- 3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
- 4. Disinfect your boat, equipment and gear by either:
 - 4.1. Washing with ~212 F water (steam clean), or
 - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - 4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore, this disinfect should be used in conjunction with a hot water (>104^o F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

3. Temporary Stream Channel or Culvert.

If a temporary channel is needed for construction of the new structure, the diversion channel shall be lined with plastic or other non-erodible material, staked, and weighted down with clean stone. A temporary channel or culvert should convey as much flow as possible. At a minimum, the temporary diversion channel/culvert must pass baseflow (approximately a Q-2 year 24-hour storm event. If the waterway is particularly flashy, size the diversion accordingly. Additionally, the temporary channel/culvert should match stream depth and velocity as close as possible to allow the passage of migrating fish and aquatic species. Fish that become stranded in dewatered areas or temporary channels should be captured and returned to the active channel immediately.

4. Erosion Control Structures.

Within three calendar days after completing the excavation for a substructure unit, place riprap or other permanent erosion control items required by the contract or deemed necessary by the engineer around the unit at a minimum to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as the engineer directs.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived.

stp-107-070 (20191121)

5. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

John Reolke, License Number ALL-119523, inspected Structure B-44-0010 for asbestos on June 24, 2020. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from the Department Project Manager: Jesse Hansen (920) 492-5630.

In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Jesse Hansen, (920) 492-5630, jesse.hansen@dot.wi.gov, and DOT BTS-ESS attn: Hazardous Materials Specialist, PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-44-0010, STH 125 over Mud Creek
- Site Address: 0.3M E JCT USH 41 to S
- Ownership Information: WisDOT Northeast Region, 944 Vanderperren Way, Green Bay, WI 54304
- Contact: Jesse Hansen
- Phone: (920) 492-5630
- Age: 69 years old. This structure was constructed in 1953
- Area: 5079 SF of deck

Insert the following paragraph in Section 6.g.:

If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

stp-107-125 (20120615)

6. QMP HMA Pavement Nuclear Density.

A Description

Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

(1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 except as modified in this special provision.

- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
 - 1. Selection of test sites.
 - 2. Testing.
 - 3. Necessary adjustments in the process.
 - 4. Process control inspection.
- ⁽³⁾ Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures.

https://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/

B Materials

B.1 Personnel

⁽¹⁾ Nuclear gauge owners and personnel using nuclear gauges shall comply with WisDOT requirements according to 460.3.3 and CMM 8-15.

B.2 Testing

⁽¹⁾ Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Conform to CMM 8-15.10.4 for test duration and gauge placement.

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges according to CMM 8-15.2.
- (2) Furnish nuclear gauges from the department's approved product list at

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

B.3.2 Comparison of Nuclear Gauges

B.3.2.1 Comparison of QC and QV Nuclear Gauges

(1) Compare QC and QV nuclear gauges according to CMM 8-15.7.

B.3.2.2 Comparison Monitoring

(1) Conduct reference site monitoring for both QC and QV gauges according to CMM 8-15.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.1.
- (3) Determine random testing locations according to CMM 8-15.10.3.

B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.2.
- (3) Determine random testing locations according to CMM 8-15.10.3.

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

(1) Calculate the average sublot densities using the individual test results in each sublot.

- (2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.
- ⁽³⁾ If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay as specified in standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.2.2 Width of 5 Feet or Less

- (1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- ⁽²⁾ If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.4 Documentation

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- ⁽²⁾ The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be as specified in standard spec 105.3.
- ⁽⁵⁾ Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.
- (6) If two consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.
- (2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.

- ⁽³⁾ If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft³ of the QC sublot average, use the QC tests for acceptance.
- ⁽⁵⁾ If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft³ each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft³, use the original QC tests for acceptance.
- (6) If the QV and QC sublot averages differ by more than 1.0 lb/ft³ after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

- ⁽¹⁾ The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.
- ⁽²⁾ The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- ⁽³⁾ If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

- (1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.
 - C (Vacant)
 - D (Vacant)
 - E Payment

E.1 QMP Testing

⁽¹⁾ Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives as specified in standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

- (1) The department will administer density incentives as specified in standard spec 460.5.2.3. stp-460-020 (20181119)
- 7. Installing and Maintaining Bird Deterrent System Station 13+10 EB; Maintaining Bird Deterrent System Station 13+1 EB

A Description

This special provision describes inspecting, installing and/or maintaining approved deterrents that prevent migratory bird nesting on bridges and culverts. Swallows or other migratory birds' nests have been observed on or under the existing culvert or bridge at the station identified. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. One deterrent system shall be installed and/or maintained for each applicable structure. Deterrent methods selected shall be appropriate for structure type, size and/or site-specific constraints.

B Materials

B.1 Hardware and Lumber

Lumber, hardware, and fastening devices shall be durable enough to last through the length of the nesting season. Fastening devices and deterrence system must be approved by the engineer prior to installation on culverts and bridges that will remain in service after removal of deterrent systems. The method of fastening should not compromise the culvert or bridge concrete surfaces or steel protection systems. The attachment locations must be restored and repaired as needed by use of engineer approved fillers, sealers and paint systems

B.2 Netting Materials

Exclusion netting is material either wrapped around or draped and fastened to bridge decks/abutments and culvert corners to prevent bird entry.

Furnish exclusionary netting to deter nesting in bridge decks and abutments and corners of box culverts, consisting of either:

- a. 1/2" x 1/2" or 3/4" x 3/4" knotless, flame resistant, U.V. stabilized polyethylene or polypropylene netting with minimum 40-pound breaking strength per strand, or engineer approved equal.
- b. Galvanized wire mesh (hardware cloth) with a wire diameter of .040 inches (19-gauge) and opening width of 1/2-inch.

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and of equal length as the netting.

B.3 Plastic Strip Curtain

Plastic strip curtains are strips of plastic attached to vertical surfaces in areas suitable for nesting.

Furnish 3-foot wide lengths of 6 mil minimum plastic sheeting with the lower 2 feet cut into vertical strips 2 inches wide.

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and staples to attach plastic strips to wood to fabricate the strip curtain.

Furnish concrete screws to attach strip curtain to structure.

B.4 Corner Slope Materials

Corner slopes are pieces of curved plastic placed in corners suitable for nesting. They are particularly effective in preventing nesting in top corners of box culverts.

Furnish U.V. stabilized pre-fabricated PVC or polycarbonate corner slopes from commercial bird-deterrent manufacturers or an approved equal.

C Construction

C.1 General

If active nests are observed after construction starts, or if a trapped bird or an active nest is found, stop work that may affect birds or their nests, and notify the engineer to consult with the Wisconsin Department of Natural Resources transportation liaison Matt Schaeve, at (920) 366-1544, or the department regional environmental coordinator Lisa Lumley, at (920) 360-6684.

Efforts should be made to release trapped birds, unharmed.

C.2 Nest Removal

Remove unoccupied nests prior to the beginning of the nesting season as designated in Prosecution and Progress. Nest removal involves the removal and disposal of unoccupied or partially constructed nests without eggs or nestlings. Removing all evidence of nesting (e.g. cleaning droppings from structures) eliminates a visual cue for a potential breeding location, especially for first-time breeders. Nest removal is

not a type of deterrent and does not prevent nest establishment but can delay the process. As such, it should only be used in conjunction with other methods. It cannot be used on its own to ensure compliance. Nest removal is not required if deterrents are installed before the start of the avoidance window unless nests interfere with successful installation of the deterrent.

Remove nests on the structure by scraping or pressure washing prior to established avoidance windows to deter nesting. Remove only unoccupied or partially constructed nests without eggs or nestlings. Remove newly built nests every two days before eggs are laid. Nest removal is intended to be used prior to and in conjunction with other nesting deterrents.

C.3 Exclusion Netting

C.3.1 Installation

Using concrete screws, anchor lumber to bridge or culvert along perimeter of intended netting. Fasten netting to lumber until netting is held taut. Eliminate any loose pockets or wrinkles that could trap and entangle birds. Ensure the net is pulled taut in order to prevent flapping in the wind, which results in tangles or breakage at mounting points.

For culverts, attach netting at a 45-degree angle at the culvert corner so it extends at least 12" below the corner.

C.4 Plastic Curtains

C.4.1 Installation

Attach plastic curtains along the entire length of vertical surface or corner on which nest building is to be deterred. Affix plastic curtain strips to treated lumber with staples spaced a minimum of 1 foot O.C. Wrap plastic curtains around lumber prior to attaching it to the structure to reduce the likelihood of it tearing out at the staples. Screw lumber into the underside of the bridge deck or top of box culvert with concrete screws placed 24-inches O.C. minimum.

C.5 Corner Slopes

C.5.1 Installation

Attach corner slopes to the structure per the manufacturer's recommendations. Use urethane-based adhesives if manufacturer supplied hardware or adhesives are not available or no recommendations are provided. Install end caps or seal ends of corner slopes to prevent entry of birds or other animals.

C.6 Inspection and Maintenance

Inspect bird deterrent devices every 2 weeks both during and prior to construction when deterrents have been installed to exclude birds prior to nesting windows, and after large storm events or high winds. Ensure that netting is taut, that no gaps or holes have formed, and that the nets are functioning properly. Ensure that corner slopes are not cracked or otherwise damaged and are functioning properly. Ensure that curtains are undamaged, with no tears, holes, or creases. Repair any damaged or loose deterrent devices. Inspect, maintain, and repair nesting deterrents whether installed by the contractor or others. Repair, replace, supplement deterrents as necessary with materials meeting the requirements of this specification.

Remove any unoccupied or partially constructed nests without eggs or nestlings

Repair deterrents to prevent birds from attempting to nest again.

Record all inspection, removal, and maintenance activities. Provide inspection, removal and maintenance records to the engineer upon request.

C.7 Removal and Structure Repair

Maintain the deterrent until the engineer determines that the deterrent is deemed no longer necessary. Upon completion of the project, remove any remaining migratory bird deterrent from the project site. If the existing bridge or culvert is to remain after construction, restore and repair as needed by use of engineer approved fillers, sealers and paint systems.

stp-999-200 (20220107)

8. Temporary Water Diversion B-44-0010 Station 13+00 EB

A Description

This special provision describes providing temporary water diversion for B-44-0010 during all stages of construction. Conform to the required Standard Specifications, Plan and the methods used must be approved in the Erosion Control Implementation Plan (ECIP).

B Materials

Furnish materials conforming to the necessary Standard Specifications based on the method of construction.

C Construction

General

Maintain channel flow at all times and minimize erosion into the existing stream using appropriate erosion control measures. Inspect Temporary Water Diversion(s) daily to ensure proper functioning and no erosion is occurring.

Ensure all portions of Temporary Water Diversion(s) accommodate the 2-year recurrence interval stream discharge. Provide overflow through the work zone for storms that exceed the 2-year flow. The 2-year recurrence interval stream discharges are as follows:

B-44-0010 Station 13+00 EB 500 cubic feet per second.

Provide hydraulic calculations and temporary water diversion plan details at each required location. Include a summary of the Temporary Water Diversion duration at each required location. All methods of diversion, calculations and plans are subject to approval as part of the ECIP.

By-Pass Pumping

If by-pass pumping is used for Temporary Water Diversion, submit the means and methods proposed for to be used during construction for approval as part of the ECIP for each location it is required. Include the following in the ECIP: how the intake will be managed to not cause an increase in the background level turbidity during pumping, equipment pumping rate capabilities, discharge energy dissipation, and erosion controls. For by-pass pumping that will extend beyond one working day, the ECIP should also include how the work zone will be managed and protected, should the pump fail, be shut down due to unacceptable water quality, or storm water flows exceed the pumping rate of equipment. After the installation of the approved by-pass pumping operation, the contractor shall demonstrate that the means and methods will pump the water at an acceptable water quality prior to starting work that necessitates the by-pass pumping.

Temporary Channel

If a temporary channel is used for Temporary Water Diversion, submit the means and methods proposed to be used during construction for approval as part of the ECIP. Properly size pipes and channels to maintain channel flow. At a minimum, line the channel with select crushed material or other means approved by the engineer to stabilize the excavated channel at each end of the temporary bypass structure. Install an impervious barrier to isolate the connection of the temporary bypass channel from the existing channel and to isolate the new culvert work area from the temporary and existing channel to prevent the 2-year storm interval from back flowing in the work area.

Restoration

Once water flow has been restored to the final location, grade, shape and finish all disturbed areas to their original existing contours or what is shown in the plan.

NER-210-020 (20210716)

9. Select Crushed Material for Travel Corridor

A Description

This special provision describes furnishing and placing select crushed material to fill voids to create a wildlife travel corridor.

B Materials

Furnish select crushed material according to the pertinent requirements of standard spec 312. Material shall be clean and substantially free from material passing the No. 4 (4.75mm) sieve.

C Construction

Place the material after the heavy riprap has been completed. Place material such that voids in the finished surface are three inches or less in any dimension.



Wisconsin Department of Transportation

Northeast Region

Request for Proposals: Reference Information Documents

Addendum #1

Town of Grand Chute, College Avenue IH 41 – Bluemound Drive STH 125, Outagamie County Design-Build Project State Design/Construction IDs: 6526-00-00/71

June 23, 2022

RID MISCELLANEOUS REFERENCE		
PUBLIC INVOLVEMENT	Department e-file	
65260000 Public Involvement Plan_UPDATED for Design Build.pdf		
ENVIRONMENTAL	Department e-file	
6526-00-00 HazMat Report.pdf		
65260000 CEC_Final Signed 122121.pdf		
DNR Preliminary Concurrence_STH 125 DesignBuild_Mud Creek6526-00-00.pdf		
Wetlands_Invasives.pdf		
6526-00-00_B-44-0010_STH 125-College Ave over Mud Creek_Outagamie County Asbestos Report 063020.pdf		
65260000 Final CEC Memo.pdf		
65260000 Wetland Impacts CEC_Slab Final Design-Wetland Impacts-Slab 042822.pdf		
65260000 WITF_Perm.xlsx		
UTILITIES	Department e-file	
ANR-APPLETON TO GREEN BAY GAS LINE with Pothole Locations.pdf		
ANR-KEWASKUM TO DENMARK BAY GAS LINE with Pothole Locations.pdf		
ANR Kewaskum to Denmark_pp.dwg		
ANR Appleton to Green Bay_pp.dwg		
GEOTECHNICAL	Department e-file	
B-44-0482-Site Investigation Report.pdf		

PAVEMENTS AND ROADWAY MATERIALS	Department e-file
PDR_2021_NER_STATE_65260000_STH 125_BRRPL.pdf	
Spencer_Kools_Nicolet_PDR Recommendations.pdf	
ROADWAYS	Department e-file
6526-00-71 STH 125 Plan Set.pdf	
HYDRAULICS	Department e-file
B44_482_HecRAS.zip	
B-44-482_hydro.pdf	
SIGNING, MARKING, TRAFFIC SIGNAL, AND LIGHTING	Department e-file
1 Site #440426 Workbook PROJECT Level Traffic Forecast_Final_Updates 041321.pdf	
6526-00-00 _STH 125_Traffic Forecast_June 2020.pdf	
Spencer_Kools_Nicolet Counts.zip	
Large WIS 125 Closed Completely vs Base.pdf	
Large WIS 125 1-lane each direction I-41 to Westhaven vs Base.pdf	
Large WIS 125 1-lane each direction I-41 to Westhaven.pdf	
Large WIS 125 Closed Completely.pdf	
Large WIS 125 Base Condition.pdf	
S44-2016 20211019 USH 41 NB & STH 125.xlsm	