

2024

PROJECT MANUAL

(SPECIAL PROVISIONS, SPECIFICATIONS, BIDDING & CONTRACT DOCUMENTS)

WASHINGTON COUNTY HIGHWAY DEPARTMENT

PLAN OF PROPOSED IMPROVEMENT

CTH P POLK - JACKSON SHERMAN ROAD TO STH 60 WASHINGTON COUNTY

RECONSTRUCTION PROJECT

PROJECT NUMBER

HWY 24-01

PROJECT NUMBER: HWY 24-01

DATE: JANUARY 31, 2024

QUESTIONS ABOUT THIS PROJECT

PLEASE CONTACT:

**JEFF CHVOSTA
PROJECT ENGINEER**

AT

GREMMER & ASSOCIATES, INC.

PHONE: 920-924-5720

EMAIL: j.chvosta@gremmerassociates.com

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WASHINGTON COUNTY**

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ADVERTISEMENT FOR BIDS

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY**

RECONSTRUCTION PROJECT

PROJECT NUMBER: HWY 24-01

The Washington County Highway Department will accept electronic bids for the County Trunk Highway P Reconstruction Project until **10:30 A.M., Wednesday, February 21, 2024**, through www.questcdn.com. At that time, County officials will publicly view electronic bids at the office of Washington County Highway Department at 900 Lang Street, West Bend, WI 53090.

CONTRACT DOCUMENTS may be obtained **ONLY** from **www.questcdn.com**. No paper plan sets will be provided. Access the QuestCDN web site to view and download bid information and documents on or after January 31, 2024 for a non-refundable fee of \$22.00. Input QuestCDN eBidDoc No. **8885154** on the QuestCDN Project Search page. No password is required. Project bid documents must be downloaded from QuestCDN which will add your company to the Planholder List and allow access to vBid online bidding for the submittal of your bid. Bidders submitting a bid via QuestCDN vBid will be charged an additional non-refundable fee of \$42.00. Contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in downloading and working with the digital documents.

This project is partially funded with State of Wisconsin Department of Transportation – Local Roads Improvement Program (LRIP) funds.

Approximate quantities are as follows:

Excavation Common	21,925	CY
Base Aggregate Dense	33,040	TON
Breaker Run	2,965	TON
HMA Pavement	9,210	TON
Concrete Masonry Culverts	95	CY
Culvert Pipes	725	LF
Storm Sewer	590	LF
Concrete Curb & Gutter	960	LF
Salvaged Topsoil	21,400	SY
Epoxy Pavement Markings	15,530	LF

The project is expected to be awarded March 21, 2024. The project start date is expected to be June 3, 2024 and shall be substantially completed by September 13, 2024 and shall be fully completed by September 27, 2024. Construction time is of the essence. Completion delays are subject to liquidated damages.

Bid security is required and shall be by a qualified surety in the form of a bid bond in the amount of five percent (5%) of the bid amount, and shall be submitted with the bid. Failure to submit the required bid security as part of the firm's sealed bid will result in immediate rejection of the firm's bid. Accepted bidder will also be required, as a condition precedent to award of contract, to furnish in the amount of 100% of the contract price, satisfactory Performance/Payment Bond and acceptable Certificate of Insurance.

Bids shall be submitted through www.questcdn.com on a unit price basis. No bid may be withdrawn for a period of 60 days from the date of the bid opening.

All bidders will need to complete and submit a Bidder's Statement of Qualifications no later than 5 days prior to the bid opening date or be listed on the current Wisconsin Department of Transportation Prequalified Contractor list in order to be qualified with Washington County for this work. The Bidder's Statement of Qualifications Form is included in the bid document for this project.

Washington County reserves the right to waive any informalities or technicalities and to reject any and all bids or parts thereof deemed to be unsatisfactory or not in the County's best interest. Furthermore, Washington County reserves the right to cancel any order or contract for failure of the successful bidder to comply with the terms, conditions and specifications of the bid request and/or contract. Washington County reserves the right to award the bid in the aggregate or by item or like item groups (where applicable) to the lowest responsible, responsive bidder who complies with the specifications, service and can meet the requirements of this request.

This advertisement is published by authority of Washington County Highway Department, January 31, 2024 and February 7, 2024.

Roy Hartmann
Buyer
Washington County

SECTION 00040
BIDDER'S STATEMENT OF QUALIFICATIONS

Pursuant to Section 66.0901 Wisconsin Statutes, the following statement of qualifications must be completed and presented to the County. The submitted statement is used to judge the BIDDER'S ability to furnish the necessary labor, materials and skills necessary to complete the contract work being done.

All prime contractors not on the current Wisconsin Department of Transportation Prequalified Contractor list and have not submitted a statement to the County in the current year must complete the "Bidder's Statement of Qualification," and submit no later than 5 days prior to the bid opening date. If the prime contractor is not on the current Wisconsin Department of Transportation Prequalified Contractor list and the Bidder's Statement of Qualifications is missing, your bid may be rejected.

Verification of contractors being on the WisDOT prequalification list or review of the submitted statement will be reviewed as part of the bid reviews.

You can email this completed statement to Roy Hartmann at roy.hartmann@washcowisco.gov, or mailed to: Washington County Highway Office, 900 Lang Street, West Bend WI 53090 at least 5 days prior to the bid opening date. Contractors may submit updated Bidder's Statement of Qualifications annually as well to keep your qualifications on file with the County. Information on this statement will be kept confidential.

1. IDENTIFICATION

- A. Official Firm Name _____
- B. Telephone _____
- C. Address _____

Main Contact Name: _____
Main Contact Email Address: _____
Firm's Website: _____
- D. Number of years in business under present firm name? _____
- E. Please check (1), (2), or (3):
(1) A Corporation _____ (2) A Co-Partnership _____ (3) An Individual _____
- F. Principle Individuals:
(If a Corporation, answer below:) (If a Co-Partnership, answer below:)
- | | |
|------------------|--------------------------------|
| President: _____ | Name of Partner: _____ |
| Vice Pres: _____ | Name of Partner: _____ |
| Secretary: _____ | If a Sole Trader answer below: |
| Treasurer: _____ | Name of Sole Trader: _____ |

G. If a Corporation, answer below:

(1) Licensed to do business in Wisconsin _____, 20____.

(2) When Incorporated? _____

(3) In what State? _____

2. EXPERIENCE

A. List of major contracts which firm has completed during past five years:

Year	Description of Work	Contract Amount	Location of Work	For Whom Performed, Name, and Mailing Address

B. Construction Experience of Principal Individuals in organization:

Individual's Name	Present Position or Office	Years of Experience	Description of Work

C. Average number of employees during the last 12 months:

Office _____ Skilled _____ Unskilled _____

Has firm ever worked on a project in which State or Federal grants have been used to fund the work? Yes _____ No _____

3. EQUIPMENT

A. List below major pieces of equipment owned and available when needed for the proposed work:

Quantity	Item	Description, Size Capacity, etc.	Condition (good or fair)	Years of Service

4. CONTRACTUAL RESPONSIBILITY

A. Has firm ever failed in the past ten years to complete on time work awarded to it?
Yes _____ No _____

B. Has any officer or partner of firm ever failed in the past ten years to complete on time a construction contract handled in his own name?
Yes _____ No _____

C. Has any officer or partner of firm ever been an officer or partner of some other organization during the past ten years that failed to complete on time a construction contract?
Yes _____ No _____

D. Has firm asked to be relieved from a bid submitted by it to a public awarding authority during the past ten years?
Yes _____ No _____

E. Has firm ever been charged with or convicted of a violation of any wage schedule?
Yes _____ No _____

F. If the answer to any of the above questions is "YES," give details below:

5. BONDING RESPONSIBILITY

A. (1) Names and addresses of bonding companies which generally execute bid and surety bonds for your firm: _____

(2) Names and addressed of all bonding companies other than those listed in A (1) above which have written bid and surety bonds during the last five years for your firm:

B. Has any bonding company ever taken over a contract, or made any payments, because of firm's failure to carry out a contract?

Yes _____ No _____

If so, state:

(1) Date: _____

(2) Name of Bonding Co.: _____

(3) Bonding Company's Mailing Address:

(4) Full particulars in each instance: _____

6. CONTRACTOR'S FINANCIAL STATEMENT

Please provide your last audited financial statement. If this is not available, please provide the following:

A. Your firm's current assets as of latest balance sheet date.

Current Assets: \$ _____ Give Date: _____

B. Your firm's current liabilities as of latest balance sheet date.

Current Assets: \$ _____ Give Date: _____

- C. Who prepared such balance sheet? _____
- D. Do you have the appropriate equipment/assets available that you can assign to this project?

Additional information may be requested if needed.

7. AFFIDAVIT

STATE OF WISCONSIN }
_____ County } SS

_____ being duly sworn, deposes and says that he is
(Name)
the _____ of _____ and that
the answers to the foregoing questions and all statements therein contained are true and correct, and
that any owner, bonding company, or other agency, herein named is hereby authorized to supply the
County with any information deemed necessary to verify this statement.

Signed: _____

Printed Name: _____

Title: _____

Date: _____

Subscribed and sworn to before me

this ____ day of _____, 20____.

_____ Notary Public

_____ County, Wisconsin

My Commission Expires:

End of Bidder's Statement of Qualifications
Submit to Washington County as indicated above.

SECTION 00100

INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS

The terms used in these Instructions to Bidders have the meanings assigned to them in the General Conditions. The term "Bidder" is defined as one who submits a Bid to the Owner. The term "Successful Bidder" is defined as the lowest qualified, responsible, and responsive Bidder, to whom the Owner awards the Contract. The term "Bidding Documents" includes the Advertisement for Bid, Instructions to Bidders, the Bid Form, and the proposed Contract Documents.

2. COPIES OF BIDDING DOCUMENTS

Complete sets of the Bidding Documents may be obtained as stated in the Advertisement for Bids.

A complete set of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. QUALIFICATION STATEMENT

The Owner may require each Bidder to show, on an annual basis or with a specific project, satisfactory evidence:

- a) that he/she has been regularly engaged in the business of constructing the Work described in the Contract Documents;
 - b) that he/she is qualified and competent to perform the Work described in the Contract Documents;
 - c) that he/she is fully prepared with the necessary capital to commence the Work or furnish the material, without delay, after the date of award of the Contract to him/her; and
 - d) that he/she is prepared to complete the Work within the time specified in the Contract Documents; and in accordance with the Agreement.
- A. Bidders shall fulfill the above requirement by submitting a Bidder's Statement of Qualification on the forms provided in these Contract Documents. **If the Bidder Qualification Statement is missing, or the bidder is not on the WisDOT prequalification list, the bid may be rejected.**

4. EXAMINATION OF SITE, CONTRACT DOCUMENTS

The Bidder is required to examine carefully the work site and the complete Contract Documents for the work contemplated. The Bidder will be fully responsible for fully informing himself as to the quality and quantity of materials and work, and shall further investigate the location and make a careful examination of the sources of materials. It is mutually agreed that submission of a Bid shall be conclusive evidence that the Bidder has made such examination and is satisfied as to all conditions and contingencies. No additional amount above the Bid and/or Contract Price shall be allowed because of error on the part of the Contractor.

The Bidder is expected to base their bid on materials, labor and equipment complying fully with the contract documents, and in the event the Bidder names or includes in his bid materials, labor or equipment which does not conform, they will, if awarded a contract, be responsible for furnishing materials, labor and equipment which fully conforms at no change in the contract price.

5. BID SECURITY / BONDS

Bid security is required and shall be by a qualified surety in the form of a bid bond in the amount of five percent (5%) of the bid amount, and shall be submitted with the bid. Failure to submit the required bid security as part of the firm's sealed bid will result in immediate rejection of the firm's bid. Accepted bidder will also be required, as a condition precedent to award of contract, to furnish in the amount of 100% of the contract price, satisfactory Performance/Payment Bond and acceptable Certificate of Insurance.

Performance/Payment Bonds – **(Required)** A performance and payment bond in the amount of 100% of the contract amount is to be provided by the successful bidder to the Washington County Purchasing Department within ten (10) days after award of contract. Failure to do so can make the contract voidable at the County's discretion and where the bid is covered by a bond such security shall be forfeited and become the property of Washington County. Performance and payment bonds must be approved by the County Attorney prior to commencement of any work.

6. SUBSTITUTE MATERIAL AND EQUIPMENT

The Contract, if awarded, will be on the basis of material and equipment described in the Plans or specified in the specifications. Whenever it is indicated in the Plans or specified in the Specifications that a substitute or "or equal" item of material or equipment may be furnished or used by Contractor if acceptable to the Owner, application for such acceptance will be considered by the Owner. The procedure for submittal of any such application by Contractor and consideration by the Owner is set forth in the General Conditions.

7. BID SIGNATURE

Bidders must state in their Bid, their full name and business address. If an incorporated company, Bidders must list the name of the State which has incorporated the company under its laws. The State of Wisconsin must have licensed this company to do business, prior to award of this Contract for the work described in the Plans, Specifications, and Contract Documents. The party properly authorized to submit the Bid must sign it.

If a Bidder does not sign this Bid, the signee must attach a Power of Attorney, evidencing the authority to sign the Bid in the name of the person for whom he has signed it.

The signee of a Bid for a corporation shall indicate the correct corporate name thereof and shall include the signature of the president or other authorized officer of the corporation, manually written below the corporate name following the word "By (name, title) ." If the signee of such a Bid is other than the President or Vice-President of the corporation, this signee shall attach a certified copy of a resolution of the Board of Directors, evidencing the authority of such official to sign the Bid. Such Bid should also bear the attesting signature of the Secretary of the corporation and the impression of the corporate seal.

For Bids of a partnership, all of the partners, or an attorney-in-fact, shall sign the Bid. If signed by an attorney-in-fact, he should attach to the Bid a Power of Attorney, executed by the partners, evidencing authority to sign the Bid.

8. BID FORM AND SUBMITTAL

Each Bidder must submit his/her Bid electronically through www.questcdn.com. Along with the Bid, the Bidder must upload the specified contract documents to Quest Construction Data Network (QuestCDN) including the bid bond.

The Owner, at its discretion, will compare Bids, in whole or in part, on a unit basis.

Bidding shall be as set forth in the Bid Form. Each Bid Item shall include all of the Contractor's costs, such as transportation, insurance, bonds, delays, labor, machinery, tools, and all materials necessary with the requirements of these Specifications. The Bidder shall make no additional stipulations on the bid form or qualify the bid in any manner.

Bids must be manually signed on the forms provided to be considered. All names must be typed or printed below the signature. Standard Terms and Conditions are included with this request and are hereby made a part of it.

Each Bidder must state in his/her Bid, the Bidder's full name and business address. If an incorporated company, he must list the State, which incorporated his company under its law. The State of Wisconsin must license such a company to do business, prior to award of the Contract by the Owner.

Before submitting a bid, each bidder will, at bidder's own expense, make or obtain any and all necessary additional examinations, measurements, investigations, explorations, tests and studies and obtained any additional information and data which pertain to the physical conditions (surface, structural, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the work and which CONTRACTOR deemed necessary in determining its bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents. CONTRACTOR's failure to perform these further investigations, explorations, tests and studies, shall not relieve the CONTRACTOR in any way for performing the work required for this project at the bid prices submitted and within the time specified.

The schedule of quantities of the Work, while the result of careful calculation, is approximate. Bidders shall assume them to be reasonably accurate, and shall use them in calculating the relative amounts of the Bid, but they are not the basis for final payment. Each Bidder shall make his/her own estimate of the quantities and shall calculate his/her unit prices accordingly. The Owner shall make payment for Work performed or material furnished, according to the field measurements or to the actual count on a unit price basis, using the Unit Prices indicated in the Bid of the Successful Bidder. The Successful Bidder agrees to accept such amount in full payment for the Work performed or material furnished.

The Bidder declares:

- 1) that he/she will perform all of the Work at their own proper cost and expense;
- 2) that he/she will furnish all necessary material, labor, tools, machinery, apparatus, and other means of construction in the manner provided and at the time specified in the Plans,

- Specifications, and Contract Documents, of which his/her Bid will become a part, if and when accepted;
- 3) that only the persons, firm, or corporation herein named have an interest in this Bid; and
 - 4) that he/she submits this Bid without collusion with any person(s) or corporation(s)

9. REJECTION OF BIDS

The Owner reserves the right to reject:

- a) any and all Bids or parts thereof deemed to be unsatisfactory or not in the County's best interest, to waive any and all informalities or technicality and to negotiate contract terms with the successful Bidder, and the right to disregard all nonconforming, non-responsive or conditional Bids, when it is in the best interest of the Owner;
- b) the Bid of a Bidder who has previously failed to perform properly or complete on time, in Contracts of a similar nature; and
- c) the Bid of a Bidder who is not, in the opinion of the Owner, in a position to perform the work as specified.
- d) the Bid of any Bidder who does not pass any evaluation to Owner's satisfaction.

10. OPENING OF BIDS

Electronic bids will be publicly viewed at the Highway Department Conference Room following the bid due date and time.

All bids shall be binding for sixty (60) days following the bid opening date unless the Bidder(s), upon request of the County, agree to an extension.

11. BIDS TO REMAIN OPEN

All Bids shall remain open for the time period specified in the Advertisement for Bids. The Owner may, in its sole discretion, release any Bid and return the Bid Security prior to that date.

12. AWARD

The Owner shall award the Contract to the lowest, most responsible and responsive Bidder, provided the Bids have been submitted in accordance with the requirements of the Bidding Documents and do not exceed the funds available. The Owner shall provide a Notice of Award to the Successful Bidder after approval. If low Bids are tied, the Owner will select the Successful Bidder.

In evaluating Bids, the Owner shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and options and unit prices if requested in the Bid Form. The Owner reserves the right to award the Contract to the lowest combination of Total Bid Base and any selected Alternate Bids, if applicable. The Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of materials or equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted in Section 00430 of the Specifications within 48 hours after the bid opening. Operating costs, maintenance considerations, performance data, and guarantees of materials and equipment may also be considered by the Owner.

The Owner may conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of the Bidders, proposed Subcontractors and other persons and organizations to do the Work in accordance with the Contract Documents to the Owner's satisfaction within the prescribed time. Owner reserves the right to reject the Bid of any Bidder who does not pass any such evaluation.

The Owner will require the Successful Bidder to execute and deliver two copies of the Agreement, to which an approved surety or sureties shall, in accordance with the law, become bound to perform or to secure the performance of the Agreement for sums equal to the Agreement prices. The copies of this Agreement will be in the form attached hereto and the successful Bidder shall deliver them to the Owner, within 10 calendar days from the date of a notice that the Owner has awarded the Contract. In case of failure to perform the above, the Owner will consider this Successful Bidder to have abandoned his/her Bid, and to be in default to the Owner, in the full amount of the Bid Bond. It is distinctly understood and agreed by the Bidder that the Bid Bond accompanying the Bid represents the liquidated damages which the Owner will suffer by reason of the Bidder's default in properly executing the Agreement and by the need to furnish sureties after the Owner has awarded the Contract.

Bidder shall provide a certificate of insurance upon award as stated in Appendix A attached. Proof of insurance is required when award is made.

Performance and Payment Bonds will be required for this project for 100% of the contract amount. The General Conditions and the Supplementary Conditions set forth Owner's requirements as to performance and payment bonds. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by the required Contract Security.

13. BID RESULTS

Bid results can be obtained at www.questcdn.com under the project results tab.

14. TIME OF COMPLETION

The successful Bidder must complete the entire Work, to the Owner's satisfaction by the date specified in the Plans, Specifications, and Contract Documents as set forth in the Bid and included in the Agreement.

15. LIQUIDATED DAMAGES

The liquidated damages for not completing the Work within the time specified shall be as set forth in the Bid Form and Agreement Form.

16. INTERPRETATION OF DOCUMENTS/QUERIES/ADDENDA

All questions about the meaning or intent of the Contract Documents shall be submitted to Gremmer & Associates, Inc. at (920) 924-5720 or j.chvosta@gremmerassociates.com. Replies will be issued by Addenda and will be made available to all parties recorded as having received the Bidding Documents. Only questions answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. However, Bidders wishing to discuss any aspect of the Work are requested to contact Jeff Chvosta of Gremmer & Associates, Inc. at (920) 924-5720 or j.chvosta@gremmerassociates.com. Final questions are due to the engineer by February 15, 2024. No further addendums relating to questions will be issued after

this date. Any addenda will be posted on **www.questcdn.com**. It is the contractor's responsibility to check the websites for addenda prior to submitting your bid.

Any conflicts within or between the Drawings and the Project Manual shall be submitted to the Engineer, at Gremmer & Associates, Inc. in writing, for review and processing. The Engineer's decision shall be final as to which shall prevail. This provision shall apply regardless of whether said conflict is acknowledged before or after bids are opened or Contracts let, or actual construction has commenced.

If addenda are issued, all Bids submitted shall include an acknowledgement of receipt of the Addenda. **Failure to acknowledge addenda may result in rejection of bid.**

17. WITHDRAWAL OF BIDS

Bids may be withdrawn by a signed and notarized notice delivered to the Washington County Highway Department and presenting proper identification upon request prior to the time of opening. Partial Bid withdrawal is not acceptable and once the bid is withdrawn it may not be re-submitted. Faxed and emailed bids will be rejected. Late bids will not be accepted and will remain unopened and returned to sender.

No bid can be withdrawn, changed or amended after the published time of receipt of bids. Unless a longer or shorter time period is stated in the Advertisement for Bids, no Bid may be withdrawn for 60 days after the date of the Bid opening.

18. TAXES

Bidders shall include in their Bid, all applicable taxes, including, but not limited to, Federal Tax, State Tax, County Tax, and Local Taxes.

The unit prices or lump sum prices as submitted in the Bid Schedule shall be the total price for materials and/or services to be paid by the Owner, including all applicable taxes.

It shall be the responsibility of the Contractor to contact the Department of Revenue to determine if there are any tax exemptions available, which would affect bidding.

19. CONTRACT PAYMENT ASSURANCES

The Owner will comply with Wisconsin Act 237, which provides for changes in public works contract payment and performance bond requirements contained in Sec. 799.14, Stats. Specifically, the new law does not require payment or performance bonds for contracts involving less than \$10,000.

For contracts greater than \$10,000, the new law and the Owner establishes performance and payment assurance requirements, as follows:

The prime Contractor(s) shall be required to pay all claims for labor and materials furnished to complete the Work.

The prime Contractor(s) on contracts of \$30,000 or more shall submit to Owner a list of all subcontractors and suppliers performing labor or supplying materials under the Contract that individually have a total value of \$5,000 or more.

The Owner reserves the right to make payments to subcontractors and suppliers or to pay the prime Contractor(s) with checks that are made payable jointly to the prime contractor(s) and to one or more subcontractor and/or suppliers. This provision does not apply to a Contract for construction, improvement, extension, repair, replacement, or removal of a transportation facility under Sec. 84.185(1)(d), Stats., a bikeway under Sec. 84.60(1)(a), Stats., a bridge, a parking lot or an airport facility, unless such work is incidental to the prime contract.

Final payment will be made to successful bidder contingent upon owners' acceptance and approval of all work done and/or products provided or services rendered. Acceptance as herein means acceptance by the County of all work performed or products provided and services rendered, after the department's authorized agent has found it to be in compliance with the specification requirement.

20. SPECIAL LEGAL REQUIREMENTS

Pursuant to Sec 103.503 of Wis. Stats, contractors and subcontractors shall have in place a written Substance Abuse Program in order to work on public works projects. Bidder, as part of their bid response or following award of this request, shall submit to Washington County the completed Affidavit of Compliance to Sec. 103.503 Wis. Stats. declaring that bidder and their subcontractors have a written Substance Abuse Program in place (See Appendix B of this request). Failure of the bidder to submit this Affidavit may result in their bid being rejected as non-responsive and next low bid may be considered for award of this project or re-bid as the county sees fit.

No reimbursement will be made by the County for any cost incurred in preparing responses to this solicitation, or for cost incurred before a formal notice to proceed is issued if a contract is awarded.

21. RETAINAGE AND PROGRESS PAYMENTS

Five percent (5%) of the invoice amount will be retained by OWNER, during the first 50% of work completed. Retainage will be released when all work (100%) has been completed to OWNER'S satisfaction.

All progress payments will be on the basis of the progress of the work measured and by the lump sum unit price schedule and unit prices for alternate bids (if applicable). CONTRACTOR shall submit invoices with information itemized in the same format as was submitted with the bid schedule.

Prior to final completion, progress payments will be made in an amount equal to the percentage indicated below, but in each case, less the aggregate of payments previously made and less such amounts as OWNER may withhold.

At 50% completion: Up until the work has been 50% completed as determined by OWNER, and if the character and progress of the Work have been satisfactory to OWNER, OWNER will retain 5 percent of the payment due.

50% to final completion: Between the time the work is 50% complete and the date of final completion as determined by OWNER, OWNER may determine that as long as the character and progress of the work remain satisfactory to them, there will be no additional retainage held on account of work completed in which case final progress payment will be in an amount equal to 100% of the work completed.

22. LIEN RELEASE

All applications for partial payment must include partial lien waivers from suppliers, contractors and subcontractors for work completed.

Lien waivers shall be supplied to the OWNER by all contractors, subcontractors and all material suppliers prior to final payment.

23. CONTRACTOR RESPONSIBILITIES

All permits & licenses applicable as required are the responsibility of the contractor. Contractor shall obtain and pay for all necessary state and local permits within 30 days of acceptance of the project and provide a copy of all permits Washington County Highway Department.

Contractor awarded is responsible to provide all copies of plans and specifications relating to this project to all subcontractors. Washington County reserves the right to approve or deny any subcontractor hired by the General Contractor.

WARRANTY: Contractor shall provide a one-year warranty at no extra charge for defects in the construction, installation and materials incorporated into the project. The Contractor shall be liable for the acceptable condition of all Work, both during construction and throughout the warrantee period. The warranty period shall begin on the date of the signed and executed certificate of completion, unless otherwise specified in a separate contract. Should any defect appear either during construction or the warrantee period, the Contractor shall in conformance to a written order from the Owners, make the required repairs or replacement at his own expense.

If CONTRACTOR fails to comply with the terms of any warranty herein contained, the OWNER may have the defects corrected and the CONTRACTOR or his/her surety shall be liable for all expenses incurred; except when, in the opinion of the OWNER, delay in correcting the defects would cause substantial cost or significant damage, repairs may be made by the OWNER without notice being given to the CONTRACTOR and the CONTRACTOR shall pay the cost thereof.

During performance and up to the completion date of Work, the Contractor shall be under an absolute obligation to safeguard from and be solely responsible for all damage resulting from his Work operations to water, gas, steam or drain pipes, street and house sewers, house services, catch basins, manholes, conduits, cables, hydrants, valves and stop boxes, light poles, street lighting, cables, transformers, traffic signals, traffic and street signs, fire and police alarm boxes, mail boxes or any other privately or publicly owned existing installation, property, or structure caused by any construction operation.

Contractor shall also safeguard from and be solely responsible for damage to pavements, sidewalks, curbs, gutter, trees, shrubbery, lawns or other items (public or private) which are scheduled to remain.

SECTION 00210

PREVAILING WAGE RATES

1. PREVAILING WAGE RATES

The County is not required to establish a rate of wage scale for this project.

SECTION 00300

BID FORM

Bid of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____ doing business as _____ * to Washington County (hereinafter called "OWNER").

*** Insert "a corporation," "a partnership," or "an individual" as applicable.**

In compliance with the ADVERTISEMENT FOR BIDS, BIDDER hereby proposes to perform all WORK for the construction of the **CTH P, SHERMAN ROAD TO STH 60, RECONSTRUCTION PROJECT** in accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

1. General Directions to Bidders

- A. All bidders must submit the "Bidders Qualification Statement," no later than 5 days prior to bid opening date. **If the Bidder Qualification Statement is missing, the bid may be rejected.**
- B. All bids must be submitted electronically through www.questcdn.com. No submitted paper, faxed or e-mailed bids will be accepted.
- C. Bidders shall not add any qualifying statements, conditions or escalator clauses to the bid form, or their bid may be declared irregular.
- D. Bidders shall examine the provisions of Division 1 thoroughly to ensure compliance with all bidding requirements.
- E. Bidders are responsible for visiting the site to get fully acquainted with conditions, as they exist so that bidders fully understand the facilities, difficulties, and possible restriction related to the execution of the work under contract. Bidders, upon request, may be provided with the opportunity to conduct any and all testing, at its sole expense, such that it is fully able to perform the work outlined in the bid pricing to be submitted.
- F. Bidders shall ensure that all items in the Bid Form such as work schedule, Bidder's official Title, Signature and Affidavit are properly executed.
- G. The requested Bid Guarantee (Bid Bond) must be submitted with the bid. Said Bid guarantee shall be in an amount of Five Percent (5%) of the base bid amount. If bid security is missing, the bid will be rejected. Bid Bonds of unsuccessful bidders will be held until successful bidders enter into a contract or 60 days, whichever is shorter.
- H. A Material Supplier & Subcontractor List with estimated dollar amounts must be submitted with the bid.

- I. A Disclosure of Ownership must be submitted with the bid.
- J. All bidders and their subcontractors shall have a written program in place for the prevention of substance abuse among its employees. Appendix B – Washington County Substance Abuse Affidavit must be submitted with the bid.
- K. Bids not conforming to the above directions may be declared irregular and may be disqualified at the discretion of the Owner.

2. Bid Submittal Procedure

Bids shall be submitted electronically through www.questcdn.com by uploading bid documents and entering unit prices within the online bid form.

3. Bid Closing

Bids must be submitted electronically by 10:30 AM (CT) on or before February 21, 2024, through www.questcdn.com.

4. Bid Opening

A public bid opening will be held following the bid due date and time on February 21, 2024, at 10:30 AM (CT), at the Washington County Highway Department office.

5. Substance Abuse Program

- A. Bidder and their subcontractors, at time of submitting bid, have a written program in place for the prevention of substance abuse among its employees that complies with Sec. 103.503 Wis. Stats. Complete the affidavit (see Appendix B of this request) and return as part of your bid if answering “Yes” to this statement.

Yes or No (Circle One)

If no, respond to the following statement as indicated below.

- B. Bidder’s answering “No” to Substance Abuse Program statement #1 above hereby certify that they and their subcontractors will develop and implement a written Substance Abuse Program if awarded this bid and will have said program in place prior to the contract being signed for this work and/or prior to commencing work on this project, whichever comes first. (Failure to develop and implement a written Substance Abuse Program as indicated above will result in bidder’s and all their subcontractor bids being rejected as non-responsive and next low bid may be considered for the award or project may be re-bid.)

Yes or No (Circle One)

Upon developing and implementing a written Substance Abuse Program, bidder shall complete the affidavit for their firm and their subcontractors (see Appendix B of this request) and return it to the Washington County Highway Department office, 900 Lang Street, West Bend, WI 53090.

6. Work Schedule

- A. Successful bidders shall begin construction of the work as indicated below. All time limits as listed shall be binding.
- B. BIDDER hereby agrees to commence work under this contract on or before a date to be specified in the NOTICE TO PROCEED and to substantially complete the PROJECT by September 13, 2024 and fully complete the PROJECT by September 27, 2024. BIDDER further agrees to pay as liquidated damages, the sum of \$2,185 for each consecutive calendar day thereafter.
- C. If a written Notice to Proceed or written Notice of Intent to Award Contract(s) is issued on or before May 24, 2024 can you complete all work included in your bid by the dates shown on the Work Sequence / Milestone schedule, herein.

☐ Yes ☐ No

If No, state additional calendar days required _____ days

We, _____ (a Corporation)
_____ (a Partnership)
_____ (an Individual)

of _____
Street City State Zip

hereby agrees to execute the proposed Contract(s) and herein furnish a surety bond in the amount specified, and to provide all labor and material required for the construction of the project designated above, for the prices hereinafter set forth, in strict accordance with the Contract Documents prepared by Gremmer & Associates, Inc..

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER agrees to perform all of the WORK described in the CONTRACT DOCUMENTS for the Total Bid Price as submitted via QuestCDN vBID based on the BID SCHEDULE.

Statement of Bidder

1. That I have examined and carefully prepared this bid from the Drawings, Project Manual and other Contract Documents and have checked the same in detailed before submitting this bid.
2. That I am financially able and have under my jurisdiction, the organization and the personnel to complete the work as shown and specified in strict accordance with the terms of the Contract Documents.
3. This bid is based upon and conforms to all requirements shown on the bid documents prepared by Gremmer & Associates, Inc., dated January 31, 2024, and all addenda acknowledged herein.
4. This statement is hereby made a part of the foregoing bid.

Binding Signatures:

The undersigned bidder, submitting this bid, hereby declares and agrees to be bound, and to perform the work in accordance with all the terms, conditions and requirements of the within and foregoing bid, the contract, the applicable specifications and special provisions, and the schedule of prices as hereby submitted and made part of the bid form.

Company _____

Signature (Manual Signature) _____

Name (Print or Type) _____

Title: _____ Date: _____

IN WITNESS WHEREOF, this BID is executed this _____ day of February, 2024. (Note: Attach any necessary Power of Attorney as required by INFORMATION FOR BIDDERS.)

1. INDIVIDUAL

IN PRESENCE OF:

_____	_____
_____	_____ (SEAL)
	Name

2. PARTNERSHIP (Association)

IN PRESENCE OF:

_____	_____ FIRM NAME
_____	_____ (SEAL)
_____	_____ Name
_____	_____ Name

3. CORPORATION

IN PRESENCE OF:

Corporate Seal

Corporation Name

By:

Name:

(type or print)

TITLE: (SEAL)

By:

Name:

(type or print)

Title:

SECTION 00310

BID SCHEDULE

CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01

A single prime contract will be awarded on the basis of lowest responsible, responsive total base bid amount, or combination of base and any selected alternate bid amounts, in the Owner's best interests.

BIDDER agrees to furnish all labor and materials for the construction required by these specifications for the complete installation of the items listed. Any and all additional items shown on the plans but not specifically listed in this Bid Schedule are considered incidental items the cost of which is to be included in the total project bid price. This is a unit price contract with award being made based upon the price for the quantities of the various items listed in this Bid Schedule. The base contract includes the following approximate quantities.

The table below is for informational purposes only. Bidder shall complete bid schedule on www.questcdn.com.

NOTE: OWNER reserves the right to modify the quantities, by any amount, at time of installation based on available funds in the budget.

BASE BID

Item No.	Item	Quantity	Unit
201.0205	Grubbing	8	STA
203.0100	Removing Small Pipe Culverts	19	EACH
203.0220	Removing Structure (B-66-95)	1	EACH
204.0100	Removing Concrete Pavement	8,980	SY
204.0150	Removing Curb & Gutter	307	LF
204.0165	Removing Guardrail	711	LF
204.0180	Removing Delineators and Markers	5	EACH
204.0220	Removing Inlets	1	EACH
204.0245	Removing Storm Sewer (18-Inch)	133	LF
204.9060.S	Removing Billboard Posts	1	EACH
205.0100	Excavation Common	21,925	CY
205.0400	Excavation Marsh	546	CY
206.2001	Excavation for Structures Culverts (B-66-95)	1	EACH
206.5001	Cofferdams (B-66-95)	4	EACH
210.2500	Backfill Structure Type B	420	TON
305.0110	Base Aggregate Dense 3/4-Inch	1,865	TON
305.0120	Base Aggregate Dense 1 1/4-Inch	11,070	TON
305.0130	Base Aggregate Dense 3-Inch	20,105	TON
311.0110	Breaker Run	2,964	TON
455.0605	Tack Coat	2,530	GAL
460.2000	Incentive Density HMA Pavement	5,900	DOL
460.6223	HMA Pavement 3 MT 58-28 S	6,380	TON
460.6224	HMA Pavement 4 MT 58-28 S	2,830	TON
460.9000.S	Material Transfer Vehicle	1	EACH
465.0120	Asphaltic Surface Driveways and Field Entrances	220	TON

465.0315	Asphaltic Flumes	55	SY
502.4205	Adhesive Anchors No. 5 Bar	122	EACH
504.0100	Concrete Masonry Culverts	95	CY
505.0400	Bar Steel Reinforcement HS Structures	20,290	LB
505.0600	Bar Steel Reinforcement HS Coated Structures	780	LB
505.0904	Bar Couplers No. 4	40	EACH
505.0906	Bar Couplers No. 6	47	EACH
505.0909	Bar Couplers No. 9	46	EACH
516.0500	Rubberized Membrane Waterproofing	17	SY
521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	4	EACH
521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	12	EACH
521.1524	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	2	EACH
521.3118	Culvert Pipe Corrugated Steel 18-Inch	436	LF
521.3124	Culvert Pipe Corrugated Steel 24-Inch	54	LF
522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	104	LF
522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	2	EACH
522.1021	Apron Endwalls for Culvert Pipe Reinforced Concrete 21-Inch	1	EACH
522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	5	EACH
522.2348	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 48x76-Inch	128	LF
522.2648	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 48x76-Inch	4	EACH
601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	962	LF
606.0200	Riprap Medium	35	CY
606.0300	Riprap Heavy	21	CY
608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	162	LF
608.0421	Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	411	LF
608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	18	LF
611.0627	Inlet Covers Type HM	3	EACH
611.0642	Inlet Covers Type MS	2	EACH
611.3004	Inlets 4-FT Diameter	3	EACH
611.3901	Inlets Median 1 Grate	2	EACH
611.8110	Adjusting Manhole Covers	1	EACH
619.1000	Mobilization	1	EACH
620.0300	Concrete Median Sloped Nose	70	SF
625.0500	Salvaged Topsoil	21,430	SY
627.0200	Mulching	13,130	SY
628.1504	Silt Fence	1,135	LF
628.2004	Erosion Mat Class I Type B	8,240	SY
628.2008	Erosion Mat Urban Class I Type B	60	SY
628.7005	Inlet Protection Type A	2	EACH
628.7010	Inlet Protection Type B	3	EACH

628.7015	Inlet Protection Type C	5	EACH
628.7504	Temporary Ditch Checks	330	LF
628.7555	Culvert Pipe Checks	85	EACH
628.7560	Tracking Pads	2	EACH
628.7570	Rock Bags	305	EACH
629.0210	Fertilizer Type B	19	CWT
630.0120	Seeding Mixture No. 20	400	LB
630.0140	Seeding Mixture No. 40	275	LB
630.0500	Seed Water	675	MGAL
633.5200	Markers Culvert End	6	EACH
634.0614	Posts Wood 4x6-Inch X 14-FT	7	EACH
634.0616	Posts Wood 4x6-Inch X 16-FT	14	EACH
634.0618	Posts Wood 4x6-Inch X 18-FT	1	EACH
637.2210	Signs Type II Reflective H	100.79	SF
637.2230	Signs Type II Reflective F	54.00	SF
638.2102	Moving Signs Type II	1	EACH
638.2602	Removing Signs Type II	21	EACH
638.3000	Removing Small Sign Supports	21	EACH
643.0420	Traffic Control Barricades Type III	234	DAY
643.0705	Traffic Control Warning Lights Type A	468	DAY
643.0900	Traffic Control Signs	234	DAY
643.5000	Traffic Control	1	EACH
645.0105	Geotextile Fabric Type C	196	SY
645.0120	Geotextile Type HR	156	SY
645.0140	Geotextile Type SAS	2,550	SY
646.1020	Marking Line Epoxy 4-Inch	14,880	LF
646.3020	Marking Line Epoxy 8-Inch	525	LF
646.5120	Marking Word Epoxy	1	EACH
646.6120	Marking Stop Line Epoxy 18-Inch	86	LF
646.7120	Marking Diagonal Epoxy 12-Inch	47	LF
646.8120	Marking Curb Epoxy	10	LF
646.8220	Marking Island Nose Epoxy	1	EACH
648.0100	Locating No-Passing Zones	0.93	MI
650.4000	Construction Staking Storm Sewer	9	EACH
650.4500	Construction Staking Subgrade	5,299	LF
650.5000	Construction Staking Base	5,444	LF
650.5500	Construction Staking Curb Gutter and Curb & Gutter	962	LF
650.6000	Construction Staking Pipe Culverts	5	EACH
650.6501	Construction Staking Structure Layout (B-66-95)	1	EACH
650.9911	Construction Staking Supplemental Control (HWY 24-01)	1	EACH
650.9920	Construction Staking Slope Stakes	5,444	LF
690.0150	Sawing Asphalt	425	LF
690.0250	Sawing Concrete	43	LF
715.0502	Incentive Strength Concrete Structures	570	DOL
740.0440	Incentive IRI Ride	3,732	DOL
999.2000.S	Installing and Maintaining Bird Deterrent System (Station 613+52)	1	EACH
SPV.0105.01	Temporary Mailbox Accommodations	1	LS

SECTION 00410

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal, and

_____ as Surety, are

hereby held and firmly bound unto _____ as OWNER in

the penal sum of \$_____ for the payment of which, well and truly be made, we hereby jointly and

severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 20_____.

The Condition of the above obligation is such that whereas the Principal has submitted to the

_____ a certain BID, attached hereto and hereby made a part
hereof to enter into a CONTRACT in writing for the:

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

NOW, THEREFORE,

- (a) If said BID shall be rejected, or in the alternate,
- (b) If said BID shall be accepted and the Principal shall execute and deliver a CONTRACT in the Form of CONTRACT attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said CONTRACT, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the AGREEMENT created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain the force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extensions of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

Principal _____

By: _____

Name: _____
(type or print)

Title: _____
(type or print)

Address: _____

Surety: _____

By: _____

Name: _____
(type or print)

Title _____
(type or print)

Address: _____

Subscribed and swore to before me

This _____ day of _____, 20____.

_____ Notary Public

_____ County, Wisconsin

MY COMMISSION EXPIRES: _____

NOTE: This affidavit must be made by an individual who shall be either the sole trader making the bid, or if the bidder is a firm or corporation, a person duly authorized.

SECTION 00430

MATERIAL SUPPLIER & SUBCONTRACTOR LIST

The following Material Suppliers and Subcontractors will be utilized for portions of the Project Work (only list those > \$5,000). Changes shall not be made subsequent to the Bid unless the change(s) is approved by the County.

[illegible]

SECTION 00480

DISCLOSURE OF OWNERSHIP

Personal information you provide may be used for secondary purposes. (See Section 15.04(1)(m) Statutes for details.)

- On the date a contractor submits a bid to or completes negotiations with a state agency or local governmental unit on a project subject to Section 66.0903 or 103.49, Wisconsin Statutes the contractor shall disclose to such state agency or local governmental unit the name of any "other construction business" which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.
- The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities and any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 103.49(2) and 103.50(2), Wisconsin Statutes.
- This form **ONLY** needs to be completed if (a) the contractor, or a shareholder, officer or partner of the contractor, owns at least a 25% interest in the "other construction business" indicated below on the date the contractor submits a bid or completes negotiations, or has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years; **and** (b) the Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay for hours worked in excess of the prevailing hours of labor to any employee at any time within the preceding three (3) years. This form **DOES NOT** have to be completed if the requirements of **both** (a) and (b) above are not met. If the requirements of both (a) and (b) above are met, this form must **ONLY** be filed with the state agency or local government unit that will be awarding the contract.
- Name and address of other construction business of any "other construction business" which meets all of the criteria specified in (2) and (3) above.

Name of Other Construction Business

Street Address or P.O. Box, City, State and Zip Code

I hereby state under penalty of perjury that the information contained in this document is true and accurate according to my knowledge and belief.

Print Name of Authorized Officer

Signature of Authorized Officer

Title of Authorized Officer

This _____ Day of _____

Name of Corporation, Partnership, or Sole Proprietorship

Address (Include Street or P.O. Box, City, State and Zip Code)

The statutory authority for the use of this form is prescribed in Sections 66.0903(12) (d) and 103.49(7)(d), Wisconsin Statutes. The use of this form is mandatory.

The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes. ERD-7777 (R. 02/2001)

SECTION 00500

AGREEMENT

THIS AGREEMENT is dated as of the __ day of _____, 20__ by _____ and _____ between WASHINGTON COUNTY HIGHWAY DEPARTMENT hereinafter called "OWNER" or "OWNER'S REPRESENTATIVE" and, _____ hereinafter called "CONTRACTOR."

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth agree as follows:

ARTICLE 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents bearing the title RFB #HWY 24-01 CTH P, POLK – JACKSON, SHERMAN ROAD TO STH 60 dated January 31, 2024 and any addenda thereto (hereinafter Bid Documents).

The Work is generally described as follows:

Provide and furnish all labor, materials, equipment, tools, power, utilities, transportation and all other services to perform construction of the complete Project

The Project for which the Work, under the contract Documents, may be the whole or only a part is generally described as follows:

Construction of CTH P, POLK – JACKSON, SHERMAN ROAD TO STH 60, consisting of approximately the following items/quantities:

Excavation Common	21,925	CY
Base Aggregate Dense	33,040	TON
Breaker Run	2,965	TON
HMA Pavement	9,210	TON
Concrete Masonry Culverts	95	CY
Culvert Pipes	725	LF
Storm Sewer	590	LF
Concrete Curb & Gutter	960	LF
Salvaged Topsoil	21,400	SY
Epoxy Pavement Markings	15,530	LF

ARTICLE 2. ENGINEER

The Project shall be administered by the OWNER or his representative, who is hereinafter called ENGINEER and who will assume all duties and responsibilities and will have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the WORK in accordance with the Contract Documents. Upon award of the contract, the firm selected for construction inspection will also be referred to as Engineer.

ARTICLE 3. CONTRACT TIME

3.1 The Work shall be substantially completed by September 13, 2024 and shall be fully completed by September 27, 2024. Substantial completion shall consist of roadway open to traffic and all items of work completed except for punch list or clean up items. It is anticipated that the Notice to Proceed will be issued on approximately May 24, 2024.

3.2 CONTRACTOR AND OWNER recognize that time is of the essence of this Agreement and OWNER will suffer financial loss if Work is not completed within the times specified in Section 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of General Conditions. The parties also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceedings the actual loss suffered by OWNER if the Work is not complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER TWO THOUSAND ONE HUNDRED AND EIGHTY FIVE DOLLARS (\$2,185) for each calendar day that expires after time specified in Section 3.1 above for both substantial and final completion until the Work is complete or until the milestones specified in section 3.1 are met.

3.3 Cooperation with other contractors and utilities.

CONTRACTOR shall work in full cooperation with other contractors, subcontractors or with utility or OWNER's forces engaged in collateral work. In case of dispute, the decision of the OWNER shall be final and binding upon the parties affected.

CONTRACTOR shall, prior to commencement of Work, inspect the entire site, verifying site conditions in order to have a complete understanding of site conditions.

CONTRACTOR shall, timely and prior to commencement of Work, contact Digger's Hotline for marking existing utilities.

In no case will the CONTRACTOR be permitted to exclude from the premises or work, any other contractor or employees thereof, or interfere with any other contractor in the execution or installation of their work.

CONTRACTOR shall arrange the work and dispose of materials so as not to interfere with the work or storage of materials of others and each shall join their work to that of others in accordance with the intent of the drawings and specifications.

CONTRACTOR shall develop a project working schedule in cooperation with the _____ which schedule shall conform to the project completion date set forth at §3.1 of this Agreement.

CONTRACTOR shall not be permitted to exclude OWNER or its employees, from the premises.

CONTRACTOR shall not be permitted to use OWNER'S employees for the work called for herein.

ARTICLE 4. CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for performance of the WORK in accordance with the Contract Documents in current funds as follows: _____ Dollars (\$_____) which figure shall be adjusted in accordance with the attached Contractor's "Unit Prices."

4.2 CHANGE ORDERS

CONTRACTOR shall perform only the work specified in the Contract Documents. Any changes in quantities or volumes shall be authorized in writing by OWNER pursuant to a written change order which shall be submitted for approval by OWNER prior to commencement of the Work outlined in said change order. Written approval of the change order by the OWNER is required before work is started. Change Orders shall be based on the Lump Sum or Unit Price Schedule (if applicable). The specifications in the change order may modify the budget of the Project and by signing the change order, OWNER'S Authorized Agent verifies that adequate funding is available.

ARTICLE 5. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions. Payment is contingent upon OWNER's approval and acceptance of all Work performed and services rendered. Acceptance means acceptance by OWNER of all Work and services performed after OWNER'S Authorized Agent has found it to be in compliance with the scope of work.

5.1 Progress Payments. OWNER shall make progress payments on account of the Contract price on the basis of CONTRACTOR'S Application for Payment as recommended by ENGINEER, once each month during construction as provided in Paragraph 5.1.1 below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values provided for in Paragraph 2.07 of the General Conditions.

5.1.1 Prior to substantial completion, progress payments will be in accordance with Paragraph 14.02 of the General Conditions in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with Paragraph 14.07 of the General Conditions. Only that Work actually INSTALLED will be considered for partial payments or as otherwise negotiated.

1. Five percent (5%) of the invoice amount will be retained by OWNER, during the first 50% of work completed. Retainage will be released when all work (100%) has been completed to OWNER'S satisfaction.
2. All progress payments will be on the basis of the progress of the work measured and by the lump sum unit price schedule and unit prices for alternate bids (if applicable). CONTRACTOR shall submit invoices with information itemized in the same format as was submitted with the bid schedule.
3. Prior to Final Completion, progress payments will be made in an amount equal to the percentage indicated below, but in each case, less the aggregate of payments previously made and less such amounts as OWNER may withhold.

4. At 50% Completion: Up until the work has been 50% completed as determined by OWNER, and if the character and progress of the Work have been satisfactory to OWNER, OWNER will retain 5 percent of the payment due.
5. 50% to Final Completion: Between the time the work is 50% complete and the date of Final Completion as determined by OWNER, OWNER may determine that as long as the character and progress of the work remain satisfactory to them, there will be no additional retainage held on account of Work completed in which case final progress payment will be in an amount equal to 100% of the Work completed.
- 5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, OWNER shall pay the remainder of the Contract Price less the retainage for the duration of the warranty period as recommended by ENGINEER as provided in said Paragraph 14.07 of the General Conditions and 14.02 of the Supplementary Conditions.
- 5.3 Prior to final payment and after CONTRACTOR notifies OWNER/ENGINEER of final completion, CONTRACTOR shall provide OWNER/ENGINEER with proof satisfactory to OWNER that any and all suppliers, vendors and subcontractors have received payment in full. CONTRACTOR shall provide OWNER/ENGINEER with all lien waivers from CONTRACTOR, suppliers and subcontractors for work completed.

ARTICLE 6. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

- 6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work
- 6.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications and which have been identified in the Contract Documents.
- 6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in Paragraph 6.2 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.
- 6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to the CONTRACTOR.

- 6.6 CONTRACTOR at CONTRACTOR'S expense shall obtain and provide proof of any and all local, state and federal permits necessary for the completion of this project as outlined in the Bid Documents.
- 6.7 To the extent CONTRACTOR employs any Subcontractors for the completion of the Work, CONTRACTOR agrees that any work performed by Subcontractors shall be covered by Article 3 and that CONTRACTOR shall be solely responsible for full payment to any and all Subcontractors performing work and shall provide OWNER proof of full payment of Subcontractors prior to release of payment.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR are attached to this Agreement, made a part hereof and consists of the following:

- 7.1 This Agreement (Pages 29 to 36, inclusive).
- 7.2 Exhibits to the Agreement (Pages ____ to ____ inclusive).
- 7.3 General Conditions: STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT (EJCDC No. C-700, Latest Edition).
- 7.4 Supplementary Conditions.
- 7.5 Project Manual bearing the title:

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

- 7.6 Project Plans bearing the title:

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

- 7.7 CONTRACTOR'S Bid Form (Pages 17 to 21) dated _____ 2024, including Addenda _____ through _____ inclusive.
- 7.8 Award Letter dated: _____
- 7.9 In the event that the terms of any of these documents conflict with one another, OWNER shall determine at its sole discretion which term and/or document is controlling
- 7.10 Any modification, including Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Section 1 of the General Conditions).

ARTICLE 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- 8.2 This agreement is not assignable. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 OWNER and CONTRACTOR each binds himself, his partners, successors assign and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 8.4 The construction and enforcement of the terms of this agreement including interpretation of the rights and responsibilities conferred herein shall be governed by the laws of the State of Wisconsin.
- 8.5 The invalidity or enforceability of any provision of this Agreement shall not affect or limit the validity or enforceability of any other provision herein and same shall be and remain valid and enforceable to the fullest extent permitted by law.
- 8.6 The parties to this Agreement hereby affirm that this writing expresses the final, complete, and exclusive statement of the terms of their Agreement. There are no inducements to enter into this Agreement other than those appearing in this document. All prior agreements written or oral are discharged or merged into this Agreement. No terms may be added to this Agreement and no existing term may be modified unless such additions or modifications are put in writing and are signed and dated by the parties.
- 8.7 Failure or delay on the part of either party hereto to exercise any right or power herein shall not operate as a waiver thereof. Further, the remedies and rights of the parties are cumulative and the exercise of one is not exclusive of the exercise of any other provided by this Agreement.
- 8.8 Notices. All notices or demands required to be given by either party under this Agreement shall be given to the other party at the address specified below and shall be accomplished by certified mail, postage prepaid and depositing same with the United States Postal Service or an overnight commercial courier service, airbill prepaid.
- 8.9 Judicial Review. In the event that a dispute is not resolved to the satisfaction of the parties involved, any party wishing to pursue legal action against the other party shall bring such action in the Circuit Court of the Washington County, State of Wisconsin
- 8.10 During performance and up to the completion date of Work, the Contractor shall be under an absolute obligation to safeguard from and be solely responsible for all damage resulting from his Work operations to water, gas, steam or drain pipes, street and house sewers, house services, catch basins,

manholes, conduits, cables, hydrants, valves and stop boxes, light poles, street lighting, cables and transformers, traffic signals, traffic and street signs, fire and police alarm boxes, mail boxes or any other privately or publicly owned existing installation, property, or structure caused by any construction operation. . Contractor shall also safeguard from and be solely responsible for damage to pavements, sidewalks, curbs, gutter, trees, shrubbery, lawns or other items (public or private) which are scheduled to remain.

ARTICLE 9. OTHER PROVISIONS

- 9.1 Performance and other bonds. CONTRACTOR will be required to furnish bonds in accordance with Section 00610 and 00620.

ARTICLE 10. WARRANTY

- 10.1 CONTRACTOR shall provide a one-year warranty at no extra charge for defects in the construction, installation and materials incorporated into the project. The CONTRACTOR shall be liable for the acceptable condition of all materials and work, both during construction and throughout the warrantee period.
- 10.2 CONTRACTOR guarantees that all methods and materials used shall be as specified in the Proposal submitted by CONTRACTOR in response to RFB #HWY 24-01. CONTRACTOR warrants that all Work shall be performed in a professional and competent manner in accordance with generally accepted industry standards.
- 10.3 All work performed by the CONTRACTOR shall be and is warranted for a period of one (1) year from and after the final completion and acceptance date of work by OWNER. If any defect appear either during construction or within said warranty period, rework, which, in the opinion of the OWNER, is necessary as the result of use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the CONTRACTOR shall, within ten (10) days upon receipt of the written notice from the OWNER, and without expense to the OWNER, perform the necessary work to a satisfactory condition, correct all defects, make good all damage to the structure, site, defects, or contents thereof, which damage, in the opinion of the OWNER, results from the use of such inferior or defective materials, equipment or workmanship. Any rework performed as a result of OWNER'S written notice to CONTRACTOR shall be warranted by CONTRACTOR for a period of two years after completion of said rework and acceptance of rework by OWNER.
- 10.4 If within ten (10) days after written notice referred to in 10.3 above, the CONTRACTOR fails to comply with the terms of any warranty herein contained, the OWNER may have the defects corrected and the CONTRACTOR or his/her surety shall be liable for all expenses incurred; except when, in the opinion of the OWNER, delay in correcting the defects would cause substantial cost or significant damage, repairs may be made by the OWNER without notice being given to the CONTRACTOR and the CONTRACTOR shall pay the cost thereof. CONTRACTOR shall provide performance bond that comports with this paragraph.
- 10.5 All special warranties applicable to specific parts of the work as may be stipulated in the Contract Specifications or other documents being a part of this Contract shall be subject to the terms this Article or the terms of the special warranty, whichever is more favorable to the OWNER. All special manufacturers' warranties shall be delivered to the OWNER prior to the acceptance of the work.
- 10.6 Insurance coverage to be per the requirements set forth in Exhibit A to the Contract Documents.

ARTICLE 11. INDEMNIFICATION CLAUSE:

- 11.1 CONTRACTOR agrees to defend, and hold COUNTY/OWNER harmless from any and all claims and suits for any losses, damages, or costs arising therefrom, alleged and asserted by a third party to the extent any said claim or suit arises from the indemnifying party's gross negligence or willful misconduct which results in (I) bodily injury (ii) any loss, damage, or destruction of personal tangible property. This obligation is conditioned on the indemnifying party receiving from the other party prompt written notification of any such claim and the other party cooperating fully with the indemnifying party in defense of any such action.
- 11.2 Nothing herein shall be construed, interpreted or operate as a waiver of any immunity, limitation on damages, notice requirements or statute of limitations afforded the OWNER pursuant to §893.80, Wis.Stats., or by any other law.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

THIS AGREEMENT will be effective on _____, 20____.

(SEAL)

(CONTRACTOR)

Attest:

By:_____

By:_____
(Title)

By:_____

By:_____
(Title)

By:_____

Washington County Chief Public Works Officer
(Title)

Washington County Highway Department
(OWNER)

END OF SECTION

SECTION 00520

NOTICE OF AWARD/ACCEPTANCE OF NOTICE OF AWARD

TO:

**PROJECT DESCRIPTION:
CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

The OWNER has considered the BID submitted by you for the above-described WORK in response to its ADVERTISEMENT FOR BIDS dated _____, and INFORMATION FOR BIDDERS.

You are hereby notified that your BID has been accepted for items in the amount of _____ Dollars \$_____.

You are required by the INFORMATION FOR BIDDERS to execute the AGREEMENT and furnish the required CONTRACTOR'S PERFORMANCE BOND, PAYMENT BOND, and CERTIFICATES OF INSURANCE within ten calendar days from the date of this Notice to you.

If you fail to execute said AGREEMENT and to furnish said bonds and certificates of insurance within ten days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20_____.

Washington County Highway Department

By: _____

(TYPE NAME)

Title: _____

ACCEPTANCE OF NOTICE OF AWARD

Receipt of the above NOTICE OF AWARD is hereby acknowledged by:

_____ this the _____ day of _____, 20____.

CONTRACTOR

By: _____

(TYPE NAME)

Title: _____

SECTION 00540

NOTICE TO PROCEED

You are hereby notified to commence WORK in accordance with the AGREEMENT dated _____, 20____, on or before _____, 20____, and you are to substantially complete this WORK by September 13, 2024 and fully complete the work by September 27, 2024.

Dated this ____ day of _____, 20____.

Washington County Highway Department

Owner

By: _____

Name: _____

(type or print)

Title: _____

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by:

this the ____ day of _____, 20____.

Contractor

By: _____

Name: _____

(type or print)

Title: _____

SECTION 00560

CONTRACT CHANGE ORDER

Order No.: _____

Date: _____

Agreement Date: _____

NAME OF PROJECT: **CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

OWNER: **Washington County Highway Department**

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original Contract Price: \$ _____

Current Contract Price adjusted by Previous Change Order: \$ _____

The Contract Price due to this Change Order will be increased by: \$ _____

The new Contract Price including this Change Order will be: \$ _____

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased/decreased) by _____ calendar days.

The date for completion of all work will be _____ (Date).

Accepted By: _____ Owner

Representing: _____

Print Name/Title: _____

Date: _____

Recommended By: _____ Engineer

Representing: _____

Print Name/Title: _____

Date: _____

Requested By: _____ Contractor

Representing: _____

Print Name/Title: _____

Date: _____

SECTION 00610

CONSTRUCTION PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership, or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the

Washington County Highway Department

(Name of Owner)

900 Lang Street, West Bend, WI 53090

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars
(\$_____) in lawful money of the United States, for the payment of which sum well and truly to be
made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such as that whereas, the Principal entered into a
certain CONTRACT with the OWNER, dated the ____ day of _____, 20____, a
copy of which is hereto attached and made a part hereof for the construction of:

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

NOW, THEREFORE, if the Principal shall well, truly, and faithfully perform its duties, all the
undertakings, covenants, terms, conditions, and agreements of said CONTRACT during the original term
thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety
and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such
CONTRACT, and shall fully indemnify and save harmless the OWNER from all costs and damages which it
may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense
which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to
remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no
charge, extension of time, alteration, or addition to the terms of the CONTRACT or to the WORK to be
performed there under of the SPECIFICATIONS accompanying the same shall in any wise affect its obligation
on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to
the terms of the CONTRACT or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

Principal

By: _____
Principal Secretary

By: _____

Name: _____
(type or print)

Name: _____
(type or print)

(Seal)

Title: _____

Witness as to Surety

Address: _____

Address: _____

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

ATTEST:

SURETY

(Surety) Secretary

By: _____

(Seal)

Attorney-in-fact

Address: _____

Witness as to Surety

Address: _____

**SECTION 00620
CONSTRUCTION PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership, or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the
Washington County Highway Department
(Name of Owner)
900 Lang Street, West Bend, WI 53090
(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars,
(\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be
made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

The CONDITION OF THIS OBLIGATION is such as that whereas, the Principal entered into a certain
CONTRACT with the OWNER, dated the ____ day of _____, 20____, a copy of which is
hereto attached and made a part hereof for the construction of:

**CTH P
POLK – JACKSON
SHERMAN ROAD TO STH 60
WASHINGTON COUNTY
PROJECT NUMBER: HWY 24-01**

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms,
subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the WORK
provided for in such CONTRACT, and any authorized extension or modification thereof, including all amounts
due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed
or used in connection with the construction of such WORK, and all insurance premiums on said work, and for
all labor, performed in such WORK whether by subcontractor or otherwise, then this obligation shall be void;
otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no
charge, extension of time, alteration or addition to the terms of the CONTRACT or to the WORK to be
performed there under of the SPECIFICATIONS accompanying the same shall in any wise affect its obligation
on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to
the terms of the CONTRACT or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall
abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three counterparts, each one of which shall be deemed an original, this the ____ day of _____, 20____.

ATTEST:

Principal

By: _____
Principal Secretary

By: _____

Name: _____
(type or print)

Name: _____
(type or print)

(Seal)

Title: _____

Witness as to Surety

Address: _____

Address: _____

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

ATTEST:

(Surety) Secretary

SURETY

(Seal)

By: _____

Attorney-in-fact

Address: _____

Witness as to Surety

Address: _____

END OF SECTION

SECTION 00625

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: Washington County Highway Department	Owner's Contract No.: HWY 24-01
Contract: CTH P, POLK – JACKSON, SHERMAN ROAD TO STH 60	Engineer's Project No.: HWY 24-01
Project: CTH P POLK - JACKSON SHERMAN ROAD TO STH 60 WASHINGTON COUNTY PROJECT NUMBER: HWY 24-01	

This [tentative] [definitive] Certificate of Substantial Completion applies to:

☐ All Work under the Contract Documents: ☐ The following specified portions of the Work:

_____, 2024

Date of Substantial Completion

The WORK to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR, and ENGINEER, and found to be substantially complete, and Accepted by the Washington County Highway Department. The Date of Substantial Completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the CONTRACT DOCUMENTS, except as stated below.

A [tentative] [definitive] list of items to be completed or corrected is attached hereto. This list may not be all- inclusive, and the failure to include any items on such list does not alter the responsibility of the CONTRACTOR to complete all WORK in accordance with the CONTRACT DOCUMENTS.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the CONTRACT DOCUMENTS except as amended as follows:

☐ Amended Responsibilities ☐ Not Amended

OWNER’S Amended Responsibilities:

CONTRACTORS’ Amended Responsibilities:

The following documents are attached to and made part of this Certificate: -

This Certificate does not constitute an acceptance of WORK not in accordance with the CONTRACT DOCUMENTS nor is it a release of CONTRACTOR'S obligation to complete the WORK in accordance with the CONTRACT DOCUMENTS.

<hr/>	<hr/>
Executed by ENGINEER	Date
<hr/>	<hr/>
Accepted by CONTRACTOR	Date
<hr/>	<hr/>
Accepted by OWNER	Date

SECTION 00700

GENERAL CONDITIONS

EJCDC, Latest Edition

Standard General Conditions of the Construction Contract for this project shall be EJCDC C-700 (Latest Edition), a copy of which can be purchased from the National Society of Professional Engineers or seen in the office of the ENGINEER.

SECTION 00800

SUPPLEMENTARY CONDITIONS

Section Includes:

SC-2.05.B.3.	Schedule of Values
SC-4.02.	Subsurface and Physical Conditions
SC-5.03.	Certificates of Insurance
SC-5.04.	Contractor's Liability Insurance
SC-5.04.B.1.	Policies of Insurance
SC-5.06.B.	Property Insurance
SC-6.06.B.	Subcontractors, Suppliers and Others
SC-6.06.C.	Subcontractors, Suppliers and Others
SC-9.03.	Project Representative
SC-14.02.A.1.	Applications for Payments
SC-14.02.B.2.	Review of Applications
SC-14.02.C.	Payment Becomes Due
SC-14.07.A.3.	Lien Waivers or Releases

Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC No. C-700, Latest Edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-2.05.B.3. Schedule of Values.

Delete Paragraph 2.05.B.3. in its entirety.

SC-4.02. Subsurface and Physical Conditions.

Add the following new paragraph(s) immediately after paragraph 4.02.B:

- C. In the preparation of the Contract Documents, Engineer or Engineer's Consultants have relied upon the following reports of explorations and tests of subsurface conditions at the site:
- Geotechnical borings and Geotechnical Report dated December 2, 2020 prepared by All Testing Specialists, LLC entitled Geotechnical Investigation, Proposed CTH M Reconstruction, Washington County, Wisconsin.

The reports contain technical data upon which CONTRACTOR may rely on to design the slope stability system. These geotechnical investigations represent conditions recorded at the specifically identified locations shown in the report and on the plans. CONTRACTOR may not interpret or assume that this technical data represents conditions at any other location.

- D. In the preparation of the Contract Documents, Engineer or Engineer's Consultants have relied upon the following drawings of physical conditions in or relating to existing surface

and subsurface structures (except Underground Facilities) which are at or contiguous to the Site: None.

SC-5.03. Certificates of Insurance.

Delete paragraph 5.03.B in its entirety and add the following paragraphs after paragraph 5.03.A.:

- B. Failure of Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- C. By requiring insurance and insurance limits herein, Owner does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

SC-5.04. CONTRACTOR's Liability Insurance.

See Appendix A for the Washington County Insurance Requirements for Contractors & Subcontractors – Construction Projects.

SC-5.04.B.1. Policies of Insurance.

Add the following paragraph after paragraph 1:

Additional insured shall include Owner (Washington County) and Engineer (T.B.D.).

SC-5.06.B. Property Insurance.

Delete paragraph 5.06.B. in its entirety.

SC-6.06.B. Subcontractors, Suppliers and Others.

Add a new paragraph immediately after paragraph 6.06.B. of the General Conditions as follows:

- 1. Within five days of the bid opening and before the Notice of Award, the apparent Successful Bidder is required to identify each proposed Subcontractor, Supplier or other organization, furnishing or performing Work having a value in excess of 5 percent of the total amount of the bid.

SC-6.06.C. Subcontractors, Suppliers and Others.

Add the following sentence at the end of paragraph 6.06.C.2.:

Owner furnish to any such Subcontractor, Supplier or other individual or entity, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor, Supplier or other individual entity.

SC-9.03. Project Representative.

Add the following sentence at the end of paragraph 9.03.A.:

Resident Project Representative (RPR) will have the authority and duties as defined in Section 105 of the “**Standard Specifications for Highway and Structure Construction,**” State of Wisconsin, Latest Edition.

SC-14.02.A.1. Applications for Payment.

Delete paragraph 14.02.A.1 in its entirety and insert the following in its place:

1. At least forty days before the date established for each progress payment (but not more often than once a month), Contractor shall submit to Engineer an Application for Payment covering the Work completed as of the date of the Application. If payment is requested by Contractor on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, Contractor shall submit three documents: an invoice from the material or equipment supplier which states item's cost; an item-specific bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest therein; all of which will be satisfactory to Owner. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

SC-14.02.B.2. Review of Applications.

Delete paragraph 14.02.B.2. and insert the following in its place:

2. Engineer's recommendation of any payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on accompanying data, that to the best of Engineer's knowledge, information and belief:

SC-14.02.C. Payment Becomes Due.

Delete paragraph 14.02.C. in its entirety and insert the following in its place:

- C. Within thirty days after presentation of Engineer's recommendation of payment to Owner, the amount recommended will (subject to the provisions of paragraph 14.02.D.) become due, and when due will be paid by Owner to Contractor.

SC-14.07.A.3. Lien Waivers or Releases.

Delete paragraph 14.07.A.3.

SECTION 00900

ADDENDA

ADDENDUM NO. _____

CTH P

POLK - JACKSON

SHERMAN ROAD TO STH 60

WASHINGTON COUNTY

PROJECT NUMBER: HWY 24-01

To: Prospective Bidders

All Bidders submitting a Bid on the above Contract shall carefully read this Addendum and give it consideration in the preparation of their Bid.

~~~~~  
THIS ADDENDUM IS ISSUED TO MODIFY, EXPLAIN, AND/OR CORRECT THE ORIGINAL DRAWINGS, SPECIFICATIONS, AND/OR PREVIOUS ADDENDUMS, AND IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS. PLEASE ATTACH THIS ADDENDUM TO THE SPECIFICATIONS AND NOTE RECEIPT OF THIS ADDENDUM IN THE PROPER SPACE PROVIDED IN THE BID FORM. PLEASE READ ENTIRE ADDENDUM. THIS ADDENDUM SHALL BE BINDING UPON ALL CONTRACTS.  
~~~~~

Return the completed and signed acknowledgement of this addendum with your sealed response for this request.

Acknowledgment of Addendum (to be returned with your sealed bid)

I _____, as an authorized representative of _____
_____ have received this Addendum for **RFB #HWY 24-01** and fully understand and will comply with all the information contained within this Notice.

Signed: _____ Date: _____

SECTION 01010

SUMMARY OF WORK

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division I - General Requirements apply to this Section except as modified herein.

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work covered by Contract Documents is to be performed under a single prime contract.
- B. Nothing contained in Drawings, Specifications or other parts of Contract Documents modifies the intent of Contract Documents as set forth in Article 3 of General Conditions, or alters Contractor's responsibilities regarding subcontractors, suppliers or those others as provided by Paragraph 6.06 of the General Conditions.
- C. Comply with the following laws, codes, ordinances and regulations:
 - 1. All work shall be in accordance with the "Standard Specifications for Highway and Structure Construction," State of Wisconsin, Latest Edition, and all Subsequent Supplemental Specifications, except Sections 101 through 104, 106 through 109, and the measurement and payment sections, as may be modified by the Contract Documents.
 - 2. Wisconsin State Administrative Code.
 - 3. Local Codes and Ordinances.

1.02 DESCRIPTION OF WORK

RECONSTRUCTION OF CTH P, consisting of approximately the following items/quantities:

Excavation Common	21,925	CY
Base Aggregate Dense	33,040	TON
Breaker Run	2,965	TON
HMA Pavement	9,210	TON
Concrete Masonry Culverts	95	CY
Culvert Pipes	725	LF
Storm Sewer	590	LF
Concrete Curb & Gutter	960	LF
Salvaged Topsoil	21,400	SY
Epoxy Pavement Markings	15,530	LF

1.03 CONTRACTOR USE OF SITES

Confine operations at sites to areas permitted by:

1. Law.
2. Ordinances.
3. Permits.
4. Contract Documents.

Contractor shall assume full responsibility for protection and safekeeping of material and products stored on and off premises.

Contractor shall obtain and pay for use of additional storage or work area if needed for construction operations.

Time Restrictions for Performing Work: To reduce the potential impact of Construction Noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. At a minimum, the special provisions will require that motorized construction equipment shall not be operated between 9:00 PM and 6:00 AM without prior written approval of the project engineer. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes.

No work shall be done outside of the standard hours without written permission of the Owner. However, emergency work during these hours may be done without prior permission.

1.04 WORK SEQUENCE

- A. Contractor is responsible for establishing a schedule, to be approved by the Owner, for the sequence and progress of the Work that is designed to meet the completion date. Contractor shall be solely responsible for coordination of all Work to ensure completion of the Work within the time limits specified in these Contract Documents.
- B. All erosion control devices shall be installed prior to the commencement of any Work.
- C. When public interest necessitates, the Owner may determine the starting place and operations sequence of construction.
- D. When, in the Owner's judgment, Contractor has obstructed or closed a street or is conducting operations at a greater scale than is necessary, the Owner may require Contractor to finish sections with Work in progress before starting additional sections.

1.05 FIELD VERIFICATION OF DRAWING INFORMATION

- A. It is the responsibility of the Contractor to acquaint himself with the location of all underground structures which may be encountered or which may be affected by work under the contract.
- B. The Contractor shall field verify the size and location of existing structures, equipment, and piping depicted on the Drawings. Information on the Drawings is based upon available record drawings at the time of preparation and is not guaranteed to be complete or correct.
- C. Where the construction is in an area serviced by an underground utility marking service, the Contractor shall notify such service three (3) working days prior to commencing his operations.

1.06 PRECONSTRUCTION CONFERENCE

Owner will schedule a conference after effective date of Agreement.

Attendance Required: Owner, Engineer, Construction Consultant, and Contractor.
The agenda will include, but not limited to:

- 1. Review of insurance certificates.
- 2. Submission of list of Subcontractors, list of products, Schedule of Values, progress schedule, traffic control plan, erosion control implementation plan, and emergency contact list that have not been previously submitted.
- 3. Designation of personnel representing the parties in Contract and the Engineer.
- 4. Procedures and processing field decisions, submittals, and substitutions, applications for payments, bid request, Change Orders and Contract closeout procedures.
- 5. Scheduling.
- 6. Use of premises by Owner and Contractor.
- 7. Security and housekeeping procedures.
- 8. Procedures for maintaining record documents.

END OF SECTION

SECTION 01020

ALLOWANCES

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division 1 - General Requirements apply to this Section except as modified herein.

1.01 EXAMINATION OF SITE

- A. The Contractor, prior to submitting this bid, shall visit the site of the said Work and familiarize himself with the location and conditions affecting the Work thereon and/or therein. No allowance will be granted because of lack of knowledge of such conditions.

1.02 INCIDENTAL WORK

- A. Incidental Work shall include all Work not particularly specified or that which may be specified and not provided for in a basis for payment, that is of an incidental or temporary nature, and required in order to safely and satisfactorily carry out the intent of the Work as indicated on the drawings and in the specifications. The cost of such Work shall be merged with and included in the prices bid under all items of Work.

END OF SECTION

SECTION 01040

COORDINATION

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division 1 - General Requirements apply to this Section, except as modified herein.

1.01 COOPERATION WITH OTHER CONTRACTORS

- A. The Contractor shall work in harmony with other contractors, or with or Owner's forces engaged in collateral work. In case of dispute, the decision of the Engineer shall be final and binding upon the parties affected.

1.02 COORDINATION OF WORK

- A. The Contractor shall be responsible for the general coordination of the entire project. The Contractor shall be responsible to advise and coordinate the phases of Work with their subcontractors and their suppliers.
- B. Contractor to coordinate erosion control and work near environmentally sensitive areas with Engineer and County representative.

1.03 HAUL ROUTES AND FILL PERMITS

- A. The Contractor shall supply a list of designated haul routes for approval by the Washington County Highway Department prior to start of construction.

1.04 NOTICE OF INTENT TO PROCEED

- A. Contractor shall notify all appropriate governmental and regulatory units, including emergency services departments, at least four (4) working days prior to his commencing operations of his intent to start Work.
- B. Contractor shall notify the Owner, the Engineer, and all utilities and/or underground facilities locators whose property may be affected by the Contractor's operations at least three (3) working days prior to his commencing operations of his intent to start Work.
- C. Contractor shall notify the Owner at least three (3) working days prior to his commencing operations of his intent to start Work. Continuing notice shall be given to the Owner each time construction is resumed after shutdown.

END OF SECTION

SECTION 01060

REGULATORY REQUIREMENTS

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division I - General Requirements apply to this Section except as modified herein.

1.01 PERMITS AND LICENSES

- A. The Owner or Engineer has applied for or obtained the following permits and approvals:
 - 1. USACE:
 - i. Section 404 Wetland Fill & Waterway Crossing permit
 - 2. WDNR:
 - i. Wetland Fill & Waterway Crossing Individual permit
 - ii. Construction Site Stormwater Runoff (NOI) permit
- B. The Contractor shall procure all other necessary permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the Work.
- C. All Work requiring permits or licenses shall abide by the governing permit/license specifications where they exceed the requirements stated in these specifications.

1.02 COMPLIANCE WITH LAWS

- A. The Contractor, his agents and employees, shall at all times observe and comply with all Federal and State Laws, local laws, ordinances, codes and regulations which in any manner affect the conduct of the Work and all such orders or decrees as exist at the present and which may be enacted later, of bodies or tribunals having jurisdiction or authority over the Work. Contractor shall protect and hold harmless the Owner, the Engineer and their representatives, against any claim or liability arising from the violation of any such law, ordinance, code, regulation or order.
- B. In particular, Contractor shall comply with all local ordinances regulating noise levels, dust, mud, roadway load limits and barricades/warning devices required at the site.

1.03 EROSION CONTROL

- A. The Contractor shall submit an erosion control implementation plan for review and approval prior to the preconstruction conference.

END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

1. GENERAL

1.01 ENGINEER'S ESTIMATE OF QUANTITIES

- A. Engineer's estimated quantities for unit price pay items, as listed in the Bid Schedule, are approximate only and are included solely for the purpose of comparison of Bids. The Bid Schedule does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as the Bid Schedule may deem necessary. Contractor will not be entitled to any adjustment in a unit bid price as a result of any change in an estimated quantity and agrees to accept the aforesaid unit bid prices as complete and total compensation for any additions or deductions caused by a variation in quantities as a result of more accurate measurement, or by any changes or alterations in the Work ordered by the Bid Schedule, and for use in the computation of the value of the Work performed for progress payments.

1.02 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- A. The method and measurement and basis of payment for all unit price pay items shall be in accordance with the pertinent sections of the "Standard Specifications for Highway and Structure Construction," State of Wisconsin, Latest Edition (hereinafter referred to as WisDOT standard specifications), except for the modifications made by the special provisions specific to this project. Reference special provision section for complete list and details.

1.03 INCIDENTAL CONSTRUCTION

- A. All work necessary to complete the project in accordance with the plans and contract, and not specifically accounted for in any other bid item, shall be considered incidental to the other bid items. The CONTRACTOR shall include the cost to provide the work in his separate unit prices and shall not be paid separately for these items.

END OF SECTION

SECTION 01200

PROJECT MEETINGS

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division I - General Requirements apply to this Section except as modified herein.

1.01 PRECONSTRUCTION MEETING

- A. The Contractor shall attend a preconstruction meeting prior to commencing work on the site. The Contractor will be advised of the exact date, time and location of the meeting.
- B. The meeting shall be attended by someone having the authority to make informed commitments for the Contractor.
- C. The Contractor's representative shall be prepared to present a tentative construction schedule setting out target dates for completion of key elements. He shall also have a rough sketch showing the location of the Contractor's intended haul roads and material storage points as well as a traffic control plan and erosion control implementation plan to be approved by the Engineer and Owner. He shall have the name of the foreman who will be staffing the project for the Contractor, and a name and telephone number of a 24-hour contact in case of an after-hours emergency.

1.02 COORDINATION MEETINGS

- A. The Contractor shall attend weekly project coordination meetings.

1.03 FINAL WALK THROUGH

- A. The Contractor shall schedule final walk through at the site with Owner and Engineer upon substantial completion and also upon final completion.

END OF SECTION

SECTION 01300

SUBMITTALS

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division I - General Requirements apply to this Section except as modified herein.

1.01 SHOP DRAWINGS

- A. Contractor shall submit four (4) copies to the Owner's representative for review and approval. The Contractor shall not proceed until the Owner's approval is given.
- B. In the event of a substitution, the Owner will require from the Contractor a credited deduction from the Contract amount equal to any savings in material cost resulting from use of the proposed substitute.

1.02 HMA MIXTURE DESIGNS & ASPHALTIC MATERIAL (PG GRADE) TICKETS

- A. HMA mixture designs and asphaltic material (PG Grade) tickets are required.
- B. Contractor shall submit copy to the Owner's representative for review and approval. The Contractor shall not proceed until the Owner's approval is given.
- C. In the event a substitution is approved, the Owner will require from the Contractor a credited deduction from the Contract amount equal to any savings in material cost resulting from use of the proposed substitute.

END OF SECTION

SECTION 01400

QUALITY CONTROL

1. GENERAL

The requirements of the Contract Documents, including the General Conditions the Supplementary Conditions and Division 1 - General Requirements apply to this Section except as modified herein.

1.01 RESPONSIBILITY

- A. The Contractor shall assume complete and sole responsibility for the quality of work. If changes or adjustments are recommended by the Contractor, they may be made only upon written approval of the Engineer.
- B. The Contractor shall assume full responsibility for the furnishing of uniform and satisfactory materials. Quality Management Programs for base aggregate, HMA pavement nuclear density, and concrete ancillary are outlined in the special provisions section of this project manual.

1.02 AUTHORITY OF ENGINEER

- A. All Work shall be done in compliance with the Contract Documents. The Engineer shall decide all questions which shall arise as to the quality and acceptability of materials furnished, Work performed, workmanship, rate of progress of Work, interpretation of the plans and specifications acceptable fulfillment of the Contract, compensation and disputes and mutual rights between Contractors under the Specifications. He shall determine the amount of Work performed and materials furnished.
- B. Failure or negligence on the part of the Engineer to condemn or reject substandard or inferior work or materials shall not be construed to imply an acceptance of such Work or materials, if it becomes evident at any time prior to the final acceptance of the Work by the Owner. Neither shall it be construed as barring the Owner, at any subsequent time, from the recovery of damages or of such a sum of money as may be needed to build anew all portions of the substandard or inferior Work or replacement of improper materials wherever found.

1.03 INSPECTION

- A. All materials and each part of detail of the Work shall be subject at all times to inspection by the Owner or his authorized representative and the Contractor will be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship and the diligent execution of the Contract. Such inspection may include mill, plant or shop inspection and any material furnished under these specifications is subject to such inspection. The Owner or his representatives shall be allowed access to all part of the Work and shall be furnished with such information and assistance by the Contractor as is determined by the Owner or his representative to make a complete and detailed inspection.

1.04 WORKMANSHIP

- A. All workmanship shall conform to the best standard practice. Unless otherwise specified, the Specifications or recognized association of manufacturers and contractors or industrial manufacturers shall be used as guides for the standards of workmanship.
- B. All exposed items of Work shall present a neat workmanlike appearance and shall be as true to shape and alignment as possible to obtain with measuring or leveling instruments generally used in the respective types of Work. Items of Work shall be sound and fully protected against damage and premature deterioration. It is specifically understood that in all questions of quality and acceptability of workmanship, the Contractor agrees to abide by the decision of the Engineer.

1.05 DEFECTIVE MATERIALS

- A. All materials and workmanship not conforming to the requirements of the Contract Documents shall be considered as defective, and all such materials, whether in-place or not, shall be rejected and shall be removed from the Work by the Contractor at his expense. Upon failure on the part of the Contractor to comply with any order of the Owner relative to the provisions of this article, the Owner shall have the authority to remove and replace such defective material and to deduct the cost of removal and replacement from any monies due or which may become due the Contractor.

1.06 SPECIFICATIONS TO BE AVAILABLE

- A. The Contractor shall keep a legible copy of the plans, specifications and all permits at the site of the work at all times.

END OF SECTION

SECTION 01500

CONSTRUCTION FACILITIES

1. GENERAL

The requirements of the Contract Documents, including the General Conditions the Supplementary Conditions and Division I - General Requirements apply to this Section except as modified herein.

1.01 TEMPORARY SERVICES

- A. Where required in order to accomplish the Work, Contractor shall provide temporary potable water supply, temporary grounded electrical service and containerized trash collection removal service.

1.02 CONSTRUCTION DEBRIS

- A. The Contractor shall at all times keep the site of the Work, including all private or public property involved in or adjacent to the Work, free from any rubbish, surplus or waste materials deposited by persons engaged in the Work or which have accumulated as a result of the Work.
- B. The Contractor shall remove all surplus materials, tools, equipment or plant, leaving the site of the Work and all portions of the finished Work clean, unobstructed and ready for use before the Work will be considered completed. After written notification, the Engineer may have removed from the site of the Work all rubbish, surplus or waste materials which the Contractor has neglected or refused to remove and deduct the costs of such removal from any monies due the Contractor.
- C. The Owner or his representative shall have the right to regulate the Work in order to control objectionable dust, mud or other nuisances in or adjacent to the area of the project site.

1.03 STORAGE OF MATERIALS

- A. The Contractor shall not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval of the Engineer.
- B. Materials delivered to the Contractor are to be neatly and compactly placed along or near the site in such manner as to cause the least inconvenience to the property owners and insure the safety of the general public. Materials shall not be placed within 20 feet of any hydrant, pedestrian crossing or intersection.

1.04 ACCESS

- A. Maintain emergency and local vehicular access through the construction period, including during underground operations, removals, and grading operations. Provide access on the existing pavement, new pavement, temporary or new aggregate base course. Do not close or remove from service any residential or commercial driveway approaches without giving 48 hours' notice to the occupants of the premises to remove their vehicle(s) prior to removal or closing of the driveway access approach.

- B. The Owner and his representatives shall have access to the site all times. Other contractors, subcontractors and material suppliers shall have access to the site at all times.
- C. Where such permanent access must be disrupted by this Contractor's operations, temporary access shall be provided by the Contractor in such a manner as to allow construction equipment and materials to ingress and egress the site.
- D. The Contractor shall neither shut off nor unnecessarily interfere with either pedestrian or vehicular access to adjacent property without the consent of the Engineer.

1.05 TRAFFIC CONTROL

- A. The work under this item shall conform to the requirements of Section 643 of the standard specifications and as hereinafter provided.
- B. Traffic control shall be the responsibility of the Contractor.
- C. Contractor shall provide a minimum of one-lane with flagging operations to local traffic at all times.
- D. The Contractor shall be responsible for the erection and maintenance of all drums, barricades, lights and signs necessary for public safety and convenience in accordance with all applicable requirements. In general, all hazards within the limits of the Work or on detours around the Work must be marked with well-painted, well-maintained drums, barricades, reflectors, electric lights, flashers and warning and directional signs in sufficient quantity and size adequate to protect life and property. These safeguards shall be moved, changed, increased or removed as required during the progress of the work to meet changing conditions.
- E. When a street is closed to through-traffic, barricades shall be placed at the adjacent intersections as well as at the location of the obstruction. Detour signs shall be attached to the barricades at the adjacent intersections. Detour signs shall be adequately illuminated and/or reflectorized so as to be clearly visible at all times.
- F. The Engineer reserves the right to require that "snow fence" be installed at locations where streets are closed for the full width of the roadway. Barricades shall be maintained in rigidly assembled condition. All warning devices shall be kept clean and in good repair so as to be readily discernible at all times.
- G. Whenever the Contractor's operations obstruct or endanger a traffic lane, and no marked detour has been provided, the Contractor shall furnish a flagman to direct traffic through or around the congested area. The Engineer shall have the right to require additional flagmen, as he may deem necessary.
- H. Adequate protection shall be provided around all openings wherever required to safeguard the Work or the public. All openings and surface obstructions shall be protected with drums, barricades, signs, lights and warning devices in accordance with local requirements.
- I. As a minimum, the provisions of the FHWA "Manual on Uniform Traffic Control Devices" shall be met. All traffic control procedures shall be subject to the approval of the Engineer.

1.06 PROTECTION FROM DAMAGE

- A. During performance and up to the completion date of Work, the Contractor shall be under an absolute obligation to safeguard from and be solely responsible for all damage resulting from his Work operations to water, gas, steam or drain pipes, street and house sewers, house services, catch basins, manholes, conduits, cables, hydrants, valves and stop boxes, light poles, street lighting, cables and transformers, traffic signals, traffic and street signs, fire and police alarm boxes, mail boxes or any other privately or publicly owned existing installation or structure. He shall also safeguard from and be solely responsible for damage to pavements, sidewalks, curbs, gutter, trees, shrubbery or lawns which are scheduled to remain.
- B. The Contractor shall be required to replace any and all damaged pavement, stone shoulders, concrete curb and gutter, driveways, sidewalks, mail boxes, privately owned shrubs and trees, etc., as a result of his construction operation, unless otherwise indicated on the plans. All material for restoration shall be of at least equal quality and/or workmanship to that which was damaged unless specifically required, otherwise by the plans or other sections of the specifications. The cost for said restoration shall be considered incidental to construction.

The Contractor will be required to protect from damage or dislocation all manhole and inlet frames, valve boxes and hydrants, until final completion of his scheduled Work. Upon completion, the Contractor shall request the Engineer to join him in a final inspection to verify the condition of all frames and boxes. No claims for extra compensation will be entertained as a result of broken or dislocated frames, boxes or hydrants prior to the final inspection.

1.07 DRAINAGE

- A. The Contractor must provide for the flow of existing surface drainage in existing sewer, water courses, culverts, gutters, catch basins, drains, etc., which are affected by the prosecution of the Work. Any diversion of existing water courses shall be done solely on the land of the Owners unless proper rights for diversion on other land have been procured.
- A. Excessive water ponding, due to grading shall be avoided. Temporary facilities shall be provided by the Contractor to handle “trapped” water until such time that permanent drainage facilities are constructed.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

1. GENERAL

The requirements of the Contract Documents, including the General Conditions, the Supplementary Conditions and Division 1 - General Requirements apply to this Section except as modified herein.

1.01 CLEAN-UP AND FINAL INSPECTION

- A. The Contractor shall have thorough and systematic clean-up operations followed closely behind the construction Work. He shall, at his own expense, remove and properly dispose of all water, dirt rubbish or any other foreign substances. The Contractor shall contact the Engineer to schedule a walk through prior to leaving the site. Any defects of any nature whatsoever shall be promptly corrected at his own expense. Notice to begin final cleaning and repairs, if such is needed, will be given by the Engineer and shall be complied with by the Contractor. The Engineer will make an inspection of the Work during the progress of final cleaning and repairing of any Work so inspected shall be kept clean by the Contractor until the final inspection by the Engineer and the acceptance of the entire Work. When the Contractor has finally cleaned and repaired the Work, he shall notify the Engineer that he is ready for a final inspection and the Engineer will thereupon inspect the Work. If the Work is not found satisfactory, the Engineer may require further cleaning and repairing and when these are completed, will again inspect the Work. In no case will the job be considered complete until the Contractor has complied with all the requirements set forth and the Engineer has made his final inspection of the entire Work and is satisfied that the entire Work is properly and satisfactorily constructed in accordance with the plans and specifications and that such Work is ready for acceptance by the Owners.

1.02 RESTORATION

- A. Existing pavement, driveways, walks, and parking areas shall be saw cut full depth to provide a smooth transition to the new improvements. All such areas encountered shall be replaced in kind.

Fine grading prior to paving shall be considered incidental to the Contract.

- B. The Contractor is responsible for lawn replacement and landscaping repairs arising from their work. All such areas encountered shall be replaced in kind.

1.03 WARRANTY

The Contractor shall be liable for the acceptable condition of all Work, both during construction and throughout the warranty period. The warranty period to be for a period of one (1) year shall commence on the date of completion as determined by the Owner. Should any defect appear either during construction or the warranty period, the Contractor shall in conformance to a written order from the Owners, make the required repairs or replacement at his own expense.

1.04 AS BUILT

- A. The Contractor will be required to coordinate with the on-site Engineer to keep an accurate record of the as-built location and/or elevation of Work under his control. This record may be a print of the construction plans upon which all deviations from the proposed construction have been legibly recorded. Such as-builts shall be transmitted by the Engineer to the Owner at the conclusion of the Work.

1.05 FINAL PAYMENT

- A. After the work has been finally accepted by the Owner and all as-built information delivered to the Owner, the Contractor will be paid in accordance with the final payment provisions of these Specifications.

END OF SECTION

SPECIAL PROVISIONS

Special Provisions

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SPECIAL PROVISIONS

1. General.

All references in these special provisions to department shall refer to the Washington County Highway Department or their representatives.

Perform the work under this construction contract for Project HWY 24-01, Polk - Jackson, Sherman Road to STH 60, CTH P, Washington County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2024 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

2. Scope of Work.

The work under this contract shall consist of common excavation, base aggregate dense, storm sewer, culvert pipes, box culvert extension, HMA pavement, concrete curb and gutter, signing, pavement marking, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

3. Prosecution and Progress.

Begin work within 10 calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the approved start date.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Work cannot start until June 3, 2024.

Fish Spawning

There shall be no instream disturbance of Cedar Creek, its tributaries, and other adjacent waterways within the corridor at Station 589+25 or 613+50 as a result of construction activity under or for this contract, from March 1 to June 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of fish and other aquatic organisms.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Northern Long-eared Bat (*Myotis septentrionalis*)

Northern long-eared bats (NLEB) have the potential to inhabit the project limits because they roost in trees, bridges, and culverts. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work, and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

The local municipality will perform the following operations after October 31 and prior to April 1:

- Cutting down and removing trees.

Migratory Birds

No evidence of swallow or other migratory bird nests have been observed on or under the following structure(s) during the preconstruction inspection. However, if nesting is later observed prior to or during construction, the contractor shall implement avoidance/deterrent measures or obtain a depredation permit. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from April 15 to August 31.

- 613+52

Swallow or other migratory bird nests have been observed on or under the existing structure(s). All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from April 15 to August 31.

See below for information on affected structure(s). As a last resort, apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds or clearing nests from all structures before the nests become active in early spring.

Either prevent active nests from becoming established or prevent birds from nesting by installing and/or maintaining one suitable deterrent device on the following structure(s) prior to nesting activity under the bid item Installing and Maintaining Bird Deterrent System:

- B-66-95 (613+50)

4. Traffic.

CTH P will be closed to through traffic. The detour will utilize STH 145, US 45, and STH 60 and will be installed and maintained as part of WisDOT Project 2711-06-70.

Coordinate with local officials, emergency responders, local residents, and school districts concerning construction operations and scheduling prior to construction. Notification shall occur four days in advance of the start of work, closures of streets, and prior to traffic control changes. Advance notification as described above is considered incidental to the Traffic Control bid item.

Provide 24-hour contact information, including current telephone number(s), to the engineer, local officials, and emergency responders in the event a safety hazard develops. Repair, replace, or restore the damaged or disturbed traffic control devices within 12 hours from the time notified.

Maintain access to all properties according to standard spec 104.6.4. When construction operations will temporarily restrict access to a property or change existing access to a property, coordinate with the owner or resident at least 48 hours prior to the work.

Portable Changeable Message Signs notifying motorists of upcoming construction shall be in place seven calendar days prior to closure of the road.

Portable Changeable Message Signs, drums, channelizing devices and other traffic control items necessary beyond the included bid items shall be considered incidental to the Traffic Control bid item.

5. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

6. Holiday and Special Event Work Restrictions.

Do not haul materials of any kind along or across any portion of the highway carrying STH 60, USH 45, or STH 145 traffic during the following holiday and special event periods:

- From noon Friday, May 24, 2024 to 6:00 AM Tuesday, May 28, 2024 for Memorial Day;
- From noon Wednesday, July 3, 2024 to 6:00 AM Monday, July 8, 2024 for Independence Day;
- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day.

7. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 14 calendar days in advance of when the prior work will be completed and the site will be available to the utility owner. Follow-up with a confirmation notice to the engineer and the utility owner not less than 3 working days before the site will be ready for the utility owner to begin its work.

The location of utility installations as described in this article are approximate.

AT&T maintains underground **communication** facilities along the east side of CTH P for the entire length of the project and along the west side of CTH P from 624+41 to STH 60. AT&T maintains underground communication facilities crossing CTH P at 597+47, 617+31 and 626+15.

AT&T plans to install new overhead facilities onto We Energies – Electric poles on the west side of the road. AT&T plans to complete this work prior to construction.

AT&T plans to discontinue their underground facilities in place along the east side of the road from 577+00 to 617+31, and the crossings of CTH P at 597+47 and 617+31. AT&T plans to install new underground facilities from the existing handhole at 574+75, RT, then north to the existing pedestal at 617+31, placed 1' inside the east r/w line. AT&T plans to install new underground facilities crossing CTH P at 602+50. AT&T plans to complete this work prior to March 30, 2024.

Midwest Fiber Networks maintains underground **communication** facilities along the east side of CTH P for the entire length of the project.

Midwest Fiber plans to relocate their facilities at the following locations (to a depth to avoid proposed work):

- 577+36, 21' RT to 577+78, 47' RT.
- 584+60, 46' RT to 577+78, 47' RT.
- 604+35, 45' RT to 606+00, 22.5' RT to 607+47, 22' RT to 609+00, 21.7' RT to 611+79, 18' RT to 613+45, 24.9' RT to 617+44, 20' RT to 618+41, 30.2' RT to 619+85, 58' RT to 620+42, 42.7' RT.

No conflicts are anticipated for the remainder of Midwest Fiber Networks facilities; however, they requested a Midwest Fiber Networks employee to be on site when working in the vicinity of the Midwest Fiber Networks facilities at the following locations:

- 593+00 to 594+50, RT; and 596+00 to 596+50, RT.

Provide notice 3 working days in advance of working at the above locations.

Midwest Fiber Networks plans to complete their work prior to March 30, 2024.

Spectrum maintains overhead **communication** facilities along the west side of CTH P from Sherman Road to the north project limits and underground communication facilities along the west side of CTH P, from 590+11 to 597+14 and from 617+75 to the north project limits.

No conflicts are anticipated for Spectrum's facilities.

Village of Jackson - Sewer maintains underground **sanitary sewer** facilities along the centerline of Daisy Drive, and along the east side of CTH P from Poppy Road to 609+14. Sanitary sewer manholes are within the project limits at the following locations:

- 583+95, 62.9' RT.
- 593+89, 20.4' RT.
- 597+89, 17.5' RT.
- 601+88, 17.2' RT.
- 605+88, 17.1' RT.
- 609+14, 16.4' RT.

Village of Jackson plans to adjust the frame and cover of the existing manholes during construction. It is anticipated this work will require one working day to complete. Provide 7 calendar day advance notice after the base aggregate dense is placed, but prior to the lower layer of asphalt being placed, and the site will be available to Village of Jackson.

No conflicts are anticipated for the remainder of Village of Jackson sewer facilities.

Village of Jackson - Water maintains underground **water main** facilities along the north side of Daisy Drive, along the east side of CTH P from Poppy Road to 624+96, crossing CTH P from 624+96 to 625+69 and along the west side of CTH P from 625+69 to the north project limits. Water valve boxes are located within the project limits at Station 584+14, 53.4' RT; Station 594+02, 83.4' RT; Station 594+00, 41.4' RT; Station 599+88, 32' RT; Station 605+92, 34.8' RT; Station 615+53, 27.6' RT; Station 615+55, 25.9' RT; Station 617+47, 29.9' RT; Station 621.30, 31.6' RT; and Station 621+32, 29.5' RT. Hydrants are located within the project limits at Station 584+15, 49.1' RT, Station 594+20, 83' RT; Station 615+53, 56.4' RT; and Station 621+34, 75' RT. A water manhole is located within the project limits at Station 611+42, 27.2' RT.

Village of Jackson plans to adjust the water valve boxes and water manhole and relocate the hydrant at Station 584+15 during construction. It is anticipated this work will require two working days to complete. Provide 7 calendar day advance notice after the base aggregate dense is placed, but prior to the curb and gutter and lower layer of asphalt being placed, and the site will be available to Village of Jackson.

No conflicts are anticipated for the remainder of Village of Jackson water facilities.

We Energies - Electric maintains overhead **electric** facilities along the west side of CTH P for the entire length of the project and overhead crossings at 577+25, 586+49, 600+53, 603+71, 617+89 and 622+00. We Energies maintains underground electric facilities crossing CTH P at 579+67, 592+19, 594+67, 602+23 and 618+99.

We Energies plans to relocate their overhead facilities at the following locations:

- 577+47, 33' RT; new pole
- 579+67, 41' LT; lower pole
- 581+95, 41' LT; lower pole
- 586+48, 41' LT; lower pole
- 603+44, 44' LT; lower pole
- 608+67, 42' LT; hold pole during culvert installation
- 617+75, 35' LT; hold pole during storm sewer installation

We Energies plans to start their work no later than March 1, 2024 and anticipates the work will take 45 working days to complete.

No conflicts are anticipated for the remainder of We Energies electric facilities.

Anticipate grading around the power poles during construction. No additional compensation will be made for grading around the poles.

We Energies - Gas maintains underground **gas** facilities along the west side of CTH P for the entire length of the project.

We Energies plans to relocate their facilities at the following locations (to a depth to avoid proposed work):

- 577+00 to 581+00, 1' inside west right-of-way.
- 588+50 to 590+50, 31' inside west right-of-way.
- 603+00 to 615+00, 2' inside west right-of-way.
- 615+00 to 617+50, 5' inside west right-of-way.

No conflicts are anticipated for the remainder of We Energies gas facilities.

We Energies plans to complete their work prior to March 30, 2024.

Wisconsin Department of Transportation maintains underground **traffic signal** facilities within the northbound lane at 624+00 and along the east side of CTH P from 624+00 to the north project limits.

Wisconsin Department of Transportation plans to install new facilities as part of Project 2310-13-70 (STH 60) during construction.

8. Other Contracts.

The following projects will be under construction concurrently with the work under this contract. Coordinate trucking, detours, work zone traffic control, roadway and lane closures, and other work items as required with other contracts.

WisDOT Project 2310-13-70, Main Street, Village of Jackson, CTH P to Eagle Drive, STH 60, Washington County, Wisconsin is under a Wisconsin Department of Transportation contract.

WisDOT Project 2711-06-70, CTH P, Polk – Jackson, STH 145 to Sherman Road, Washington County, Wisconsin is under a Wisconsin Department of Transportation contract.

9. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has applied for a Section 404 Permit from the U.S. Army Corps of Engineers. Comply with the requirements of the permit in addition to requirements of the special provisions.

If the contractor requires work outside the proposed slope intercepts, based on their method of operation to construct the project, it is the contractor's responsibility to determine whether a U.S. Army Corps of Engineers Section 404 permit modification is required. If a Section 404 permit modification is necessary, obtain the permit modification prior to beginning construction operations requiring the permit. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the permit modification. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit modification request.

10. Information to Bidders, Construction Site Storm Water Permit (NOI) for Storm Water Discharges.

The department has applied for permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Construction Site Storm Water Permit (NOI), (WPDES Permit No. WI-S067831-6). The permit can be found at:

<https://dnr.wisconsin.gov/permits/water>

A certificate of permit coverage is available from the department office by contacting Brad Abraham at (262) 335-4437. Post the permit certificate in a conspicuous place at the construction site.

11. Construction Over or Adjacent to Navigable Waters.

Cedar Creek is classified as a state navigable waterway under standard spec 107.19.

12. 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° F) application.

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

13. Environmental Protection, Dewatering.

Work areas for culverts shall be fully dewatered. 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

The contractor shall submit and obtain the necessary Wisconsin Discharge Elimination System (WPDES) permits and/or high capacity well approvals for the dewatering of the project if required.

The cost of all work and materials associated with water treatment and/or dewatering is incidental to the bid items the work is associated.

14. 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.

15. Street Sweeping.

Remove dirt and dust particles from the roadway and impacted adjacent roadways using a street sweeper periodically during the project as directed by the engineer. Provide a self-contained mechanical or air conveyance street sweeper and dispose of the accumulated material. Street sweeping shall be considered incidental to other items.

16. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and no further meetings will be required unless directed by the engineer. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks prior notice to the engineer to allow for these notifications.

17. Prime Contractor Participation.

The contractor shall perform at least 30 percent of the original contract amount with the contractor's own organization in accordance with standard spec 108.1.2.

18. Removing Billboard Posts, Item 204.9060.S.

A Description

This special provision describes removing billboard posts conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Billboard Posts in each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S	Removing Billboard Posts	EACH

19. Excavation Common, Item 205.0100.

Subsection 201.5.3 of the WisDOT standard specifications is supplemented as follows:

Payment: In accordance with Sections 205.5 of WisDOT standard specifications, except that it shall be modified as follows:

The quantity to be paid for as excavation common will be “plan quantity” as set forth in the contract plans without measurement thereof. Any modifications to the contract quantity caused by corrections or revisions of the original contract plans which have been approved by the Engineer will be measured in accordance with the applicable section of the standard specifications and the contract quantity will be adjusted accordingly to determine the final pay quantity.

20. Borrow Pit or Material Disposal Sites.

All locations and permits for borrow pits or material disposal sites shall be the responsibility of the contractor. All costs associated with borrow pits or material disposal sites, including, but not limited to, erosion control, fertilizing, and seeding shall be considered incidental to other items.

21. Recovered Asphalt and Concrete.

Asphalt recovered from existing asphaltic pavement may be used as Base Aggregate Dense ¾-inch or 1 ¼-inch under the new pavement or shoulders if it meets the requirements of Section 301 of the standard specifications. Recovered asphaltic material that is clean and suitable shall not be used as backfill, breaker run, fill material, or embankment material on this project, unless approved by the Engineer.

Concrete recovered from existing concrete pavement may be used as Base Aggregate Dense ¾-inch or 1 ¼-inch under the new pavement or shoulders if it meets the requirements of Section 301 of the standard specifications. Recovered existing concrete shall not be used as backfill, breaker run, fill material, or embankment material on this project.

22. Paving in Echelon.

Echelon paving shall be completed on the upper layer for one mainline travel lane and any adjacent outside shoulders, turn lanes, bypass lanes or intersections in one direction at a time and shall be incidental to the bid item HMA Pavement 4 MT 58-28 S.

23. HMA Pavement.

Subsection 460.5 of the WisDOT standard specifications is supplemented as follows:

Payment: In accordance with Section 460.5 of WisDOT standard specifications, except that payment shall include all costs associated with paving in echelon and HMA Cold Weather Paving in accordance with Section 450, if required.

24. Quality Management Program.

Follow all applicable WisDOT Quality Management Program (QMP) provisions that require the contractor to perform quality control testing during material production, material placement, and/or construction.

25. 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-08-00.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 815.

B.2 Testing

- (1) Conform to WTM T355 and CMM 815 for density testing and gauge monitoring methods. Conform to CMM 815.10.4 for test duration and gauge placement.

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges according to CMM 815.2.
- (2) Furnish nuclear gauges from the department's approved product list at

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/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 WTM T355.

B.3.2.2 Reference Site Monitoring

- (1) Conduct reference site monitoring for both QC and QV gauges according to WTM T355.

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 815.10.2.
- (2) Determine required number of tests according to CMM 815.10.2.1.
- (3) Determine random testing locations according to CMM 815.10.3.

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 815.10.2.
- (2) Determine required number of tests according to CMM 815.10.2.2.
- (3) Determine random testing locations according to CMM 815.10.3.

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

- (1) Calculate the average subplot densities using the individual test results in each subplot.
- (2) If all subplot 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 subplot average is more than one percent below the target density, do not include the individual test results from that subplot when computing the lot average density and remove that subplot's tonnage from the daily quantity for incentive. The tonnage from any such subplot 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 subplot 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 subplot 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 815. 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 subplot. Testing in a previously accepted subplot 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 subplot 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 subplot and lot densities.
- (6) If two consecutive subplot 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 subplot 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 subplot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification subplot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification subplot average is more than one percent below the specified target density, compare the QC and QV subplot averages. If the QV subplot average is within 1.0 lb/ft³ of the QC subplot average, use the QC tests for acceptance.
- (5) If the first QV/QC subplot average comparison shows a difference of more than 1.0 lb/ft³ each tester will perform an additional set of tests within that subplot. Combine the additional tests with the original set of tests to compute a new subplot average for each tester. If the new QV and QC subplot averages compare to within 1.0 lb/ft³, use the original QC tests for acceptance.
- (6) If the QV and QC subplot 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 subplot density test results or retesting of the subplot 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.

26. Material Transfer Vehicle, Item 460.9000.S.

A Description

This special provision describes providing Material Transfer Vehicles (MTV) and operators for use during HMA upper layer paving operations of the travel lanes as shown in the plan or as directed by the engineer.

B Materials

Furnish a self-propelled MTV with the ability to remix, maintain constant temperature, and continually feed the paver hopper. MTV storage capacity shall be adequate to provide continuous forward movement of the paver. Coordinate paver speed to match the delivery of material and capacity of the MTV to minimize stopping of the paver.

C Construction

Ensure that an operator stays with the MTV at all times during moving operations. Keep the paver's hopper full at all times and the MTV's hopper filled such that the conveying augers are never exposed to avoid segregation of the material. Placement of HMA upper layer pavement in the travel lanes will not be allowed without the MTV. Tie ins of intersections, shoulders paved separately, and other non-travel lane areas will not require the use of the MTV.

D Measurement

The department will measure Material Transfer Vehicle once for the contract, acceptably completed, regardless the number of vehicles in use.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.9000.S	Material Transfer Vehicle	EACH

Payment is full compensation for furnishing all material transfer vehicles and operators.

27. Culvert Backfill.

Subsection 520.2.5.3 of the WisDOT standard specifications is replaced with the following:

Trench Backfill: Furnish trench backfill from 1 foot above the top of the pipe to the top of the subgrade. The trench backfill shall be granular material matching the gradation shown in Subsection 520.2.5.2.2.

Subsection 520.5.2 (2) of the WisDOT standard specifications is replaced with the following:

Payment: Trench backfill for culvert pipes is incidental to the culvert pipe item and will not be paid for separately.

28. Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D.

Supplement standard spec 601.5.3 as follows:

Payment shall include any required concrete gaps or high early strength concrete for construction staging or access.

29. Manhole, Inlet, and Catch Basin Adjusting Rings.

Modify standard spec 611 as follows:

Adjustment rings shall be rubber, and shall be in a flat and/or tapered configuration of a size to closely match the inside and outside dimensions of circular or rectangular structures, installed individually or in combination not to exceed 3-inches in height. If multiple rubber adjustment rings are necessary, a maximum of two adjustment rings can be used. Rubber grade rings shall be tapered to match the cross slope and profile of the roadway.

30. Drain Tile.

Drain tile may be located within the construction limits. All costs associated with drain tile exploration, protection, and/or replacement shall be considered incidental to other items.

31. Maintenance and Repair of Haul Roads.

Prior to the start of construction, notify the Engineer of the roads used for the intended haul routes. Prior to and after completion of construction, the haul roads will be logged by a committee comprised of representatives of the Owner, Contractor, and Engineer. Haul roads will be repaired by the Contractor to their condition prior to the construction project at the expense of the Contractor. Any permits or waivers required by municipalities are the responsibility of the contractor.

32. Mobilization.

Multiple mobilization may be required for such items as: traffic control; signing items; pavement marking; salvaged topsoil; seeding; mulch; drainage items and other incidental items related to the staging. No additional payment will be made by the County for said mobilizations beyond Item 619.1000, Mobilization included in the bid form.

33. Water.

Contractor shall provide and pay for all costs associated with water required for grading, excavating, backfilling, compacting, cooling or washing pavement, dust control, and erosion control. Water shall be considered incidental to other items.

34. Topsoil and Salvaged Topsoil.

Replace standard spec 625.2 (1) with the following:

- (1) Topsoil consists of loam, sandy loam, silt loam, silty clay loam, or clay loam humus-bearing soils adapted to sustain plant life, and ensure the topsoil consists of the following:

Topsoil Requirements	Minimum Range	Maximum Range
pH	6.0	8.0
Organic Matter*	5%	20%
Clay	5%	30%
Silt	10%	70%
Sand	10%	70%

*Organic matter determined by loss on ignition test of samples oven dried to constant weight at 212 F (100 C).

Add the following to standard spec 625.2:

- (3) Furnish material that is free from large roots, sticks, weeds, brush, stones, litter, and waste products.
(4) Do not furnish surface soils from ditch bottoms, drained ponds, and eroded areas, or soils which are supporting growth of NR 40 listed plants and noxious weeds or other undesirable vegetation.

Replace standard spec 625.3.3 (3) with the following:

- (3) Ensure that for the upper 2 inches, 100 percent of the material passes a one-inch sieve and at least 90 percent passes the No. 10 sieve.

35. Temporary Ditch Checks.

Subsection 628.3.14 (2) of the WisDOT standard specifications is supplemented as follows:

Contractor may also construct temporary ditch checks with rock bags meeting the specifications shown in standard spec 628.2.13.

Subsection 628.4.17 of the WisDOT standard specifications is revised as follows:

The County will measure Temporary Ditch Checks by the linear foot acceptably completed regardless of the material chosen to construct the ditch check. If using erosion bales, the County will only measure the length across the ditch, not the length of each row of bales. The County will not measure ditch checks constructed with a single row of bales.

36. Fertilizer Type B.

Replace standard spec 629.2.1.3 with the following:

- (1) Fertilizer Type B will conform to the following requirements:

Nitrogen, not less than 24% with 6% percent of the nitrogen being slow release.

Phosphorus, not less than 15%

Potash, not less than 9%

- (2) The total nitrogen, phosphorus, and potash shall equal at least 48 percent.

Replace standard spec 629.3.1.3 with the following:

⁽¹⁾ Apply fertilizer containing at least 48 percent total nitrogen, phosphorus, and potash at 5 pounds per 1,000 square feet unless otherwise directed by the engineer. For Fertilizer Type B that contains a different percentage of components, determine the new application rate by multiplying the specified rate by a dimensionless conversion factor determined as follows:

$$\text{Conversion Factor} = 48 / \text{New Percentage of Components}$$

Replace standard spec 629.4(1):

⁽¹⁾ The department will measure Fertilizer Type B by the hundred pounds (CWT) acceptably completed, measured based on the application rate of 5 pounds per 1,000 square feet. The department will not measure fertilizer used for the bid items under 632. The measured quantity equals the number of hundred-weight (CWT) of material determined by multiplying the actual number of CWT of material incorporated by the ratio of the actual percentage of fertilizer components used to 48 percent for Fertilizer Type B.

37. Seeding Mixture No. 30.

Replace standard spec 630.2.1.5.1.1 Table 630-1 Highway Seed Mixtures with the following:

Conform to the following the species, proportions, purity, and germination:

Species	Purity Minimum %	Germination Minimum %	Mixture Proportion %
Perennial Ryegrass	97	90	10
Hard Fescue	97	85	15
Red Fescue	97	85	25
Salt Grass	98	85	20
Tall Fescue	98	85	30

Replace standard spec 630.3.5 (1) with the following:

⁽¹⁾ Use the following sowing rates for the seeds in pounds per 1000 square feet:

Seed Mixture 30 Special at 5.0 pounds

38. Seeding.

Replace standard spec 630.3.5 (1) with the following:

(1) Use the following sowing rate for seeds in pounds per 1000 square feet:

- No. 10 at 3 pounds
- No. 20 at 5 pounds
- No. 30 at 5 pounds
- No. 40 at 5 pounds
- No. 60 at an equivalent seeding rate of 1.5 pounds[1]
- No. 70 or 70A at 0.4 pounds
- No. 75 at an equivalent seeding rate of 0.7 pounds[1]
- No. 80 at an equivalent seeding rate of 0.8 pounds[1]
- Temporary seeding at 3 pounds
- Nurse crop seeding at 2 pounds

- [1] Determine the actual seeding rate by multiplying the equivalent seeding rate by the sum of the unadjusted and adjusted percentages of the various species in the seed mixtures as sown.

39. Street Signs.

Existing street signs shall remain the property of Washington County. All existing signs are to be salvaged, stacked and cared for. Coordinate with Washington County for the removal, stockpiling and transfer of signs. Any signs or posts to be salvaged and reinstalled that are damaged during removal or construction operations shall be replaced by the contractor at no cost to Washington County.

40. Fire Number Signs.

Contractor shall be responsible for the removal and re-installation of fire number signs along the project. Fire number signs in conflict with the project shall be temporarily moved back beyond the limits of the proposed improvement. Contractor shall replace any fire number signs damaged during the removal and re-installation process or during construction at their cost. All work associated with the removal, temporary placement, and re-installation of fire number signs shall be considered incidental to the project.

41. Survey Monument Coordination.

Notify the Washington County Deputy Surveyor, Ted Dumke, (262) 335-4436, at least 30 days before the beginning of construction activities. The Deputy Surveyor will then make the arrangements to have the Public Land Survey Monument and Landmark Reference Monuments tied out.

After the majority of construction is complete (before restoration), again notify the Deputy Surveyor that the site is ready for the replacement of the monuments. The Deputy Surveyor will then make arrangements to have the Public Land Survey Monument and Landmark Reference Monuments reset.

42. Property Survey Monuments.

Contractor shall be responsible for locating and protecting all identified existing right-of-way and property pipes. If it is found that monuments have been lost through construction, final payment may be withheld until the Contractor has replaced the monuments. Replacement shall be done by a land surveyor having a current State of Wisconsin registration in land surveying. No additional payment will be made by the County for this work. Final monumentation of new right-of-way acquired as part of the project plat will be completed by the department upon completion of the roadway project.

43. Traffic Signals.

Existing traffic signals loop detectors and pull boxes exist in the pavement at the intersection of STH 60 and CTH P. The Wisconsin Department of Transportation will be replacing the traffic signals and loops at the intersection of CTH P and STH 60 as part of WisDOT Project 2310-13-70. Contractor shall make every effort to keep the loop detector conduit and cables, pull boxes and traffic signals in working condition. The Wisconsin Department of Transportation contact is David Brantner, (262) 548-8736, david.brantner@dot.wi.gov.

44. Installing and Maintaining Bird Deterrent System Station 613+52, Item 999.2000.S.

A Description

This special provision describes inspecting, installing and 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, Benton Stetzel at (262) 623-0194, or the department regional environmental coordinator, Tim McElmeel at (262) 548-6458.

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.

D Measurement

The department will measure Installing and Maintaining Bird Deterrent System (Station) as a single unit at each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
999.2000.S	Installing and Maintaining Bird Deterrent System Station 613+52	EACH

Payment for Installing and Maintaining Bird Deterrent System is full compensation for providing and installing deterrents that prevent migratory bird nesting; removing and disposing of unoccupied or partially constructed nests without eggs or nestlings; maintaining, repairing, replacing, supplementing, existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

45. Permanent Mailboxes.

Contractor shall be responsible for the removal and re-installation of mailboxes along the project in accordance with the United States Postal Service regulations. Contractor shall replace any mailboxes damaged during the removal and re-installation process or during construction at their cost. All work associated with the removal and re-installation of permanent mailboxes shall be considered incidental to the project.

46. Temporary Mailbox Accommodations, Item SPV.0105.01.

A Description

This special provision describes providing temporary mailbox facilities for the project at locations determined by the Washington County Highway Department and the United States Postal Service (USPS).

B Materials

Furnish temporary mailboxes in accordance with local USPS requirements.

C Construction

Prior to the start of construction, coordinate with the local Postmaster and Washington County Highway Department for temporary mailbox requirements (size, height, location(s), etc.). Provide temporary mailbox accommodations that contain no less than the number of mailboxes located within the project limits.

Paper boxes shall be provided for each mailbox. Install the mailbox accommodations at the proper height and distance from the curb or edge of roadway as required by the USPS. Provide notice to affected property owners and the USPS no less than one week prior to project completion and removal of the temporary mailbox accommodations.

D Measurement

The department will measure Temporary Mailbox Accommodations as a single lump sum unit acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Temporary Mailbox Accommodations	LS

Payment is full compensation for coordinating with the Washington County Highway Department and USPS; furnishing and installing temporary mailbox(es), including any required posts, mailboxes, foundations, and mounting hardware; removal of the temporary mailboxes; and for cleaning out and restoring the site.

APPENDIX A

WASHINGTON COUNTY INSURANCE REQUIREMENTS

CONTRACTORS & SUBCONTRACTORS – CONSTRUCTION PROJECTS

I. Liability Insurance Requirements

- A. Commercial General Liability coverage at least as broad as Insurance Services Office Forms #CG 00 01 07 98 and #CG 25 03 11 85, including coverage for Products Liability, Completed Operations, Contractual Liability, and XCU (excavation, collapse & underground operations) coverage with the following minimum limits:
- | | | |
|----|---|-------------------------|
| 1. | General Aggregate Limit
(Other than Products-Completed Operations) | per project \$2,000,000 |
| 2. | Products-Completed Operations Aggregate | per project \$1,000,000 |
| 3. | Personal and Advertising Injury Limit | \$1,000,000 |
| 4. | Each Occurrence Limit | \$1,000,000 |
| 5. | Fire Damage Limit – any one fire | \$ 50,000 |
| 6. | Medical Expense Limit – any one person | \$ 5,000 |
| 7. | Asbestos Removal (if applicable) | \$5,000,000 |
- B. Automobile Liability coverage at least as broad as Insurance Services Office Form #CA 00 01 07 97, with minimum limits of \$1,000,000 combined single limit per accident for bodily injury and property damage, provided on a Symbol 1-Any Auto basis.
- C. Worker's Compensation as required by the State of Wisconsin, and Employers Liability Insurance with sufficient limits to meet underlying Umbrella Liability insurance requirements.
- D. Umbrella Liability providing coverage at least as broad as the underlying General Liability, Automobile Liability and Employers Liability, with a minimum limit of \$5,000,000 each occurrence and \$5,000,000 aggregate, and a maximum self-retention of \$10,000.
- E. Aircraft Liability and Watercraft Liability. If the project work includes the use of, or Operation of, any aircraft or watercraft, then Aircraft and Watercraft Liability insurance must be in force with a limit of \$1,000,000 per occurrence for bodily injury and property damage.
- F. Bond Requirements
1. Bid Bond (**required**). The contractor will provide to the owner a Bid Bond, which will accompany the bid for the project. The Bid Bond shall be equal to 5% of the contract bid.
 2. Payment and Performance Bond (**required**). If awarded the contract, the contractor will provide to the owner a Payment and/or Performance Bond in the amount of the contract price, covering faithful performance of the contract and payment of obligations arising thereunder, as stipulated in bidding requirements, or specifically required in the contract documents on the date of the contract's execution.

3. Acceptability of Bonding Company. The Bid, Payment and Performance Bonds shall be placed with a bonding company with a *Best's Insurance Reports* rating of no less than A and a Financial Size Category of no less than Class V.

II. Insurance Requirement for Sub-Contractors

All sub-contractors shall be required to obtain Commercial General Liability, Automobile Liability, Workers' Compensation, Employers Liability, and Asbestos Removal Coverage (if applicable). This insurance shall be as broad as those noted for Contractor requirements contained in Section I with the exception of General Aggregate Limits at \$1,000,000. It is the responsibility of the Prime Contractor to ensure all subcontractors have and maintain required insurance coverage for this project. Failure to do so will result in the Prime Contractor being responsible for any and all damages and/or negligence of the subcontractors involved.

III. Additional Requirements

- A. Acceptability of Insurers. Insurance is to be placed with insurers who have a *Best's Insurance Reports* rating of no less than A and a Financial Size Category of no less than Class VI, and who are authorized as an admitted insurance company in the state of Wisconsin.
- B. **Washington County, Washington County's elected and appointed officials, and Washington County employees shall be named as additional insureds on all liability policies for liability arising out of project work. Please provide a copy of this endorsement with your certificate of insurance.**
- C. Certificates of Insurance acceptable to Washington County shall be submitted prior to commencement of the work. These certificates shall contain a provision that coverage afforded under the policies will not be canceled until at least 30 days' prior written notice has been given to Washington County.

APPENDIX B

Affidavit of Compliance with Section 103.503, Wis. Stats.

STATE OF WISCONSIN)
) ss.
_____ COUNTY)

_____, being first duly sworn, on oath, deposes and states that:

1. I work for _____ (Employer) in the following capacity:
2. _____, (Employer) has submitted a bid with Washington County, specifically Bid #RFB #HWY 24-01.
3. I am aware of Section 103.503 of the Wisconsin Statutes, a copy of which is attached hereto. I understand that I must comply with Section 103.503.
4. I certify on behalf of my Employer, as well as any subcontractors that we may be working with, that we have in place a written program for the prevention of substance abuse among our employees.
5. I understand that if my Employer does not have a written program in place, or a subcontractor that we may be working with does not have a written program in place, that complies with Section 103.503, Wis. Stats., that our bid may be rejected as non-responsive and the next low bid may be considered or the project may be re-bid.
6. I understand that Washington County may request a copy of our written program or that of our subcontractors, at any time and that we will comply with that request in a prompt manner.

Signature of Authorized Officer

Print Name of Authorized Officer

Subscribed and sworn to before me
this ____ day of _____, 2024

Title

Notary Public, State of Wisconsin
My commission expires: _____

Name of Corporation, Partnership, Sole
Proprietorship or Business

103.503 Substance abuse prevention on public works projects. (1) DEFINITIONS. In this section:

(a) "Accident" means an incident caused, contributed to, or otherwise involving an employee that resulted or could have resulted in death, personal injury, or property damage and that occurred while the employee was performing the work described in s. 66.0903 (4) or 103.49 (2m) on a project.

(b) "Alcohol" has the meaning given in s. 340.01 (1q).

(c) "Contracting agency" means a local governmental unit, as defined in s. 66.0903 (1) (d), or a state agency, as defined in s. 103.49 (1) (f), that has contracted for the performance of work on a project.

(d) "Drug" means any controlled substance, as defined in s. 961.01 (4), or controlled substance analog, as defined in s. 961.01 (4m), for which testing is required by an employer under its substance abuse prevention program under this section.

(e) "Employee" means a laborer, worker, mechanic, or truck driver who performs the work described in s. 66.0903 (4) or 103.49 (2m) on a project.

(f) "Employer" means a contractor, subcontractor, or agent of a contractor or subcontractor that performs work on a project.

(g) "Project" means a project of public works that is subject to s. 66.0903 or 103.49.

(2) **SUBSTANCE ABUSE PROHIBITED.** No employee may use, possess, attempt to possess, distribute, deliver, or be under the influence of a drug, or use or be under the influence of alcohol, while performing the work described in s. 66.0903 (4) or 103.49 (2m) on a project. An employee is considered to be under the influence of alcohol for purposes of this subsection if he or she has an alcohol concentration that is equal to or greater than the amount specified in s. 885.235 (1g) (d).

(3) **SUBSTANCE ABUSE PREVENTION PROGRAMS REQUIRED.** (a) Before an employer may commence work on a project, the employer shall have in place a written program for the prevention of substance abuse among its employees. At a minimum, the program shall include all of the following:

1. A prohibition against the actions or conditions specified in sub. (2).

2. A requirement that employees performing the work described in s. 66.0903 (4) or 103.49 (2m) on a project submit to random, reasonable suspicion, and post-accident drug and alcohol testing and to drug and alcohol testing before commencing work on a project, except that testing of an employee before commencing work on a project is not required if the employee has been participating in a random testing program during the 90 days preceding the date on which the employee commenced work on the project.

3. A procedure for notifying an employee who violates sub. (2), who tests positive for the presence of a drug in his or her system, or who refuses to submit to drug or alcohol testing as required

under the program that the employee may not perform work on a project until he or she meets the conditions specified in sub. (4) (b) 1. and 2.

(b) Each employer shall be responsible for the cost of developing, implementing, and enforcing its substance abuse prevention program, including the cost of drug and alcohol testing of its employees under the program. The contracting agency is not responsible for that cost, for the cost of any medical review of a test result, or for any rehabilitation provided to an employee.

(4) **EMPLOYEE ACCESS TO PROJECT.** (a) No employer may permit an employee who violates sub. (2), who tests positive for the presence of a drug in his or her system, or who refuses to submit to drug or alcohol testing as required under the employer's substance abuse prevention program under sub. (3) to perform work on a project until he or she meets the conditions specified in par. (b) 1. and 2. An employer shall immediately remove an employee from work on a project if any of the following occurs:

1. The employee violates sub. (2), tests positive for the presence of a drug in his or her system, or refuses to submit to drug or alcohol testing as required under the employer's substance abuse prevention program.

2. An officer or employee of the contracting agency has a reasonable suspicion that the employee is in violation of sub. (2) and requests the employer to immediately remove the employee from work on the project.

(b) An employee who is barred or removed from work on a project under par. (a) may commence or return to work on the project upon his or her employer providing to the contracting agency documentation showing all of the following:

1. That the employee has tested negative for the presence of drugs in his or her system and is not under the influence of alcohol as described in sub. (2).

2. That the employee has been approved to commence or return to work on the project in accordance with the employer's substance abuse prevention program.

(c) Testing for the presence of drugs or alcohol in an employee's system and the handling of test specimens shall be conducted in accordance with guidelines for laboratory testing procedures and chain-of-custody procedures established by the substance abuse and mental health services administration of the federal department of health and human services.

(5) **LOCAL ORDINANCES; STRICT CONFORMITY REQUIRED.** A local governmental unit, as defined in s. 66.0903 (1) (d), may enact an ordinance regulating the conduct regulated under this section only if the ordinance strictly conforms to this section.

History: 2005 a. 181.

Text from the 2005?06 Wis. Stats. database updated by the Revisor of Statutes. Only printed statutes are certified under s. 35.18 (2), stats. Statutory changes effective prior to 6?2?07 are printed as if currently in effect. Statutory changes effective on or after 6?2?07 are designated by NOTES. Report errors at (608) 266?2011, FAX 264?6978, <http://www.legis.state.wi.us/rsb/>

APPENDIX C

Standard Terms and Conditions, Washington County, WI For Public Works Contracts

1. **ENTIRE AGREEMENT:** These Standard Terms and Conditions shall apply to any contract, including any purchase order, awarded as a result of this request. Special requirements of a resulting contract may also apply. Further, the written contract with referenced parts and attachments shall constitute the entire agreement, and no other terms and conditions in any document, acceptance, or acknowledgment shall be effective or binding unless expressly agreed to in writing by the County.
2. **DEFINITIONS:** As used herein, “vendor” and “bidder” includes a provider of goods and services, or both, who is responding to an RFP or a bid.
3. **SPECIFICATIONS:** The specifications in this request are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a design, type of construction, quality, functional capability or performance level, or any combination thereof desired. When alternates are proposed, they must be identified by manufacturer, stock number, and such other information necessary to establish equivalency.
4. **DEVIATIONS AND EXCEPTIONS:** Deviations and exceptions from terms, conditions, or specifications shall be described fully, on the vendor’s letterhead, signed and attached to the bid. In the absence of such statement, the bid shall be accepted as in strict compliance with all terms, conditions, and specifications and the vendors shall be held liable.
5. **BID BOND GUARANTY-PERFORMANCE BONDS- INSURANCE:**
 - a) **Bid Bond Guaranty- (required)** A bid bond, payable to Washington County Treasurer in an amount of five percent (5%) of maximum bid must accompany the bid as a guarantee that if the bid is accepted, the bidder will execute and file the proper Agreement within five (5) days after issuance of the Agreement by County to bidder for signature. Return of bid bond will be executed when the contract is signed.
 - b) **Performance and Payment Bonds – (required)** A performance and payment bond in the amount specified in the Request for Bids is to be provided by the successful bidder to the Washington County Purchasing Department within ten (10) days after both parties have signed the Agreement. Failure to do so can make the contract voidable at the County’s discretion and where the bid is covered by a bond such security shall become the property of Washington County as liquidated damages. Performance and payment bonds must be approved by the County Attorney prior to commencement of any work.
 - c) **Insurance-** An insurance certificate which meets the County’s requirements, as specified in the bid document shall be provided to the Purchasing Department with the bid or as stated in the bid specifications. Failure to do so can make the contract voidable at the county’s discretion. Said insurance certificate must be approved by the County’s Insurance Coordinator prior to the commencement of any work. The contractor shall not allow the subcontractor to commence any work until the insurance required of the subcontractor has been obtained and approved.

The surety bond, the performance and payment bond and the insurance certificate must be issued by companies licensed to do business in the State of Wisconsin or signed by an agent licensed by the State of Wisconsin. Washington County will be named as additional insured with respect to general liability coverage. Should any insurance policy be canceled before

the expiration of this contract, the issuing company must provide 10 days' notice to Washington County.

6. **SAFETY REQUIREMENTS:** All material, equipment, supplies and services provided to the County must comply fully with all Safety Requirements as set forth by the Wisconsin Administration Code, Wisconsin Department of Workforce Development and all applicable OSHA standards.
7. **DELIVERY TERMS:** Bids shall include delivery F.O.B. to the address specified, all transportation charges prepaid and born by bidder unless otherwise specified. Shipments sent C.O.D. or freight collect will not be accepted.
8. **GUARANTEED DELIVERY:** Failure of the vendor to adhere to the delivery schedule as specified, or to promptly replace rejected or defective materials within a specified time frame, shall render the contractor liable for the difference between the "open market" and the contract price, and/or other costs as applicable under the Uniform Commercial Code. Such purchases will be deducted from contract quantities.
9. **TAX EXEMPT: (Not Required - See page 14 # 18 TAXES)** All bids must be submitted without the inclusion of Federal Excise and Wisconsin Sales Taxes as the County is exempt therefrom. (State Statue No. 77.54(9a) (b).
10. **SIGNATURE REQUIREMENT:** This bid must be manually signed by an authorized representative of your company.
11. **CANCELLATION:** Washington County reserves the right to cancel any order or contract for failure of the successful bidder to comply with terms, conditions and specifications for this RFB or RFP. The County reserves the right to terminate any agreement due to no-appropriation of funds or failure of performance by the vendor.
12. **RIGHT TO ACCEPT ALL OR PART OF BID:** Washington County reserves the right to waive any informalities and to reject any and all bids deemed to be unsatisfactory or not in the County's best interest.
13. **MATERIAL SAFETY DATA SHEETS:** It is a direct condition of this order that the vendor shall supply Washington County, when applicable, with a Material Safety Data Sheet for the material purchased. In addition, the vendor shall supply any material related to the safe use of this material and hazards associated with its use, including but not limited to installation procedures and personnel protective equipment requirements. All hazardous components shall be identified.
14. **BID RESULTS:** Bidders may obtain information pertaining to results of bids at the Purchasing Department, Monday through Friday, 8:30 A.M. To 4:00 P.M. Prior appointment is advisable; copies are obtained at .25 cents per page and postage costs, if applicable. Bid openings are public unless otherwise specified.
15. **AMENDMENT OF BIDS:** No bid may be amended by bidder. However, bidder may withdraw a bid as per the appropriate provision of the Contract Documents. Bidder will not be allowed to resubmit their bid after it's been withdrawn.
16. **CHANGES TO BID DOCUMENTS:**
 - a) **By County:** Bid Documents may be changed by the Purchasing Department in response to need for further clarification, specification changes, new opening dates, etc. and will be made by written Addenda.

- b) **Upon request of the Bidder:** If any of the terms and conditions prevents the bidder from bidding, consideration will be given, if possible, to a bidder request for change. This request must be submitted in writing to the Purchasing Department five (5) business days (unless otherwise stated in the bid documents), prior to bid opening and if granted, it will require an addendum for all bidders.
17. **PRICES:** Bid prices shall be stated in units requested in US funds. Prices shall be binding for sixty (60) calendar days following the bid opening date unless otherwise stated in the bid document. Mathematical errors in extension may be corrected, providing that the unit price is legible. Conflicts that involve dollar amounts, the unit price multiplied by the respective quantity shall govern as bid price.
18. **PURCHASE ORDERS:** No shipment shall be made without an authorized purchase order from the county, issued by the Purchasing Division.
19. **METHOD OF AWARD:** Award shall be made to the lowest responsible, responsive vendor conforming to the specifications, terms and conditions, or to the most advantageous bid submitted to the County on a quality versus price basis. Quantities involved, time of delivery, purpose for which required, competency of vendor, the ability to render satisfactory service, and past performance, will be considered in determining responsibility. If the contract is to be awarded, award of the bid will be made to the bidder submitting a combination of base bid and alternates, which are most advantageous to the County. Award is a condition of and subject TO permit approval.
20. **ORDERING/ACCEPTANCE:** Written notice of award to a vendor in the form of a purchase order or otherwise, mailed or delivered to the address shown on the bid will be considered sufficient notice of acceptance of bid. A formal contract containing all provisions of the contract signed by both parties shall be used when required by Washington County. A sample "draft" Contract when available may be included with these specifications and may be used in its' present form or modified for this project.
21. **PAYMENT TERMS AND INVOICING:** Unless stated otherwise in the bid documents, Washington County normally pays properly submitted invoices within 30 days of receipt of goods and services, or combination of both, which have been delivered, installed (if required) and accepted as specified. Invoices presented for payment must be submitted in accordance with instructions contained on the Purchase Order (unless otherwise specified) including reference to purchase order number to the correct address noted on the Purchase Order for processing.
22. **APPLICABLE LAW:** This request and possible resulting contract or order shall be interpreted under the laws of the State of Wisconsin. Any disputes or claims that arise under this contract shall be litigated in the Circuit Court of Washington County, WI.

APPENDIX D
GEOTECHNICAL REPORTS



July 6, 2021

Mr. Brad A. Abraham
Project Engineer
Washington County Highway Department
900 Lang Street
West Bend, WI 54090

Re: Test Borings and Marsh Probes
Proposed Road Reconstruction
CTH P, STH 145 to STH 60
Washington County, Wisconsin
(JGS# 0700-20-002)

Dear Mr. Abraham:

Six (6) soil test borings and thirteen (13) marsh probes were completed recently for the above-referenced project, per your request. The following report presents a summary of our findings and recommendations relative to pavement design, subgrade preparation and the removal of unsuitable soils.

Field and Laboratory Investigations

The test boring and marsh probe locations were selected and identified in the field by the client's civil engineering consultant. Plan and profile sheets provided to us showing the boring and probe locations are included in the appendix to this report. The test borings were made at or near the marks provided, and notes as to the locations of the test borings relative to the road centerline are included on the boring logs.

The test borings were made with a truck-mounted CME Model 45 drill rig. The existing pavement layers were penetrated with a flight auger and carbide toothed bit. Samples of the subgrade soils were obtained at 1.5- to 2.5-ft. intervals by the standard penetration test procedure (ASTM D1586). The samples obtained from the test borings were preliminarily classified in the field by the drill foreman, and field logs were prepared. Representative portions of the soil samples were placed in labeled containers and transferred to our office for further inspection, laboratory test assignment

and final classification by a geotechnical engineer. Final boring logs showing descriptions of the stratification encountered, along with the sampling and field test data, are included in the appendix.

The marsh probes were made with a hand auger at the stakes provided. The probes were extended through the organic soils, and the depths of the organic soils were recorded. A summary of the marsh probe data is included in the appendix.

The laboratory-testing program consisted of a moisture content determinations and calibrated penetrometer tests. The laboratory test results are included on the boring logs.

Subsurface Conditions Encountered

The existing asphalt ranges in thickness from 9-1/2 in. to 15 in. at the test boring locations. The asphalt is underlain by 6 to 9 in. of concrete pavement. Based on the resistance to drilling, the concrete is hard, but no steel reinforcement was detected. No granular base course was present below the concrete.

The subgrade soils vary considerably from one boring location to another and include silty clay, clayey silt, sandy silt and silty sand/gravel. Silty clay soils predominate, however, and the consistencies of these soils range from very soft to very stiff, based on the standard penetration test results and calibrated penetrometer readings. Samples of the silty clay soils exhibited moisture contents ranging from 14.4 to 36.6 percent and calibrated penetrometer readings ranging from 0.2 to 3.2 tons/sq.ft. Boring C3 encountered apparent limestone bedrock at 11 ft. below existing grade. Details regarding the subsurface stratigraphy and conditions encountered in the test borings can be obtained from the boring logs included in the appendix.

Free groundwater was encountered in Borings C1, C2 and C3 at 4.5 to 9 ft. below existing grade. No groundwater seepage was detected in the other test borings. The borings were immediately backfilled per WDNR regulations, and the pavement was patched.

The marsh probes encountered organic soils (mainly clayey topsoil) to depths ranging from 10 to 38 in. below existing grade. A tabulation of the marsh probe data is included in the appendix.

Opinions and Recommendations

It is our understanding that this section of CTH P will be totally reconstructed with full-width shoulders. The new road profile will require cuts of as much as 10.5 ft. and fills of as much as 5 ft. It is anticipated that the existing asphalt and concrete pavement will be entirely removed or will possibly be milled and/or rubblized for use where fill is needed.

As mentioned earlier, silty clay soils predominate along this section of roadway. The pavement thickness design parameters applicable to these soils are as follows:

<i>AASHTO Classification</i>	A-7
<i>Design Group Index</i>	17
<i>Soil Support Value</i>	3.5
<i>Frost Index</i>	F-3
<i>Modulus of Subgrade Reaction</i>	100 lbs./in. ³
<i>Resilient Modulus</i>	2,600 lbs./in. ²

After the proposed subgrade elevations have been established, the subgrade should be proofrolled with a loaded dump truck. Any areas that noticeably deflect under the truck tires should be improved by aeration and compaction, removal and replacement, or treatment with a suitable soil amendment. Of the six test boring locations, significant undercutting (EBS) below the existing roadbed is anticipated only at Boring C1. At that location, an undercut extending to about 4 ft. below the existing road surface will likely be required due to very soft soil conditions.

Prior to placement of fill apart from the existing roadbed, all topsoil and other organic materials should be removed. The thickness of the organic soils at the marsh probe locations are listed in the table included in the appendix. As much as several feet of coarse granular fill may be needed

July 6, 2021

Page 4
JGS 0700-21-002

to stabilize the subgrade in these areas. The fill should be placed and compacted in accordance with the appropriate sections of the State of Wisconsin D.O.T. Standard Specifications.

It should be noted that apparent limestone bedrock was encountered at about 11 ft. below existing grade in Boring C3. It appears that a cut of about 10.5 ft. is called for at that location. The possibility of the need for limited rock removal in that area should be taken into account.

Closing

Unused portions of the samples obtained in the test borings will be stored at our office for a period of 30 days and will then be discarded. If other arrangements are desired, please notify our office within this holding period.

If there are any questions, or if we can be of any further assistance, please contact our office. We have appreciated the opportunity to be of service to you on this project.

Sincerely,

JGS GEOTECH, LLC

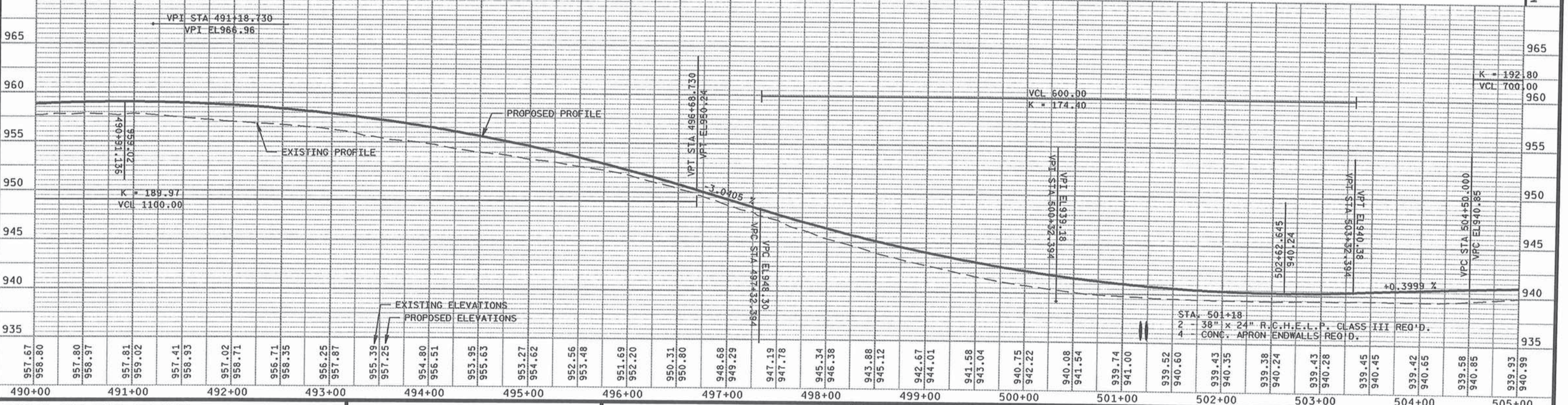
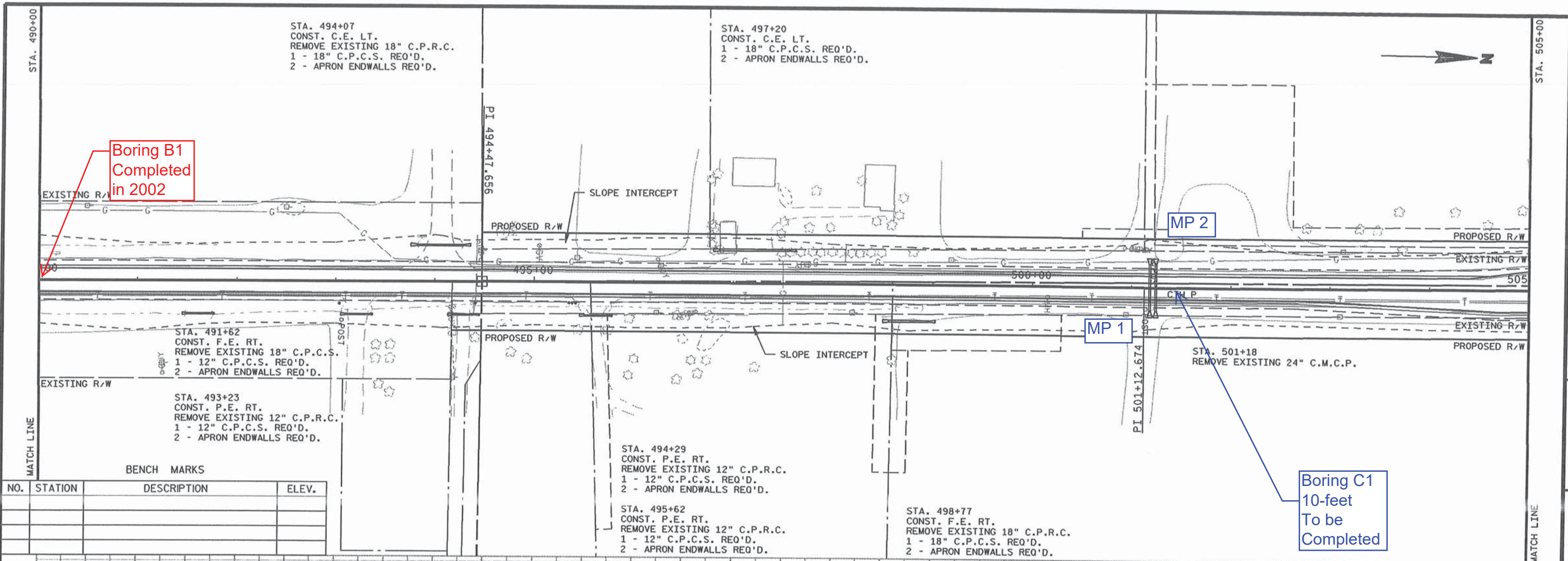


Jeffrey G. Smith, P.E.
Geotechnical Engineer

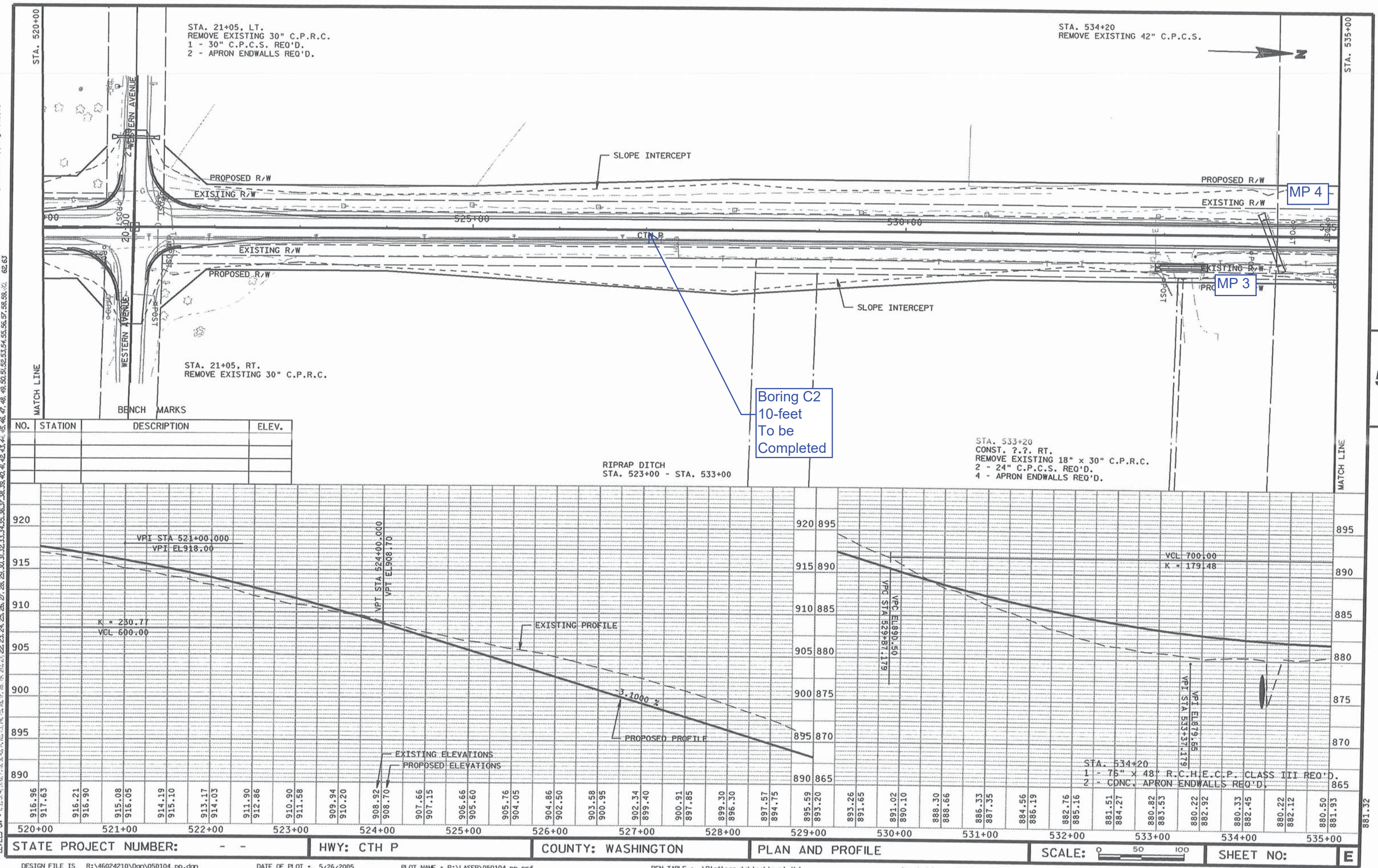


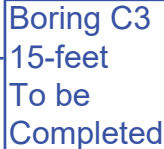
APPENDIX

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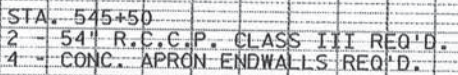


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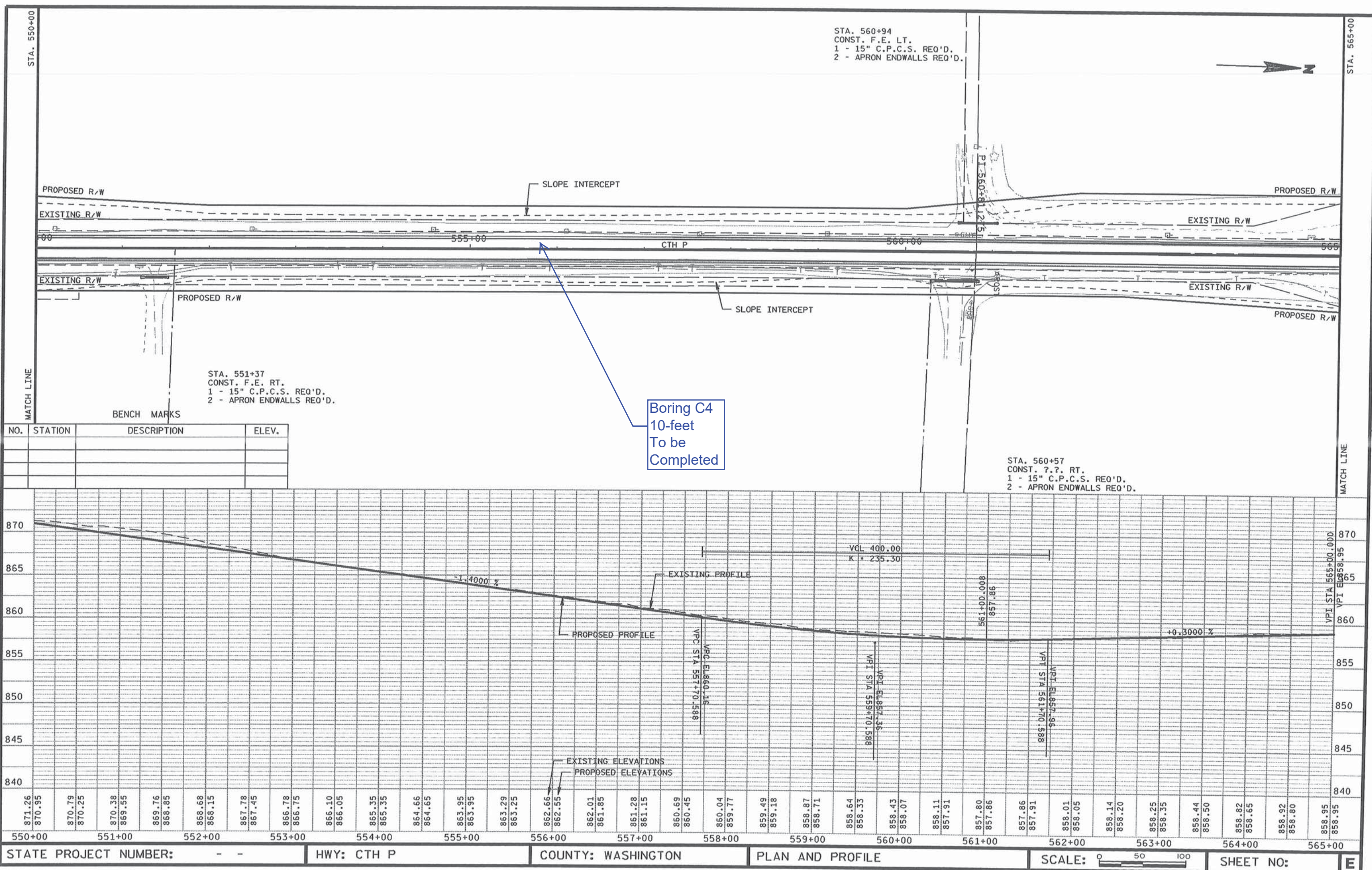


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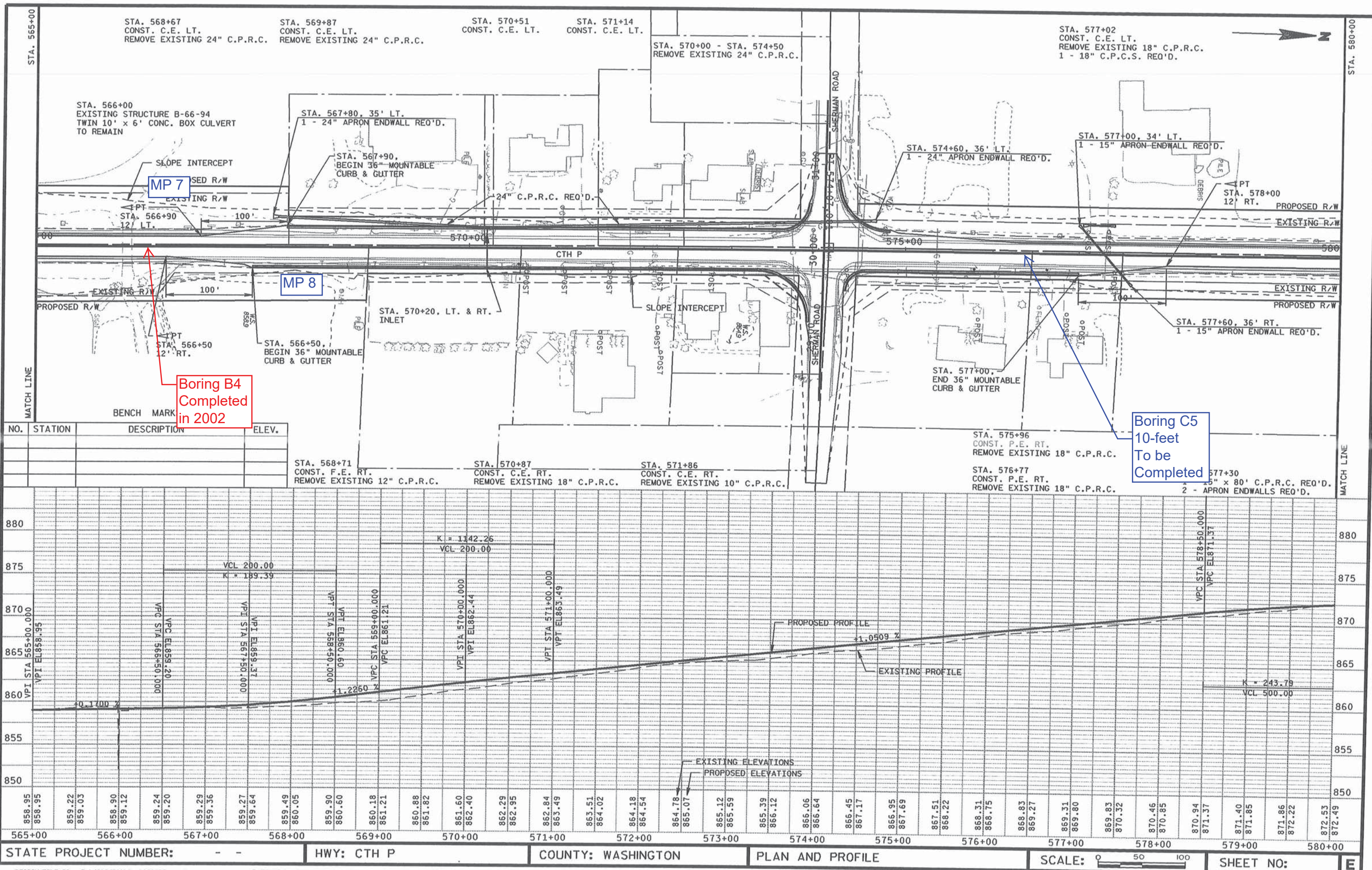


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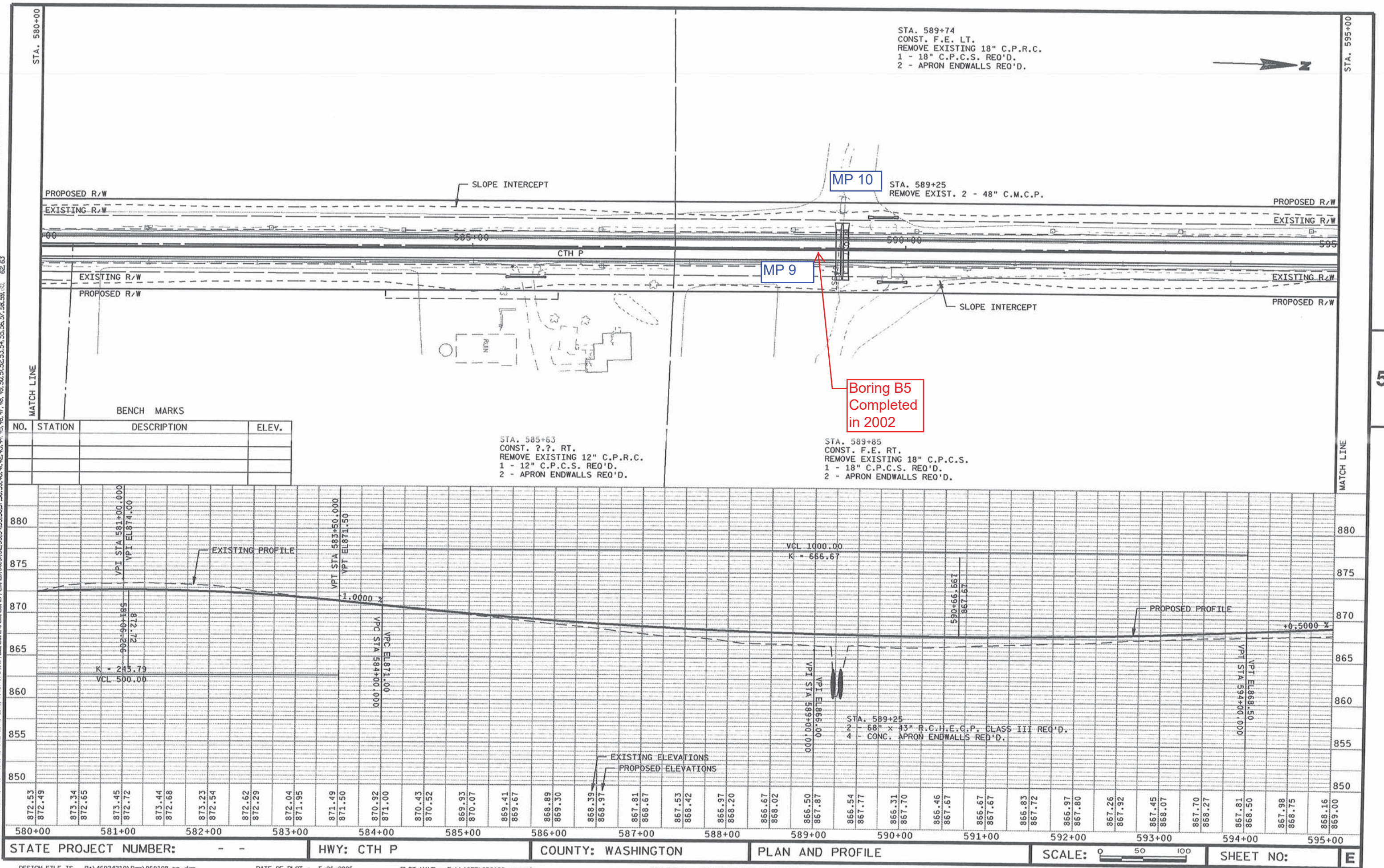


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SUMMARY OF MARSH PROBE DATA
CTH P, STH 145 to STH 60
Washington County, Wisconsin

Probe No.	Depth of Organic Soil Inches	Organic Soil Type	Inorganic Soil Below
MP-1	11	Dark Brown Clayey Topsoil	Olive Brown Silty Clay
MP-2	22	Dark Brown Clayey Topsoil	Brown & Gray Mottled Silty Clay
MP-3	32	Gary Organic Clayey Silt with roots	Grayish Brown Sandy Clay
MP-4	14	Dark Brown Clayey Topsoil with gravel	Yellowish Brown Silty Clay with gravel
MP-5	10	Dark Brown Clayey Topsoil	Yellowish Brown Silty Clay
MP-6	38	Dark Brown & Black Clayey Topsoil	Dark Brown Silty Clay with gravel
MP-7	23	Dark Brown Clayey Topsoil	Greenish Gray Silty Clay
MP-8	20	Dark Brown Clayey Topsoil	Greenish Gray Sandy Silty Clay
MP-9	15	Dark Brown & Black Clayey/Peaty Topsoil	Brown Mottled Silty Clay
MP-10	10	Dark Brown Clayey Topsoil	Yellowish Brown Silty Clay
MP-11	22	Dark Greenish Gary Organic Clayey Silt	Greenish Gray Silty Clay
MP-12	13	Black Clayey Topsoil	Brown Mottled Clayey Silt
MP-13	26	Dark Brown to Black Clayey Topsoil	Brown & Gray Mottled Silty Clay

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements						JOB NO.: 0700-21-002					
CLIENT: Washington County Highway Dept.						BORING NO.: C1					
LOCATION: STH 145 to STH 60 Washington County, Wisconsin						GROUND ELEVATION: _____ BORING LOCATION: _____					
BORING STARTED 6/30/2021 BORING COMPLETED 6/30/2021 TOTAL BORING DEPTH 10'					Groundwater: During Drilling 6.5' Completion of Drilling None 24 Hours After Completion						

Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf	Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
Drilled 8.5' west of centerline										ASPHALT (15")	
								1			
								2		CONCRETE (7")	
24.6				0.2	1	6"	2	2		FILL OF VERY SOFT DARK GRAYISH BROWN SILTY CLAY moist, little fine to coarse sand, trace fine to coarse gravel. (Possibly Slightly Organic)	
36.6				0.5	2	18"	3	3			
27.3				1.5			4	4		STIFF DARK GRAYISH BROWN SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (Possibly Slightly Organic)	
							5	5			
29.9				0.2	3	18"	6	1		VERY SOFT BROWN MOTTLED SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (CL)	
							7	1		VERY LOOSE YELLOWISH BROWN FINE TO MEDIUM SAND wet, trace to little silt. (SP-SM)	
							8	2			
22.0				1.2	4	18"	9	3		MEDIUM STIFF LIGHT YELLOWISH BROWN SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (CL)	
							10	5			
END OF BORING											
								11			
								12			

LOGGED BY J.P.	CHECKED BY JGS	CLASSIFICATION SYSTEM USCS/JGS
METHOD OF DRILLING 2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring		
MACHINE MODEL Truck-mounted CME 45		
SPT HAMMER TYPE Safety hammer, rope and cathead		
	SPLIT-SPOON	TUBE
	AUGER	WASH

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements CLIENT: Washington County Highway Dept. LOCATION: STH 145 to STH 60 Washington County, Wisconsin	JOB NO.: 0700-21-002 BORING NO.: C2 GROUND ELEVATION: _____ BORING LOCATION: _____
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BORING STARTED <u>6/30/2021</u> BORING COMPLETED <u>6/30/2021</u> TOTAL BORING DEPTH <u>10'</u>	Groundwater: During Drilling <u>5.5'</u> Completion of Drilling <u>4.5'</u> 24 Hours After Completion _____
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Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf							
Drilled 7' west of centerline										ASPHALT (15")	
								1			
								2		CONCRETE (6")	
19.0				2.0	1	14"	4	2		MEDIUM STIFF DARK BROWN SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (Possibly Slightly Organic)	
17.5				1.2			6	3		MEDIUM STIFF TO SOFT BROWN AND YELLOWISH BROWN MOTTLED SILTY CLAY moist, little fine to coarse sand, trace fine to coarse gravel. (CL)	
19.9				0.2	2	18"	3	4			
							4	5			
							5				
12.0					3	18"	2	6		VERY LOOSE LIGHT YELLOWISH BROWN SANDY SILT wet, trace clay, little fine to coarse gravel. (ML)	
							2	7			
9.3							8	8		MEDIUM DENSE TO DENSE LIGHT YELLOWISH BROWN SANDY CLAYEY SILT moist, little fine to coarse gravel. (ML)	
					4	12"	46	9			
							54	10		END OF BORING	
								11			
								12			

LOGGED BY <u>J.P.</u>	CHECKED BY <u>JGS</u>	CLASSIFICATION SYSTEM <u>USCS/JGS</u>
METHOD OF DRILLING <u>2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring</u>		
MACHINE MODEL <u>Truck-mounted CME 45</u>	 SPLIT-SPOON	 TUBE
SPT HAMMER TYPE <u>Safety hammer, rope and cathead</u>	 AUGER	 WASH

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements						JOB NO.: 0700-21-002									
CLIENT: Washington County Highway Dept.						BORING NO.: C3									
LOCATION: STH 145 to STH 60 Washington County, Wisconsin						GROUND ELEVATION: _____ BORING LOCATION: _____									
BORING STARTED 6/30/2021				Groundwater: During Drilling 9'				BORING COMPLETED 6/30/2021				Completion of Drilling None			
TOTAL BORING DEPTH 11.5'				24 Hours After Completion				_____				_____			

Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf							
Drilled 7' west of centerline										ASPHALT (12")	
								1		CONCRETE (7")	
								2		FIRM TO MEDIUM DENSE LIGHT YELLOWISH BROWN CLAYEY SILT very moist, some fine to coarse sand, little fine to coarse gravel. (ML)	
					1	12"	4				
							6				
								3			
								4			
								5			
								6		DENSE LIGHT YELLOWISH BROWN SILTY FINE TO COARSE SAND AND FINE TO LARGE GRAVEL moist to wet. (ML)	
					2	18"	6				
							7				
								7			
								8			
								9			
								10		DENSE LIGHT YELLOWISH BROWN CLAYEY SILT moist, little fine to coarse sand, little fine to coarse gravel. (ML)	
								11			
								12			
								11		APPARENT LIMESTONE BEDROCK	
										END OF BORING	

LOGGED BY J.P.		CHECKED BY JGS		CLASSIFICATION SYSTEM USCS/JGS	
METHOD OF DRILLING 2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring					
MACHINE MODEL Truck-mounted CME 45		SPT HAMMER TYPE Safety hammer, rope and cathead		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> SPLIT-SPOON </div> <div style="text-align: center;"> TUBE </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">A</div> AUGER </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">W</div> WASH </div> </div>	

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements						JOB NO.: 0700-21-002					
CLIENT: Washington County Highway Dept.						BORING NO.: C4					
LOCATION: STH 145 to STH 60 Washington County, Wisconsin						GROUND ELEVATION: _____ BORING LOCATION: _____					
BORING STARTED 6/30/2021 BORING COMPLETED 6/30/2021 TOTAL BORING DEPTH 10'					Groundwater: During Drilling None Completion of Drilling None 24 Hours After Completion						

Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf							
Drilled 6' east of centerline										ASPHALT (12")	
								1			
								2		CONCRETE (9")	
								3		VERY STIFF DARK BROWN SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (CL)	
								4		STIFF TO VERY STIFF LIGHT YELLOWISH BROWN SLIGHTLY MOTTLED SILTY CLAY moist, trace to little fine to coarse sand, trace fine to coarse gravel. (CL)	
								5			
								6		STIFF TO VERY STIFF LIGHT YELLOWISH BROWN SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (CL)	
								7			
								8			
								9			
								10		END OF BORING	
								11			
								12			

LOGGED BY J.P.		CHECKED BY JGS		CLASSIFICATION SYSTEM USCS/JGS	
METHOD OF DRILLING 2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring					
MACHINE MODEL Truck-mounted CME 45		SPT HAMMER TYPE Safety hammer, rope and cathead		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> SPLIT-SPOON </div> <div style="text-align: center;"> TUBE </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">A</div> AUGER </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">W</div> WASH </div> </div>	

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements CLIENT: Washington County Highway Dept. LOCATION: STH 145 to STH 60 Washington County, Wisconsin	JOB NO.: 0700-21-002 BORING NO.: C5 GROUND ELEVATION: _____ BORING LOCATION: _____
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BORING STARTED <u>6/30/2021</u> BORING COMPLETED <u>6/30/2021</u> TOTAL BORING DEPTH <u>10'</u>	Groundwater: During Drilling <u>None</u> Completion of Drilling <u>None</u> 24 Hours After Completion _____
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Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf							
Drilled 7' east of centerline										ASPHALT (15")	
								1			
								2		CONCRETE (7")	
					1	9"	4	2		MEDIUM STIFF TO STIFF GREENISH GRAY SILTY CLAY moist, trace fine to coarse sand, trace fine to coarse gravel. (CL)	
21.8				2.0			4	3			
					2	10"	4	4		STIFF GRAYISH BROWN SLIGHTLY MOTTLED SILTY CLAY moist, little fine to coarse sand, trace fine to coarse gravel. (CL)	
22.5				1.7			6	5			
					3	18"	7	6		STIFF TO VERY STIFF LIGHT YELLOWISH BROWN SILTY CLAY moist, trace to little fine to coarse sand, trace fine to coarse gravel. (CL)	
19.7				1.7			16	7			
					4	18"	7	8			
18.4				2.5			8	9			
							12	10		END OF BORING	
								11			
								12			

LOGGED BY <u>J.P.</u>	CHECKED BY <u>JGS</u>	CLASSIFICATION SYSTEM <u>USCS/JGS</u>
METHOD OF DRILLING <u>2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring</u>		
MACHINE MODEL <u>Truck-mounted CME 45</u>		
SPT HAMMER TYPE <u>Safety hammer, rope and cathead</u>		
	SPLIT-SPOON TUBE AUGER WASH	

LOG OF BORING

JGS GEOTECH, LLC

PROJECT: CTH P Road Improvements						JOB NO.: 0700-21-002					
CLIENT: Washington County Highway Dept.						BORING NO.: C6					
LOCATION: STH 145 to STH 60 Washington County, Wisconsin						GROUND ELEVATION: _____ BORING LOCATION: _____					
BORING STARTED 6/30/2021 BORING COMPLETED 6/30/2021 TOTAL BORING DEPTH 10'					Groundwater: During Drilling None Completion of Drilling None 24 Hours After Completion						

Notes and Laboratory Test Results					Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
M _c %	D _d pcf	O _c %	Q _u tsf	Q _p tsf	Sample No	Recovery	Blow Count	Depth Feet	Sample	Material Classification	Elevation
										ASPHALT (9-1/2")	
								1		CONCRETE (7")	
								2		FILL OF STIFF DARK GRAYISH BROWN SILTY CLAY moist, little fine to coarse sand, trace fine to coarse gravel, trace to little topsoil.	
								3			
								4		MEDIUM STIFF TO STIFF LIGHT YELLOWISH BROWN WITH GRAY MOTTLES SILTY CLAY moist, little fine to coarse sand, trace fine to coarse gravel. (CL)	
								5			
								6		STIFF TO VERY STIFF LIGHT YELLOWISH BROWN SILTY CLAY moist, trace to little fine to coarse sand, trace fine to coarse gravel. (CL)	
								7			
								8			
								9			
								10		END OF BORING	
								11			
								12			

LOGGED BY J.P.		CHECKED BY JGS		CLASSIFICATION SYSTEM USCS/JGS	
METHOD OF DRILLING 2-1/4 in. I.D. hollow stem auger casing with carbide toothed finger bit for entire depth of boring					
MACHINE MODEL Truck-mounted CME 45		SPT HAMMER TYPE Safety hammer, rope and cathead		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> SPLIT-SPOON </div> <div style="text-align: center;"> TUBE </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">A</div> AUGER </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px;">W</div> WASH </div> </div>	

JGS GEOTECH, LLC

FIELD EXPLORATION STANDARD SAMPLING PROCEDURES

Soil sampling was performed in general accordance with ASTM method D-1586. Using this method, a 140 lb. weight (hammer) free-falling a distance of 30 in. is used to drive a 2 in. O.D. by 1-3/8 in. I.D. split-barrel sampler into the soil. The sampler is first driven 6 in. into the soil for seating purposes. The sampler is then driven an additional 12 in., and the number of blows required to drive the sampler the final 12 in. is known as the penetration resistance or "N" value. The number of hammer blows used in making the test is reported on the drill logs for all three 6 in. increments of penetration (example: 7/8/9 where $8 + 9 = 17$ is the standard penetration resistance or "N" value). "N" values are used to indicate relative densities of cohesionless (sand and gravel soils) and to a lesser degree the consistencies of cohesive soils.

All soil samples recovered from the test borings were preliminarily classified in the field by the drill crew. Representative portions of the samples were enclosed in glass jars, labeled and returned to the laboratory for further examination and final classification by a geotechnical engineer.

Please note that the boring logs show the subsurface conditions at the dates, locations and depths indicated, and it is not warranted that they are representative of subsurface conditions at other locations and times, and to greater depths than penetrated by the borings. It should also be noted that water level determinations made in clean, cohesionless soil are generally quite reliable, whereas water level determinations made in cohesive soils may not indicate true static water levels even after several days or weeks observation.

JGS GEOTECH, LLC

Field Classification System for Soil Exploration

Non Cohesive Soils

(Silt, Sand, Gravel and Combinations)

<u>Relative Density</u>	<u>Blows Per Ft.</u>
Very Loose	5 or less
Loose	6 to 10
Firm	11 to 15
Medium Dense	16 to 30.
Dense	31 to 50
Very Dense	51 or more

Relative Proportions

<u>Descriptive Term</u>	<u>Percent</u>
Trace	1 to 10
Little	11 to 20
Some	21 to 35
And	36 to 50

Cohesive Soils

(Clay, Silt and Combinations)

<u>Consistency</u>	<u>Blows Per Foot</u>
Very Soft	3 or less
Soft	4 to 5
Medium Stiff	6 to 10
Stiff	11 to 15
Very Stiff	16 to 30
Hard	31 or more

Laboratory Test Symbols

M_c: Natural Moisture Content

D_d: Natural Dry Density

O_c: Organic Content

Q_u: RIMAC Unconfined Compressive Strength

Q_p: Calibrated Penetrometer

Particle Size Identification

Boulders - 8 inch diameter or more

Cobbles - 3 to 8 inch diameter

Gravel - Coarse - Large 1 to 3 inch

- Medium - 1/2 to 1 inch

- Fine - 4.76mm to 1/2 inch

Sand - Coarse - 2.0mm to 4.76mm
(dia. of pencil lead)

- Medium - 0.42mm to 2.0mm
(dia. of broom straw)

- Fine - 0.074mm to 0.42mm
(dia. of human hair)

Silt - 0.002mm to 0.074mm
(Cannot see particles)

Plasticity

Degree of Plasticity

Plasticity Index

None to Slight 0 to 4

Slight 5 to 7

Medium 8 to 22

High to Very High Over 22

Classification on logs are made by visual inspection in the absence of classification tests.

Standard Penetration Test - A 2.0 in. O.D. by 1-3/8 in. I.D. sampler (split-spoon) is driven a distance of 1.5 ft. with a 140 lb. hammer free falling a distance of 30.0 in. The number of hammer blows required for each 6.0 in. of penetration are recorded on the boring log (Example - 6/8/9). The Standard Penetration Resistance (N value) can be obtained by adding the last two figures (i.e. N = 8+9 = 17).

Strata Changes - In the column "Material Classification" on the boring log, the horizontal lines represent strata changes. A solid line (—) represents an actually observed change, a dashed line (-----) represents an estimated change.

Groundwater Observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause the water levels to vary from those indicated on the logs.

Interbedded Strata Descriptions

Very thin seams	- Paper thin to 1/8 in. thick
Thin seams	- 1/8 in. to 1 in. thick
Medium seams	- 1 in. to 6 in. thick
Large seams	- 6 in. to 12 in. thick

*Guidelines herein are based on rope and cathead method of driving sampler. Adjustments can be applied for high efficiency automatic SPT hammer.

Project File: CTH P, 145 to Kucor Rd.
HD

GEOTECHNICAL EXPLORATION REPORT



For the:

**CTH P Reconstruction
STH 145 to CTH NN (West)
Washington County, Wisconsin**

Prepared for:

**Ayres Associates
N19 W24075 Riverwood Drive
Suite 300
Waukesha, Wisconsin 53188**

Prepared by:

**Professional Service Industries, Inc.
W228 N727 Westmound Drive
Suite A
Waukesha, Wisconsin 53186**

**PSI Project No. 052-15101(Revised)
March 12, 2002**



March 12, 2002

Mr. Munzer Haidar, P.E.
Ayres Associates
N19 W24075 Riverwood Drive
Suite 300
Waukesha, Wisconsin 53188

Re: Geotechnical Exploration Report
CTH P Reconstruction
STH 145 to CTH NN (West)
Washington County, Wisconsin
PSI File No. 052-15101(Revised)

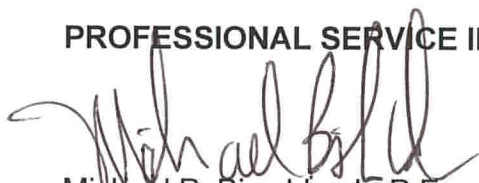
Dear Mr. Haidar:

Professional Service Industries, Inc. is pleased to submit our Geotechnical Exploration Report for the above referenced project. This report includes the results of field and laboratory testing, and recommendations for pavement design, as well as general site development.

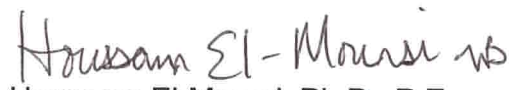
We appreciate the opportunity to perform this Geotechnical Study and look forward to continued participation during the design and construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.



Michael P. Birschbach, P.E.
Senior Engineer



Houssam El-Moursi, Ph.D., P.E.
Senior Regional Engineer

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PROJECT INFORMATION

Project Authorization

Professional Service Industries, Inc. (PSI) has completed a geotechnical exploration for the proposed reconstruction of CTH P in the Towns of Jackson, Polk and West Bend, in Washington County, Wisconsin. Mr. Munzer Haider, of Ayres Associates, authorized our services. This exploration was accomplished in general accordance with PSI Proposal No. 052-1066, dated September 12, 2001.

Project Description

Based upon information provided by Mr. Munzer Haider, of Ayres Associates, we understand that the project involves the reconstruction of an approximate 7-mile section of CTH P from STH 145 on the south to CTH NN (west) on the north, in Washington County, Wisconsin. While the horizontal alignment will remain near that of the existing, the vertical alignment will be modified to current standards. The project also includes widening the existing roadway to 24 feet and adding 8-foot wide gravel shoulders, of which 3 to 5 feet will be paved.

The geotechnical recommendations presented in this report are based on the available project information and the subsurface materials described in this report. If any of the noted information is incorrect, please inform PSI in writing so that we may amend the recommendations presented in this report if appropriate and if desired by the client. PSI will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

Purpose and Scope of Services

The purpose of this study was to explore the subsurface conditions at the site to estimate the various soil profile components, the engineering characteristics of the subgrade materials and to provide criteria for the use by the design engineers for pavement design. Our scope of services included drilling 14 soil test borings within the existing road alignment, select laboratory testing, and preparation of this geotechnical report. In addition, core samples at each boring location were taken. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, and presents recommendations regarding the following:

- A discussion of subsurface conditions encountered, including pertinent soil properties.
- Existing pavement sections at each test boring location.
- Recommendations for subgrade preparation, including placement and compaction of fill soils.
- Recommendations for pavement design.

- Comments regarding factors that will impact construction and performance of the proposed construction.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The project consists of the reconstruction of an approximate 7-mile section of CTH P, from STH 145 on the south to CTH NN on the north, in the Towns of Jackson, Polk and West Bend, Washington County, Wisconsin.

The existing CTH P consists of an existing 22-foot wide, 2 lane rural roadway with 2- to 7-foot wide shoulders. The existing roadway is constructed of multiple layers of asphaltic concrete. The asphaltic concrete is underlain by portland cement concrete at a majority of the boring locations.

The topography is somewhat rolling. Based upon a review of the USGS maps, the elevations range from El. 860± to El. 1010±. There is an estimated maximum elevation difference of approximately 150 feet along the entire roadway alignment.

The existing asphaltic pavement of CTH P was generally noted to be in fair to poor condition. There were signs that the pavement surface was deteriorating, including pavement transverse and longitudinal cracking. Some areas of asphalt patching and milling were also noted along the road alignment. The edges of the asphalt pavement were generally in advanced state of deterioration with numerous longitudinal cracks observed. This is likely the result of the existing pavement section being wider than the underlying concrete section.

Subsurface Conditions

The site subsurface conditions were explored with 14 soil test borings (B-1 to B-14) conducted within the existing roadway alignment. All test borings were drilled to depths of 10 feet below the existing ground surface. The boring locations were selected by PSI and the Client and were located in the field by the drill crew by measuring distances from known site reference points (see attached Boring Location Maps). The borings were advanced utilizing hollow stem auger drilling methods and soil samples were routinely obtained during the drilling process. Drilling and sampling techniques were accomplished generally in accordance with ASTM procedures.

In general, the existing section consisted of asphalt surface layer over underlying concrete slab. No base stone was present; however, the materials underlying the concrete were classified as dark brown sand and gravel with varying amounts of silt. The existing pavement section thickness, at each boring location is shown on the following table.

SUMMARY TABLE

Boring Number	Boring Location	Asphalt	Concrete
B-1	NB	3½	9½
B-2	NB	8½	NO
B-3	SB	8½	8
B-4	SB	17	NO
B-5	NB	12	5
B-6	NB	19½	4*
B-7	SB	11	9
B-8	SB	12	6
B-9	NB	10	10
B-10	NB	10	NO
B-11	SB	8	8
B-12	SB	9	8
B-13	SB	9½	8
B-14	SB	9	8

*4" of fill soil between asphalt and concrete

NB – Northbound Lane

SB – Southbound Lane

The existing sand and gravel underlying the pavement generally consisted of dark brown sand and gravel trace to little silt and silty sand and gravel that is classified as a SM material, according to the Unified Soil Classification System (USCS). These soils are considered fair to good subgrade materials. However, they are not considered suitable for use as base materials.

At borings B-6, B-8 and B-10, the underlying material consisted of fill and possible fill extending to depths of 5½ to 8 feet. The fill soils were classified as clayey to silty sand, clayey silt to silty clay and silty sand. Standard penetration resistance N-values within these fills and possible fills ranged from 8 to 25 blows per foot (bpf). Moisture contents ranged from 4 to 16 percent, indicating moist soil conditions. These soils were classified as ML, CL and SM according to USCS.

The native materials at a majority of the borings generally consisted of sandy to clayey silt, silty to clayey sand and silty sand and gravel. Standard penetration resistance N-values within these granular soils ranged from 6 to 48 bpf, indicating a loose to very dense soil relative density. Moisture contents ranged from 3 to 26 percent, indicating a moist soil condition. These soils were classified as SM and SC according to USCS.

Within borings B-3, B-4, B-5, B-7, B-9, B-11, B-13 and B-14, underlying layers of cohesive soils were present and consisted of silty clay, silty to sandy clay and clayey silt to silty clay. Standard penetration resistance N-values within these silty and clayey soils typically ranged from 6 to 16 bpf. Pocket penetrometer values ranging from 0.5 to 4.25 tons per square foot (tsf) were also recorded, indicating a firm to hard soil consistency. Moisture contents ranged from 12 to 21 percent, indicating a moist to very moist soil condition. These soils were classified as ML and CL according to USCS.

Water was measured within borings B-4 at a depth of 2 feet while drilling and at 4 feet upon completion. At B-6, B-10, B-11 and B-12 was measured at depths of 6 to 8 feet below existing grade while drilling and 5 feet to 8 feet upon the completion of drilling operations. All other borings were dry upon completion. Considering the relative moisture contents within these borings, the groundwater table was likely below the depth of subgrade explored at these locations. However, seasonal variations may cause fluctuations in the groundwater table.

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the appendix should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on these boring logs. The samples that were not altered by laboratory testing will be retained for 60 days from the date of this report and then will be discarded.

Soil Survey Map Review

A review of the U.S. Soil Conservation Service Soil Survey for Washington County Wisconsin was performed. The maps indicate that the predominant soil type for the existing roadway generally consists of Ozaukee, Mequon and Hochheim loams or soils with similar properties. The soil survey indicates that these soils are generally silt loam (sandy to clayey silt) over silty clay loam. They are somewhat poorly to well draining soils.

Within close proximity to the existing creek crossings, the soil survey indicates Brookston and Ashkun silty clay loams to be present. These soils are poorly to very poorly drained and generally consist of glacial till (silty clay) soils. In general, these soils are considered

to be less suitable for pavement support due to the drainage characteristics and the presence of finer grained (clay & silt) soils.

The soils observed at the boring locations correspond relatively well to those indicated on the soil survey maps.

RECOMMENDATIONS

Pavement Recommendations

It is understood that the majority of this project will consist of reconstruction of the pavement section along the existing roadway alignment. This includes widening the existing roadway and shoulders, and some grading to provide better sight distances on the vertical alignment. The conditions observed in the borings generally indicate fair to good subgrades present below the existing pavement section. However, in some areas, the existing pavement section was also underlain by silty clay to clayey silt soils, which are considered poor subgrade soils.

We recommend that the existing asphalt be removed. The recycled asphalt pavement should not be used as a base course below new pavement; however, recycled asphalt may be used below shoulder areas or as a source of fill where grade changes are planned. In areas where the existing concrete is to be greater than 2 feet below the proposed roadway base course elevation, it may be left intact. Where there is less than 2 feet of separation, the concrete should be pulverized or removed. It could also be used as a source of fill or as a base course.

After removing the existing pavement, the surface should be inspected for areas of inadequate or failed subgrade by proof rolling with a smooth drummed vibratory roller where granular soils are encountered and a fully loaded tandem axle dump truck or similar rubber tired vehicle where cohesive soils are encountered. This should be performed under the direction of the geotechnical engineer. The purpose of proof-rolling will be to delineate any excessively loose/soft areas not disclosed by the test borings and to provide compaction of the existing subgrade.

Prior to the placement of new fills in any area where widening will occur, in any areas to be raised, the subgrade should also be subjected to proof rolling operations as outlined above. Since the borings were performed in the roadway, boring information relative to the thickness of topsoil and/or unsuitable soils outside of the roadway is not available. It is anticipated that some topsoil and/or unsuitable soil removal will be required prior to fill placement in the areas to be widened. For proper pavement support, in areas underlain by deposits of topsoil, organics or other unsuitable soils, these soils should be removed throughout their depth and for a distance of at least 2 feet beyond the edge of the shoulder and replaced with compacted embankment material.

Where more than 2 feet of fill will be placed, it is recommended that the lateral distance extend 1 foot for every foot of fill placed. In areas where the concrete is to be left intact, it is recommended that the existing shoulder be removed to the base elevation of the concrete slab. The area should then be thoroughly proof rolled and replaced with structural fill. This is necessary to provide a uniform subgrade and to prevent reflective cracking from the pavement slab.

The results of the borings indicate that the majority of the project alignment is underlain by granular deposits which are anticipated to exhibit good pavement support characteristics. However, areas with poorer silty clay or clayey silt subgrade soils were also encountered. Where such areas are identified, these areas should be selectively undercut to provide a firm, non-yielding subgrade and backfilled with a suitable non frost susceptible fill such as a granular backfill as specified in section 209 of the State of Wisconsin Standard Specifications for Highway and Structure Construction. The amount of subgrade preparation required will be influenced by the subgrade moisture conditions at the time of construction.

After an acceptable subgrade condition is achieved, the placement and compaction of the pavement section base course or new fills may begin and should be monitored by a representative of the geotechnical engineer. Fill placement should be done in accordance with the State of Wisconsin's Standard Specifications for road and Bridge Construction. We recommend each lift of fill be compacted as per the state's "Special Compaction" requirements, Article 207.3.6.3.

The visual/manual classifications and moisture contents of selected samples indicate that the subgrade soils along most of the project are anticipated to consist of sand and silty sand. These soils are considered good subgrade materials. Based upon the field laboratory data and provided the subgrade is prepared as outlined above, the following values are recommended for design where the sand and silty sand subgrade soils are encountered:

CBR (California Bearing Ratio)	10.0
FGI (Frost Group Index)	F-3
SSV (Soil Support Value)	4.3
DGI (Design Group Index)	12.0
K (Modulus of Subgrade Reaction)	150.0

However, there were sections of the existing pavement section that were underlain by deposits of sandy silt, clayey silt and silty clay. These areas include the areas around existing creek crossings. These soils are moisture sensitive and susceptible to frost action. Significant decreases in subgrade strength generally occur when such materials become wet or saturated and it is not an unreasonable assumption that these subgrade soils will experience some seasonal moisture variations during and after construction. Depending upon where final grades are established, these siltier soils may fall within the pavement zone of influence. Based upon the field laboratory data and provided the

subgrade is prepared as outlined above, the following values are recommended for design where the silty clay and clayey silt are encountered:

CBR (California Bearing Ratio)	5.0
FGI (Frost Group Index)	F-3
SSV (Soil Support Value)	3.8
DGI (Design Group Index)	15.0
K (Modulus of Subgrade Reaction)	125.0

All fill added to raise grades must have design values at least equal to those above. Construction of the subgrade and pavements should be in accordance with the State of Wisconsin Standard Specifications for Road and Bridge Construction.

The CBR values given above have been estimated. For less conservative CBR values, we recommend that actual CBR tests be performed on each type of material.

CONSTRUCTION CONSIDERATIONS

PSI should be retained to provide observation and testing of construction activities involved in the pavement and earthwork construction, and related activities of this project. PSI will not accept any responsibility for conditions that deviated from those described in this report, or for the performance of the pavement if we are not engaged to provide construction observation and testing for this project.

Moisture Sensitive Soils/Weather Related Concerns

The soils that were encountered at this site are highly sensitive to weather, disturbances caused by construction traffic, and changes in moisture content. Increases in the soil moisture content can cause significant reduction in the soil strength and support capabilities. In addition, soil that becomes wet may be slow to dry and thus significantly retard the progress of grading and compaction. It will, therefore, be advantageous to perform earthwork and construction activities during dry weather.

Water should not be allowed to collect in excavations, on pavement areas, or on prepared subgrades. The site should be graded to direct water from construction areas and away from the pavement.

Groundwater Control

Groundwater was measured within a few borings at a depth of 2 to 8 feet below existing grade upon the completion of drilling operations. All other borings were dry upon completion. Based upon this, little difficulty with groundwater control is anticipated along the majority of the project. However, groundwater control will be necessary if groundwater is encountered in excavations in any widening and fill areas or

excavations for culvert or utility installation. Depending upon excavation depths and lengths of exposure, and considering that excavations will not occur more than a foot or two below any water level present at the time, it is likely that a conventional dewatering system consisting of a gravity system or construction sumps and pumps, will be adequate for groundwater control.

Excavations

Excavations will be unstable and will cave rapidly. Excavations must be constructed in accordance with current Occupational Safety and Health Administration (OSHA) guidelines to protect workers and others during construction. These regulations must be strictly enforced; otherwise, workers could be in danger and the owner(s) and the contractor(s) could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable excavations and must shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility excavation depth, exceed those specified in local, state, and federal safety regulations. We are providing this information solely as a service to our client. PSI does not assume any responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and federal safety or other regulations.

GENERAL COMMENTS

The soil test borings are relatively widely spaced and the soil profile between the borings has been estimated by interpolation. Anomalies and unanticipated conditions may require the field determination of construction procedures.

When the plans and specifications are more complete, or if significant changes are made in the character or location of the proposed roadway, a consultation should be arranged to review them with respect to the prevailing soil conditions. At that time, it may be necessary to submit supplementary recommendations.

It is recommended that the services of a qualified geotechnical engineer be engaged to test and evaluate the subgrade soils prior to placing the pavement section. Monitoring and testing should also be performed to verify that fill materials meet the standard specifications and that they are properly placed and compacted in accordance with the "Standard Compaction" requirements of the State of Wisconsin Standard Specifications for Road and Bridge Construction.

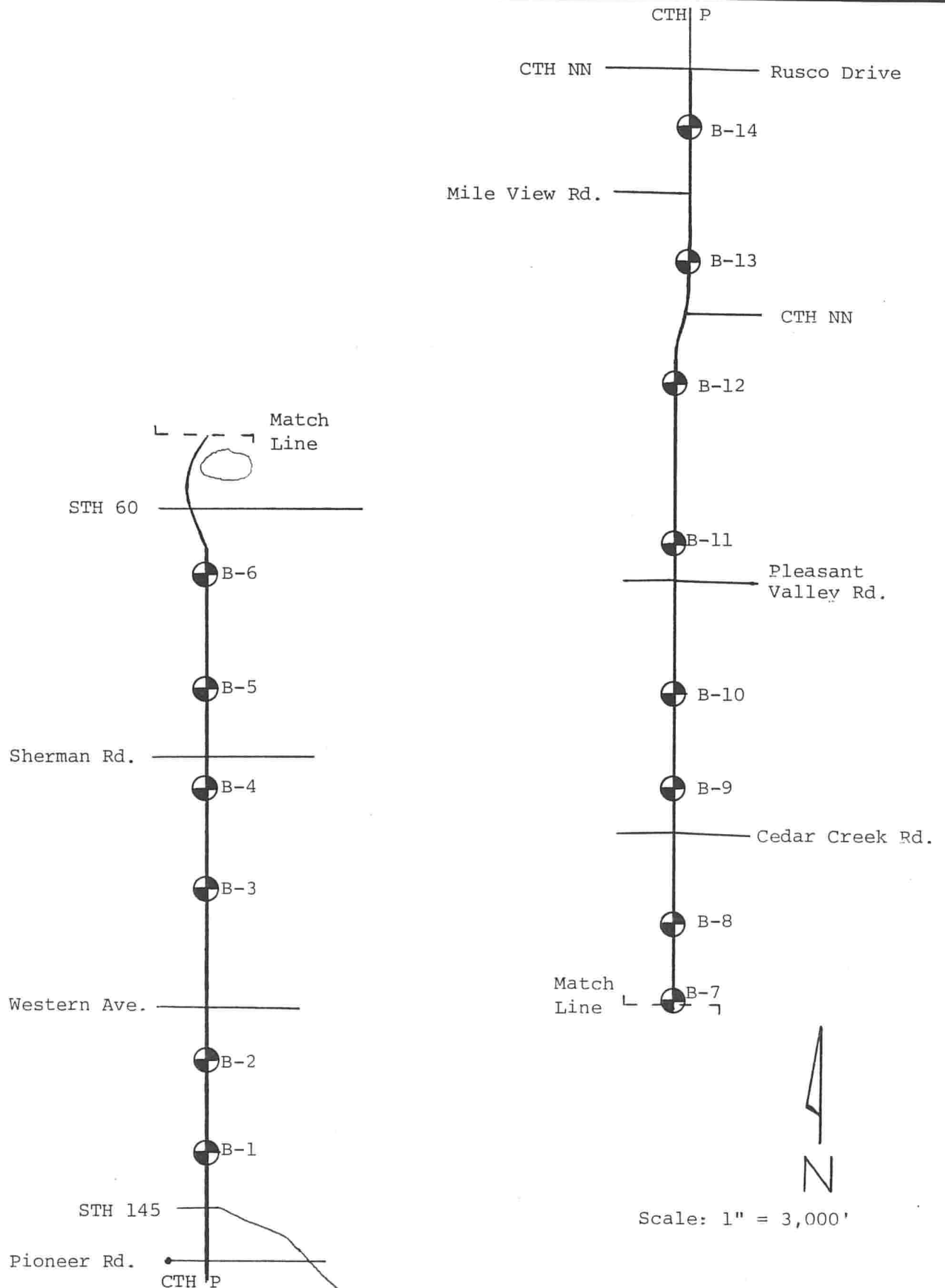
REPORT LIMITATIONS

Our recommendations are based on assumptions made by PSI, project details furnished by others, and the subsurface conditions that were encountered at the test boring locations. If our assumptions are not correct, if there are any changes to this project, or if the subsurface conditions encountered during construction differ from those noted in this report, PSI must be notified immediately in writing to determine if the recommendations provided in this report need to be changed or if supplemental recommendations are required. If PSI is not notified of deviations, PSI will not be responsible for the impact of those deviations on the project.

We warrant that the findings, recommendations, and professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

We must be retained and provided the opportunity to review the final plans and specifications to check that our engineering recommendations have been properly interpreted and are correctly incorporated into the design documents. At that time, it may be necessary to revise the recommendations provided in this report or submit supplemental recommendations. This report has been prepared for the exclusive use by Ayres Associates for this project only.

APPENDIX



BORING LOCATION PLAN

Client: Ayres Associates
 Project: CTH P Reconstruction
 Location: Washington County, Wisconsin
 Number: 052-15105

MOVEMENT PLAN

SHERMAN ROAD

CTH P

WESTERN AVENUE

BEGIN
PROJECT

STH 145

PIONEER ROAD

RES
CIATES



MOVEMENT PLAN

PLEASANT VALLEY ROAD

CTH P

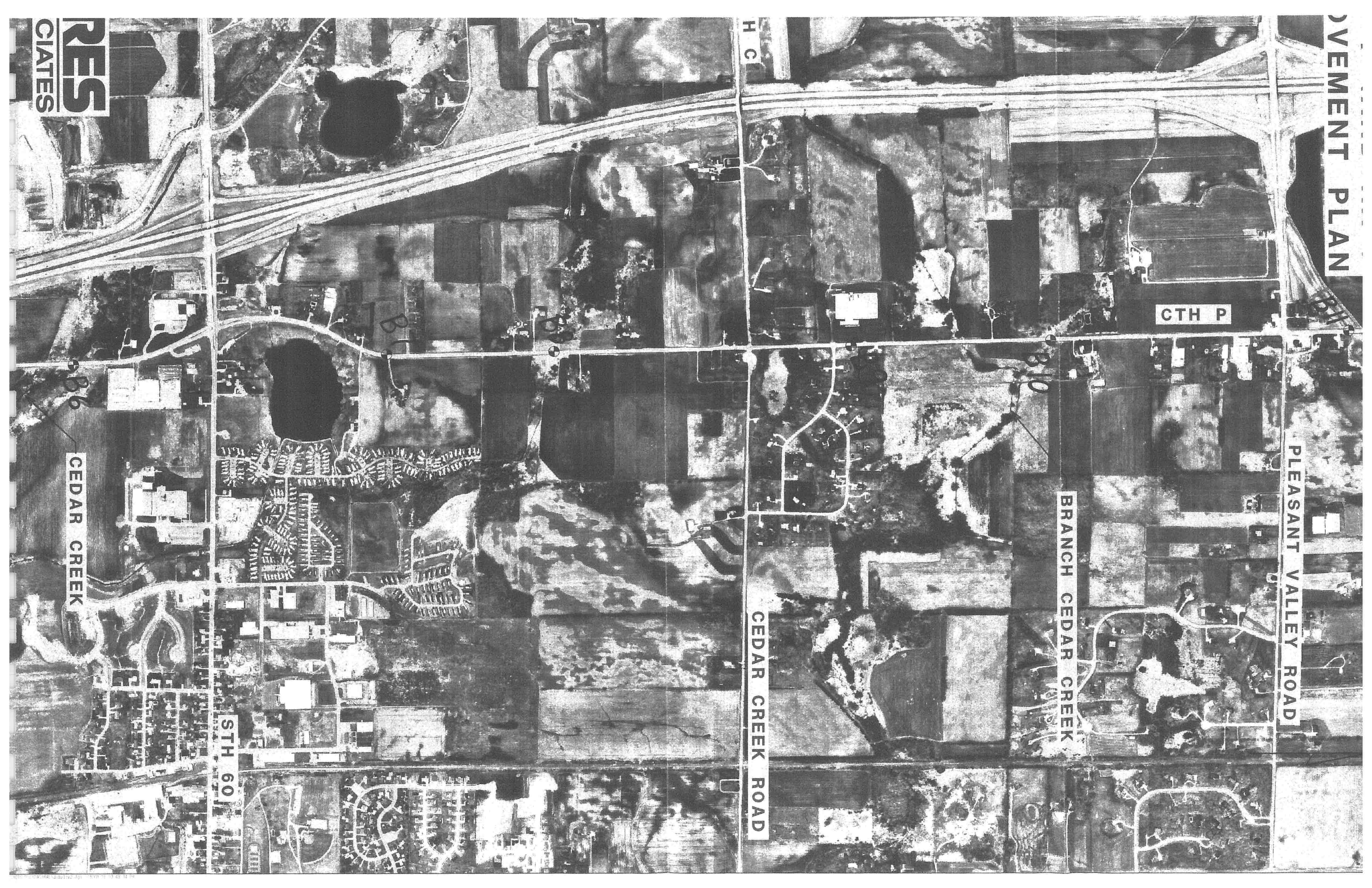
BRANCH CEDAR CREEK

CEDAR CREEK ROAD

STH 60

CEDAR CREEK

RES
CIATES



MOVEMENT PLAN

CTH NN

END
PROJECT

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CTH NN

CTH P


RES
CIATES

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

- N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split-spoon.
- Qu: Unconfined compressive strength, TSF.
- Qp: Penetrometer value, unconfined compressive strength, TSF.
- Mc: Water content, %.
- LL: Liquid limit, %.
- PI: Plasticity index, %.
- δd : Natural dry density, PCF.
- : Apparent groundwater level at time noted after completion of boring.

DRILLING AND SAMPLING SYMBOLS

- SS: Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
- ST: Shelby Tube - 3" O.D., except where noted.
- AU: Auger Sample.
- DB: Diamond Bit.
- CB: Carbide Bit.
- WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

TERM (NON-COHESIVE SOILS)

Very Loose
Loose
Medium
Dense
Very Dense

STANDARD PENETRATION RESISTANCE

0-4
4-10
10-30
30-50
Over 50

TERM (COHESIVE SOILS)

Very Soft
Soft
Firm (Medium)
Stiff
Very Stiff
Hard

Qu - (TSF)

0 - 0.25
0.25 - 0.50
0.50 - 1.00
1.00 - 2.00
2.00 - 4.00
4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-0.6mm	Silt	0.074mm-0.005mm
Cobbles	8 in.-3 in.	Medium Sand	0.6mm-0.2mm	Clay	-0.005mm
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm		



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LOG OF BORING B-1

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling Dry
▽ At Completion Dry
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ X Moisture ⊠ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft						
						3.5" Asphalt over 9.5" Concrete						
						Dark Brown Sand and Gravel			1 X			
				1		Brown Silty Sand to Sandy Silt, Some Gravel, Moist, Medium Dense to Dense		18-18-30 N=48	5 X	⊙		
				2				4-3-4 N=7	8	⊙		
	5			3				6-7-9 N=16		⊙		Poor Recovery
				4				8-6-8 N=14	7 X	⊙		No Recovery - Auger Sample
	10					END OF BORING AT 10'						
						Cave-in at 7'-6".						

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-2

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling Dry
▽ At Completion Dry
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ X Moisture ⊠ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft 8.5" Asphalt						
				1		5" +/- Dark Brown to Black Sand and Gravel, Trace Silt		3-5-6 N=11	2 X	1 X ⊙		Poor Recovery - Drove Stone
				2		Brown Silty to Clayey Sand, Moist, Loose to Medium Dense		5-8-5 N=13	11 X ⊙ *			
	5			3				4-5-6 N=11	10 X *			
				4				9-6-7 N=13	1 X ⊙			Poor Recovery - Drove Stone
	10					END OF BORING AT 10' Cave-in at 7'-10".						

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-3

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS
▽ While Drilling Dry
▽ At Completion Dry
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ X Moisture ⊠ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft						
						8.5 " Asphalt over 8" Concrete						
				1		Dark Brown to Black Sand and Gravel, Trace Silt		8-5-3 N=8	12	⊙ X ⊠ +		P200 = 33% No Recovery - Auger Sample LL = 35 PL = 17
				2		Brown Silty to Sandy Clay, Trace Gravel, Moist		3-4-4 N=8	14	⊙ X		No Recovery - Auger Sample
	5			3		Brown Silty Sand to Sandy Silt, Some Gravel, Moist, Loose		2-3-3 N=6	9	⊙ X		
				4		Brown Silty Clay, Trace Sand and Gravel, Moist, Hard		3-4-6 N=10	16	⊙ X	>*	
	10					END OF BORING AT 10' Cave-in at 8'.						

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-4

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling 2 Ft.
▽ At Completion 4 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ©	Additional Remarks
	0					Surface Elev.: ft					
						17" Asphalt					
				1		Dark Brown to Black Sand and Gravel, Little Silt		5-5-4 N=9	1 X		Poor Recovery
				2		Brownish Gray Silty Sand and Gravel, Moist to Wet		4-4-4 N=8	6 X ⊙		
	5			3		Brown and Gray Clayey Silt to Silty Clay, Some Sand, Moist to Wet, Loose/Firm to Stiff		4-4-5 N=9	18 X ⊙		
				4				9-13-10 N=23	21 X ⊙		No Recovery - Drove Stone
	10					END OF BORING AT 10'					
						Cave-in at 8'.					

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-5

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling Dry
▽ At Completion 7 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft	Additional Remarks
	0					Surface Elev.: ft					
						12" Asphalt over 5" Concrete over 4" Deteriorated Concrete					
				1		Dark Brown Silty Sand and Gravel		8-4-4 N=8	7	⊗	
				2		Brown Sandy to Clayey Silt, Trace to Little Gravel, Moist, Loose		2-3-5 N=8	15	⊗	
	5										
				3		Brown Silty Clay, Little Sand and Gravel, Moist, Hard		2-3-9 N=12	15	⊗	>*
				4				5-4-5 N=9		⊗	No Recovery - Drove Stone
	10					END OF BORING AT 10'					
						Cave-in at 7'.					

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-6

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling 8 Ft.
▽ At Completion 5 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft. ⊙ X Moisture ⊠ PL LL STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft					
				1		19.5" Asphalt over 4" Brown and Gray Silty Clay (fill) over 4" Concrete					
				2		12" Dark Brown Sand and Gravel, Some Silt		5-5-5 N=10			Poor Recovery
				3		Possible Fill, Brown to Dark Brown Clayey Silt to Silty Clay, Trace Sand and Gravel, Moist to Wet		3-4-4 N=8	12		
	5			4		Brown to Gray Sand and Gravel, Some Silt, Moist to Wet, Medium Dense		3-15-11 N=26			Poor Recovery
						END OF BORING AT 10'					
	10					Cave-in at 7'.		2-12-11 N=23	7		

Completion Depth: 10.0 ft
Date Boring Started: 12/17/01
Date Boring Completed: 12/17/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-7

Sheet 1 of 1

PSI Job No.: 052-15101	Drilling Method: 3 1/4" HSA	WATER LEVELS ▽ While Drilling Dry ▽ At Completion Dry ▽ 24 Hr. n/a
Project: Roadway Reconstruction	Sampling Method: Split Spoon	
Location: CTH P (STH 145 to CTH NN-west)	Hammer Type: Automatic	
Washington County, Wisconsin	Latitude:	
	Longitude:	

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ X Moisture ⊠ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft						
						11" Asphalt over 9" Concrete						
						6" Silty Sand, Some Gravel, Dry						
				1		Brown Mottled Silty Clay, Trace Sand and Gravel, Moist, Very Stiff to Hard		4-3-3 N=6	14	⊙ X ⊠ +		P200 = 52% LL = 39 PL = 20
				2				3-4-5 N=9	15	⊙ X *		
	5											
				3		Brown Silty Sand to Sandy Silt, Trace to Little Gravel, Moist, Medium Dense		7-8-9 N=17	7	X ⊙		
				4				7-8-10 N=18		⊙		No Recovery
	10					END OF BORING AT 10'						
						Cave-in at 8'.						

Completion Depth: 10.0 ft	Sample Types:	Remarks:
Date Boring Started: 12/18/01	Auger Cutting	Shelby Tube
Date Boring Completed: 12/18/01	Split-Spoon	Hand Auger
Logged By: MB	Rock Core	
Drilling Contractor: PSI		

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-8

Sheet 1 of 1

PSI Job No.: 052-15101	Drilling Method: 3 1/4" HSA	WATER LEVELS ▽ While Drilling Dry ▽ At Completion Dry ▽ 24 Hr. n/a
Project: Roadway Reconstruction	Sampling Method: Split Spoon	
Location: CTH P (STH 145 to CTH NN-west)	Hammer Type: Automatic	
Washington County, Wisconsin	Latitude:	
	Longitude:	

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ X Moisture ⊠ PL + LL 1 25 50 STRENGTH, tsf ▲ Qu * Qp 0 2.0 4.0				Additional Remarks
	0					Surface Elev.: ft								
						12" Asphalt over 6" Concrete								
						Probable Fill, Brown to Dark Brown Sandy Silt, Some Gravel, Moist, Loose								
				1				6-5-4 N=9	11	⊙	X			Poor Recovery
				2				6-4-4 N=8	13	⊙	X			No Recovery - Auger Sample
	5					Dark Brown to Grayish Brown Sandy Silt, Some Gravel, Moist, Loose to Medium Dense								
				3				2-2-4 N=6	21	⊙	X			
				4				2-2-12 N=14	26	⊙	X			
	10					END OF BORING AT 10'								
						Cave-in at 8'.								

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-9

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS

▽ While Drilling Dry
▽ At Completion Dry
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft © X Moisture □ PL + LL	Additional Remarks
	0					Surface Elev.: ft					
						10" Asphalt over 10" Concrete					
				1		Brown to Dark Brown Clayey Silt, Some Sand, Trace Gravel, Moist, Loose		8-4-4 N=8	14	⊙ X	Poor Recovery
				2		Orangish Brown Clayey Sand to Sandy Clay, Moist, Hard		6-6-5 N=11	16	⊙ X	>*
	5					Light Brown Fine Sand, Some Silt, Dry, Medium Dense		9-8-11 N=19	3	X ⊙	
				3							
				4				11-11-11 N=22	3	X ⊙	
	10					END OF BORING AT 10'					
						Cave-in at 8'.					

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-10

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS
▽ While Drilling 8 Ft.
▽ At Completion 8 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft © X Moisture □ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft						
						10" Asphalt over 4" Crushed Asphalt						
						Possible Fill, Dark Brown to Gray Clayey to Silty Sand, Moist, Medium Dense						
				1				7-13-8 N=21	4	X		
				2				5-6-5 N=11	16		X	
	5					Possible Fill, Light Brown Silty Sand and Gravel, Moist, Medium Dense						
				3				8-13-12 N=25	5	X		
						Brown Silty Sand and Gravel, Moist to Wet, Medium Dense						
				4				11-11-10 N=21	9	X		
	10					END OF BORING AT 10'						
						Cave-in at 8'.						

P200 = 33%
LL = 20
PL = 18

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:

Auger Cutting
 Split-Spoon
 Rock Core

Shelby Tube
 Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-11

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS
▽ While Drilling 8 Ft.
▽ At Completion 8 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft X Moisture ▲ Qu * Qp	Additional Remarks
0	0					Surface Elev.: ft					
						8" Asphalt over 8" Concrete					
						Dark Brown Silty Sand and Gravel, Moist					
						Dark Brown to Gray Clayey Silt to Silty Clay, Moist, Loose/Very Stiff					
				1				13-13-6 N=19			
				2				3-4-4 N=8	22	X *	Poor Recovery
	5					Gray Silty to Clayey Sand, Trace Gravel, Moist, Loose					
				3				2-5-4 N=9	20	X	
				4		Brown Silty Sand, Trace Gravel, Moist to Wet		3-5-9 N=14	9	X	
	10					END OF BORING AT 10'					
						Cave-in at 7'-10".					

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:
Auger Cutting
Split-Spoon
Rock Core

Shelby Tube
Hand Auger

Remarks:

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LOG OF BORING B-12

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS
▽ While Drilling 6 Ft.
▽ At Completion 7.5 Ft.
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft © X Moisture □ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
	0					Surface Elev.: ft						
						9" Asphalt over 8" Concrete						
				1		Brown Clayey to Sandy Silt, Trace Gravel, Moist, Loose to Medium Dense		15-12-8 N=20	14	X ©		
				2				3-4-3 N=7	10	© X		
	5					Brown Silty Sand to Sandy Silt, Wet, Loose to Medium Dense						
				3				4-4-4 N=8	22	© X		
				4				3-6-5 N=11	21	© X		
	10					END OF BORING AT 10'						
						Cave-in at 7'-6".						

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger

Remarks:

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LOG OF BORING B-13

Sheet 1 of 1

PSI Job No.: 052-15101	Drilling Method: 3 1/4" HSA	WATER LEVELS ▽ While Drilling Dry ▼ At Completion Dry ▽ 24 Hr. n/a
Project: Roadway Reconstruction	Sampling Method: Split Spoon	
Location: CTH P (STH 145 to CTH NN-west)	Hammer Type: Automatic	
Washington County, Wisconsin	Latitude:	
	Longitude:	

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft	Additional Remarks
	0					Surface Elev.: ft					
						9.5" Asphalt over 8" Concrete					
						Dark Brown Silty Sand and Gravel, Moist					
				1		Brown Silty Clay, Trace Sand and Gravel, Moist, Hard		5-7-6 N=13			Poor Recovery
				2				4-5-6 N=11	15	⊗	P200 = 76% LL = 30 PL = 17
	5										
				3				7-8-8 N=16	12	⊗	Poor Recovery - Drove Stone
						Light Brown Clayey to Sandy Silt, Moist, Medium Dense					
				4				3-5-7 N=12	14	⊗	
	10					END OF BORING AT 10'					
						Cave-in at 8'-6".					

Completion Depth: 10.0 ft	Sample Types:	Remarks:
Date Boring Started: 12/18/01	Auger Cutting	
Date Boring Completed: 12/18/01	Split-Spoon	
Logged By: MB	Rock Core	
Drilling Contractor: PSI	Shelby Tube	
	Hand Auger	

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LOG OF BORING B-14

Sheet 1 of 1

PSI Job No.: 052-15101
Project: Roadway Reconstruction
Location: CTH P (STH 145 to CTH NN-west)
Washington County, Wisconsin

Drilling Method: 3 1/4" HSA
Sampling Method: Split Spoon
Hammer Type: Automatic
Latitude:
Longitude:

WATER LEVELS
▽ While Drilling Dry
▽ At Completion Dry
▽ 24 Hr. n/a

Elevation, (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft X Moisture PL LL 1 25 50 STRENGTH, tsf ▲ Qu * Qp 0 2.0 4.0	Additional Remarks
	0					Surface Elev.: ft					
						9" Asphalt over 8" Concrete					
				1		Dark Brown Clayey Silt, Some Sand, Trace Gravel, Moist, Medium Dense		7-11-13 N=24	12	X	Poor Recovery - Drove Stone
				2		Brown Silty to Sandy Clay, Trace Gravel, Moist, Very Stiff		3-4-5 N=9	16	X	
	5			3				3-3-5 N=8			Poor Recovery
				4				4-5-6 N=11	14	X	
	10					END OF BORING AT 10'					

Completion Depth: 10.0 ft
Date Boring Started: 12/18/01
Date Boring Completed: 12/18/01
Logged By: MB
Drilling Contractor: PSI

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger

Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.