

*"Our mission is to upgrade and maintain  
a safe and efficient road system"*

# **GRAND TRAVERSE COUNTY ROAD COMMISSION**

## **MASON CREEK TIMBER BRIDGE PROJECT**

January 2019

# GRAND TRAVERSE COUNTY ROAD COMMISSION

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**EAST DUCK LAKE ROAD OVER MASON CREEK**

**CONSTRUCTION OF SINGLE SPAN TIMBER BRIDGE**

**GRAND TRAVERSE COUNTY ROAD COMMISSION**

Sealed bids for construction of a single span timber bridge on East Duck Lake Road over Mason Creek are requested and will be received until **9:30 a.m. on March 11, 2019**, at the Grand Traverse County Road Commission Office, 1881 LaFranier Road, Traverse City, MI 49696, at which time they will be opened and read aloud.

Work on this project includes traffic control for a road closure, excavation, timber bridge construction, guardrail and HMA paving as detailed on the plans and specifications. All piles and structure materials will be supplied by Krenn Timber Bridge, Inc. and delivered to the project site. Supply of Timber Bridge materials is not a part of this construction bid.

Work shall not start before **April 15, 2019**. East Duck Lake Road shall be open to traffic with the closure removed by **June 28, 2019**. The final project completion date is **June 28, 2019**. Once work is started, it shall be continuous until open-to-traffic.

Plans and Specifications will be on file and available from 7:00 a.m. to 3:30 p.m. Monday through Friday starting on **February 22, 2019** at the Grand Traverse County Road Commission Office. Persons desiring paper or electronic copies of the plans should contact **Joe Slonecki, PE, at 231-922-4849**.

Each bid proposal shall be submitted on the provided Bid Form. A certified check, cashier's check or an acceptable bid bond for a sum of no less than five percent (5%) of the amount of the bid will be required with each submittal.

No bid may be withdrawn for a period of ninety (90) calendar days after the scheduled time for the receipt of the bids.

*All proposals must be in sealed envelopes, plainly marked as to contents and the name of the bidder. Telephone or faxed bids will not be accepted. The Board reserves the right to accept or reject any and all bids, to waive any irregularities in the bids, and to award the bid in a manner deemed in the best interests of Grand Traverse County.*

## INSTRUCTIONS TO BIDDERS

### ARTICLE 1 - DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders will have the meanings indicated in the Construction Contract and the General Specifications. Additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof:

Bidder — The individual or entity who submits a Bid directly to the Road Commission.

Drawings or Plans — The terms drawing or plans as used in these documents may mean project specific drawing sheets, log scoping documents, or any other document setting forth the scope of the Work under the Contract.

Issuing Office — The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

Successful Bidder — The Bidder submitting a responsive Bid to whom the Road Commission (on the basis of the Road Commission's evaluation as hereinafter provided) makes an award.

### ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the fee, if any, stated in the Advertisement or Invitation to Bid shall be obtained from the Issuing Office. The fee is nonrefundable unless specifically stated otherwise in the proposal. Payment of the plan fee, and any applicable shipping charges must be received by the Issuing Office before copies of the Bidding Documents are issued. Before issuance of Bidding Documents, the name, address, email address, phone number and fax number of the person to whom the documents are issued shall be provided to the Issuing Office.
- 2.02 Complete sets of Bidding Documents obtained from the issuing office must be used in preparing Bids; the Road Commission does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 The Road Commission in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

### ARTICLE 3 - QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.

- A. List of related project experience complete with dollar value of contract, type of work, project owner and project owner's representative and phone number.
- B. Current work now under contract or anticipated during the life of the project. Include project name, type, dollar value, completion date and percentage presently complete.
- C. Equipment list. Provide list of construction equipment presently owned and/or leased along with the equipment intended to be used on the project.
- D. List of suppliers and subcontractors.
- E. Bid Bond.
- F. Bidder Qualification Statement with supporting data.
- G. Affidavit of Non-Collusion.

#### ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- 4.01 On request, the Road Commission will provide Bidder access to the Site to conduct examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. A Right of Way Permit may be required for work within the Right of Way as a condition to access. Any fees for the Right of Way Permit will be waived by the Road Commission.
- 4.02 It is the responsibility of each Bidder before submitting a Bid to:
  - A. examine and carefully study the Bidding Documents, including any Addenda and the other related data identified in the Bidding Documents;
  - B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
  - C. become familiar with and satisfy Bidder as to all federal, state, and local laws, rules, codes, and regulations that may affect cost, progress, or performance of the Work;
  - D. carefully study all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided by the Road Commission, if any, and carefully study all reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the Supplementary Conditions.
  - E. obtain and carefully study (or assume responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data

concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the materials, means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including any specific materials, means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;

- F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
  - G. become aware of the general nature of the work to be performed by the Road Commission and others at the Site that relates to the Work as indicated in the Bidding Documents;
  - H. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
  - I. promptly give the Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
  - J. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.03 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific materials, means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

## ARTICLE 5 - PRE-BID CONFERENCE

A mandatory pre-bid conference **will** be required on this Project.

5.01 A pre-bid conference will not be held.

## ARTICLE 6 - SITE AND OTHER AREAS

- 6.01 The Site is identified in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

## ARTICLE 7 - INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to the Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed, emailed, or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than 3 days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by the Road Commission or the Engineer.

## ARTICLE 8 - BID SECURITY – A Bid security **will** be required for this Project.

- 8.01 A Bid must be accompanied by Bid security made payable to the Road Commission in an amount of 5% of Bidder's maximum Bid price and in the form of a certified or bank check, money order or a Bid Bond on an AIA form issued by a surety meeting the requirements of paragraph 6 of the General Specifications.
- 8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 10 days after the Notice of Award, the Road Commission may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom the Road Commission believes to have a reasonable chance of receiving the award may be retained by the Road Commission until the earlier of **7** days after the Effective Date of the Agreement or 30 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.
- 8.03 Bid security of other Bidders whom the Road Commission believes do not have a reasonable chance of receiving the award will be returned within 15 days after the Bid opening.

## ARTICLE 9 - CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be (a) Substantially Completed and (b) also completed and ready for final payment are set forth in the Contract.

## ARTICLE 10 - LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, are set forth in the Contract.

## ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS

- 11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to the Road Commission, application for such acceptance will not be considered by the Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in the General Specifications and may be supplemented in the General Requirements.

## ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A bid must be accompanied by a list of the subcontractors, suppliers, individuals, or entities proposed for the Work. Such list shall include the portion of the work the subcontractor will be performing and shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such subcontractor, supplier, individual, or entity. If the Road Commission, after due investigation, has reasonable objection to any proposed subcontractor, supplier, individual, or entity, the Road Commission may, before the Notice of Award is given, request the apparent Successful Bidder to submit a substitute, without an increase in the Bid.
- 12.02 If the apparent Successful Bidder declines to make any such substitution, the Road Commission may award the Contract to the next lowest Bidder that proposes to use acceptable subcontractors, suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any subcontractor, supplier, individual, or entity so listed and against which the Road Commission makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to the Road Commission subject to revocation of such acceptance after the Effective Date of the Agreement as provided in the General Specifications.
- 12.03 Contractor shall not be required to employ any subcontractor, supplier, individual, or entity against whom Contractor has reasonable objection.



## ARTICLE 13 - PREPARATION OF BID

- 13.01 The Bid form is included with the Bidding Documents. Additional copies may be obtained from the issuing office.
- 13.02 All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed. A Bid price shall be indicated for each [section, Bid item, alternative, adjustment unit price item, and unit price item] listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown below the signature.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid form. The official address of the joint venture must be shown below the signature.
- 13.08 All names shall be typed or printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form.
- 13.10 The address, email, and telephone number for communications regarding the Bid shall be shown.

## ARTICLE 14 - BASIS OF BID; EVALUATION OF BIDS

### 14.01 Unit Price

Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.

The total of all Bid prices will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid for the item. The final quantities and Contract Price will be determined as follows:

1. For all Unit Price Work, initially the Contract Price will be deemed to include an amount equal to the sum of the Unit Price for each separately identified item of Unit

Price Work times the estimated quantity of each item as indicated in Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by the Road Commission pursuant to the General Specifications.

2. Each Unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
3. Discrepancies between the multiplication of units of Work and Unit Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

Bidders shall submit a Bid on a Unit Price basis for the base Bid and include a separate price for each alternate described in the Bidding Documents as provided in the Bid form, if any. The price for each alternate will be the amount added to or deleted from the base Bid if the Road Commission selects the alternate. In the evaluation of Bids, alternates will be applied in the same order as listed in the Bid form.

#### ARTICLE 15 - SUBMITTAL OF BID

- 15.01 Bids may be submitted by either completing the Bid forms in the bound documents provided or by completing copies made from the Bid forms in the documents provided. A Bid shall include the completed Bid form, Bid security and other material identified for inclusion with the Bid.
- 15.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to GRAND TRAVERSE COUNTY ROAD COMMISSION, 1881 LAFRANIER ROAD, TRAVERSE CITY, MI 49696-8911.
- 15.03 Bids submitted by facsimile, email, in any another electronic form will not be considered.

#### ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

- 16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with the Road Commission and promptly thereafter demonstrates to the reasonable satisfaction of the Road Commission that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

#### ARTICLE 17 - OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

#### ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid form, but the Road Commission may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

#### ARTICLE 19 - AWARD OF CONTRACT

- 19.01 The Road Commission reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. The Road Commission further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to be non-responsive. The Road Commission may also reject the Bid of any Bidder if the Road Commission believes that it would not be in the best interest of the Project to make an award to that Bidder. The Road Commission also reserves the right to waive any or all formalities or nonconformities, and to negotiate contract terms with the Successful Bidder. Any such waiver shall not affect the validity of the Contract or affect the right of the Road Commission to enforce any provision of the Contract.

By submitting this Bid, the Bidder waives any and all claims against the Road commission related to the Road Commission's selection of the Successful Bidder.

- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, the Road Commission will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, the Road Commission will consider the qualifications of Bidders and may consider the qualifications and experience of subcontractors, suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of

subcontractors, suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.

- 19.05 The Road Commission may conduct such investigations as the Road Commission deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed subcontractors, suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- 19.06 If the Contract is to be awarded, the Road Commission will award the Contract to the Bidder whose Bid is in the best interests of the Project and the Road Commission.

#### ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

- 20.01 Paragraphs 5 and 6 of the General Specifications, as may be modified by the Supplementary Conditions, set forth the Road Commission's requirements as to Bonds and Insurance. When the Successful Bidder delivers the executed Agreement to the Road Commission, it must be accompanied by such Bonds and Insurance.

#### ARTICLE 21 - SIGNING OF AGREEMENT

- 21.01 When the Road Commission gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within 7 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to the Road Commission. The Road Commission shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

**GRAND TRAVERSE COUNTY ROAD COMMISSION  
CONSTRUCTION CONTRACT**

PROJECT: Masson Creek Timber Bridge (GTCRC #18E005)

LOCATION: East Duck Lake Road at Masson Creek, Green Lake Township, Grand Traverse County Michigan.

THIS CONTRACT is made this \_\_\_\_\_ day of \_\_\_\_\_, **2019**, by and between GRAND TRAVERSE COUNTY ROAD COMMISSION, a quasi-municipal corporation and a duly organized County Road Commission in the State of Michigan, of 1881 LaFranier Road, Traverse Road Commission, Michigan 49696 (the "Road Commission") and \_\_\_\_\_, a \_\_\_\_\_ corporation, whose address is \_\_\_\_\_, (the "Contractor");

WHEREAS, the parties wish to accomplish improvements at the above location (the "Site") and have solicited and submitted a bid for such improvements;

THEREFORE, the parties mutually agree as follows:

1. Contract Documents. The following designated documents shall be deemed to be a part of this Contract:

- ☐ Advertisement
- ☐ Information to Bidders
- ☐ Instructions to Bidders
- ☐ Affidavit of Non-Collusion
- ☐ Bid
- ☐ Legal Status of Bidder
- ☐ Performance Bond with maintenance and guarantee obligations
- ☐ Payment Bond
- ☐ Notice of Award
- ☐ Notice to Proceed
- ☐ Authorization of Change(s)
- ☐ Work Item Descriptions
- ☐ General Specifications
- ☐ Supplemental Specifications
- ☐ Special Provisions
- ☐ Plans and Details
- ☐ Progress Schedule
- ☐ Contractor Safety Plan
- ☐ Pre-Construction Meeting Minutes
- ☐ Reports

- ☐ Michigan Department of Transportation Standard Specifications for Construction, excluding any standard specifically executed in the Contract Documents and;

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- ☐ Grand Traverse County Road Commission Standards and Specifications
- ☐ Addenda

2. Scope of the Work - Subject Matter. The Contractor, under penalty of bond, if applicable, attached, shall furnish all labor, materials, equipment and appliances suitable, capable, and necessary for the Work and do all the Work as set forth in the bid for the above project according to the specifications, plans, bids, bonds and other Contract documents which are or become a part of this Contract, in a manner, time and place as herein set forth.

It is the intent of the Contract to describe a functionally complete Project to be constructed in accordance with the Contract. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract or from prevailing custom or trade usage as being required to produce the intended result will be provided at no additional cost to the Road Commission. The Scope of Work is referred to herein as the "Work" or the "Scope of Work."

3. Contract Times. The services to be rendered under this Contract shall commence upon issuance of the Notice to Proceed. The Contract working time shall be **April 1, 2019** with an intended substantial completion date of **June 28, 2019** and a final completion date of **June 28, 2019**. Except as otherwise provided, should the Contractor be obstructed or delayed in the prosecution or completion of the Work by any act, neglect, or default of the Road Commission, then the time herein fixed for completion of the Work shall be extended for a period equivalent to the time lost by reason of such delay for the causes herein mentioned. The duration of such extension shall be determined by the Road Commission Engineer.
4. Contract Price. The Road Commission agrees to pay the Contractor the Unit Prices provided in the attached bid(s), specifications and other Contract documents in the time and manner therein provided. The total estimated price for all Work described herein shall be \_\_\_\_\_, more or less, to be paid pursuant to the procedures established in the Contract documents.

5. Non-Discrimination. The parties agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, sexual orientation, gender identity, religion, national origin, age, sex, height, weight, family status, marital status, or physical or mental disability. Breach of this covenant may be regarded as a material breach of this Contract.
6. Independent Contractor. The relationship of the Contractor to the Road Commission is that of an independent contractor and in accordance therewith, the Contractor covenants and agrees to conduct itself consistent with such status and that neither it nor its employees, officers or agents will claim to be an officer, employee or agent of the Road Commission or make any claim, demand or application to or for any rights or privileges applicable to any officer or employee of same, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit. The parties do not intend the services provided by the Contractor to be a joint venture.
7. Maintenance and Guarantee. For one year after the date of final payment, the Contractor shall maintain and repair the Work. Any Work which is found to be defective shall promptly and without cost to the Road Commission and in accordance with the Road Commission's written instructions, be corrected or replaced with non-defective Work. If the Road Commission determines that Work must be replaced, the Contractor shall promptly replace the Work. If the Contractor believes that replacement of the Work was unreasonable and only repair of the Work should have been ordered by the Road Commission, the Contractor may file a claim against the Road Commission for the difference in cost, and, if the Road Commission disagrees with said claim, may pursue such claim in accordance with the dispute resolution procedure established in the Contract. If the Contractor does not promptly repair or replace the Work pursuant to the Road Commission's directions, the Road Commission may itself correct the defective Work or may have the defective Work corrected by another contractor. The Contractor shall pay all of the Road Commission's costs and expenses, including Road Commission overhead costs and attorney fees associated with the repair or replacement of the defective Work. Where defective Work has been corrected or removed and replaced under this paragraph, the correction period with respect to such Work will be extended for an additional term of one year after such correction or removal and replacement has been completed. These obligations are in addition to any other obligation provided by law or this Contract or warranty.
8. Recovery of Money. Whenever, under this Contract, any sum of money shall be recoverable from or payable by the Contractor to the Road Commission, the same amount may be deducted from any sum due to the Contractor under this Contract or under any other contract between the Contractor and the Road Commission. The rights of the Road Commission are in addition and without prejudice to any other right the Road Commission may have to claim the amount of any loss or damage suffered by the Road Commission on account of the acts or omissions of the Contractor.

9. Illegal Workers. The Contractor certifies that it does not and will not, during the performance of this Contract, employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986, as amended.

10. Contractor Responsibility. The Contractor shall perform the Work in a good and workerlike manner and assumes the risk in performing under this Contract. Contractor shall be solely responsible and answerable in damages for all improper Work, accidents or injuries to person or property.

11. Indemnification. Contractor shall indemnify and hold harmless the Road Commission, its board members, officers, agents and employees from and against any and all claims, liabilities, losses, damages, or expenses (including costs of investigation and defense, actual attorney fees and expenses, and settlement expenses) arising from or related to any claim (whether or not a third-party claim) alleging (1) bodily injury or death of any persons and damage or loss of any property, (2) breach of any representation, warranty, or covenant by the Contractor, (3) a hazardous environmental condition resulting or arising out of or in connection with the performance of any Work relating to this Contract, and (4) any negligent (or more culpable) act or omission of the Contractor in connection with the performance of its obligations under this Contract based upon any act, omission, or negligence of Contractor or its employees, agents, servants, subcontractors, or any other person or persons, including but not limited to the Road Commission, its agents, officers, or employees. The obligations to indemnify, and hold harmless contained herein shall exclude only those matters in which the claim arises out of allegations of the sole negligence of the Road Commission, its officers, agents or employees. This indemnification provision shall not be limited by reason of insurance coverage of any type. This provision is not intended to waive the defense of governmental immunity that may be asserted by the Road Commission in an action against it nor is it the Road Commission's exclusive remedy under this Contract.

The Road Commission hereby reserves the right to select its own counsel in defense of any matter arising hereunder, and no payment, or acknowledgement of liability, loss, fine, penalty or charge shall be made against the Road Commission without its express written consent.

The Contractor expressly acknowledges and agrees that this indemnification provision is intended to be as broad and inclusive as is permitted by law and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

This indemnity shall survive the expiration or termination of this Contract.

12. Compliance with Regulations. The Contractor shall keep itself fully informed of and shall at all times comply with all local, state and federal laws, rules and regulations applicable to this Contract and the Work to be done hereunder.



13. MISS DIG. The Contractor shall be responsible for contacting and coordinating with all affected utilities. The Contractor is responsible for complying with the MISS Dig Underground Facility Damage Prevention and Safety Act for all Work under this Contract.

14. Standard of Conduct. Unless a higher standard is contained in Contractor's bid, Contractor shall render all services under this Contract according to generally accepted industry practices for the intended use of the Work or project.

15. Third Party Participation. The Contractor agrees that despite any subcontract entered into by the Contractor for execution of activities or provision of services related to the completion of this project, the Contractor shall be solely responsible for carrying out the project pursuant to this Contract. The Contractor shall specify in any such subcontract that the subcontractor shall be bound by this Contract and any other requirements applicable to the Contractor in the conduct of the project unless the Road Commission and the Contractor agree to modification in a particular case.

16. Qualifications of the Contractor. The Contractor specifically represents and agrees that its officers, employees, agents and consultants have and shall possess the experience, knowledge, and competence necessary to qualify them individually for the particular duties they perform hereunder and to perform the Work.

- The Contractor does **not** have to be pre-qualified by the Michigan Department of Transportation for the Work to be performed under this Contract.

17. Contractor's Representations. The Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions, including subsurface and soil conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all federal, state, and local laws, rules, and regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface and surface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the General Specifications and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the General Specifications as provided in the General Specifications.

E. Contractor has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (including surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the material, means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including applying the specific material, means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by Contractor to perform the Work, and safety precautions and programs incident thereto.

F. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the terms and conditions of the Contract Documents.

G. Contractor is aware of the general nature of Work to be performed by the Road Commission and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

I. Contractor has given the Road Commission Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

K. Contractor has reviewed, examined, and understands all standards referenced in the Contract.

L. Contractor understands that any quantity estimates are provided for reference only and the Contractor has verified final quantities. Contractor has provided written notice of any substantial discrepancies and the written resolution thereof by the Engineer is acceptable to Contractor.

18. Notice. Whenever it is provided in this Contract that a notice or other communication is to be given or directed to either party, the same shall be given or directed to the respective party at its address as specified in this Contract, or at such other address as either party may, from time to time, designate by written notice to the other.

19. Termination.

A. For Fault. If the Road Commission determines that the Contractor has failed to perform or will fail to perform all or any part of the services, obligations, or duties required by this Contract, the Engineer may terminate or suspend this Contract in whole or in part upon written notice to the Contractor specifying the portions of this Contract and in the case of suspension shall specify a reasonable period not more than 10 days from receipt of the notice, during which time the Contractor shall correct the violations referred to in the notice. If the Contractor does not correct the violations during the period provided for in the notice, this Contract shall be terminated upon expiration of such time. Upon termination, any payment due the Contractor at time of termination may be adjusted to cover any additional costs occasioned or to be occasioned by the Road Commission by reason of the termination and failure to perform, including attorney fees and overhead costs. This Section shall not limit or modify any other right of the Road Commission to proceed against the Contractor at law or equity or under the terms of this Contract.

For the avoidance of doubt, failure to perform under this Section includes, but is not limited to, the following:

1. Contractor fails to begin the Work within the time specified.
2. Contractor fails to prosecute the Work to assure completion within the number of days specified.
3. Contractor fails to perform in accordance with the Contract.
4. Contractor fail to perform in accordance with the Contract requirements and specifications.
5. Contractor neglects or refuses to remove and replace rejected materials or Work.
6. Contractor discontinues the Work without the Road Commission's approval.
7. Contractor fails to resume work that has been discontinued within a reasonable number of days after notice to do so.
8. Contractor is uncooperative, disruptive or threatening.
9. Contractor fails to conduct the Work in an acceptable manner.

B. Not for Fault. The performance of Work or any portion thereof under the Contract may be terminated by the Road Commission Manager in whole or in part whenever the Road Commission Manager determines that termination is in the Road Commission's best interest. Any such termination shall be effected by the delivery to the Contractor of a written notice of termination at least 5 days before the date of termination, specifying the extent to which performance of the Work under the Contract is terminated and the date upon which such termination becomes effective.

After receipt of a notice of termination, except as otherwise directed, the Contractor shall stop Work on the date of receipt of the notice of termination or other date specified in the notice; place no further orders or subcontracts for materials,

services or facilities except as necessary for completion of such portion of the Work not terminated; terminate all vendors and subcontracts, settle all outstanding liabilities and claims and secure the site as directed by the Road Commission in the notice of termination.

Upon termination, the Contractor shall be entitled to and the Road Commission shall pay the costs actually incurred in compliance with this Contract up to the date of termination. In no event shall the Contractor be entitled to recover costs not actually incurred or anticipated profits on Work not completed or dispensed with.

20. Failure to Enforce. Failure by the Road Commission at any time to enforce the provisions of the Contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the Contract or any part thereof, or the right of the Road Commission to enforce any provision at any time in accordance with its terms.

21. Freedom of Information Act. The Contractor acknowledges that the Road Commission may be required from time to time to release records in its possession by law. The Contractor hereby gives permission to the Road Commission to release any records or materials received by the Road Commission as it may be requested to do so as permitted by the Freedom of Information Act, MCL 15.231 *et seq.* Provided, however, that the Contractor shall not be held liable for any reuse of the documents prepared by the Contractor under this Contract for purposes other than anticipated herein.

22. Force Majeure. If because of Force Majeure either party is unable to carry out any of its obligations under this Contract (other than obligations of such party to pay or expend money for or in connection with the performance of this Contract), and if such party promptly gives to the other party concerned written notice of such force majeure, then the obligations of the party giving such notice will be suspended to the extent made necessary by such force majeure and during its continuance, provided the effect of such force majeure is eliminated insofar as possible with all reasonable dispatch. "Force Majeure" means unforeseeable events beyond a party's reasonable control and without such party's fault or negligence, including, but not limited to, acts of God, acts of public enemy, acts of the federal government, fire, flood, inclement weather, epidemic, quarantine restrictions, strikes and embargoes, labor disturbances, the unavailability of raw materials, legislation, orders or acts of civil or military authority, injunctions, or other causes of a similar nature which wholly or substantially prevent performance. If the suspension of Work lasts for more than thirty (30) days, the Road Commission may terminate this Contract pursuant to paragraph 17.B.

If the Contractor is delayed in the completion of Work due to Force Majeure, or otherwise, the time for completion may be extended for a period determined by the Road Commission to be equivalent to the time of such delay. However, the Contractor shall not be entitled to any increase in Contract Price as a result of the Force Majeure unless otherwise expressly agreed in writing by the Engineer.

23. Dispute Resolution. If any party has a dispute with another regarding the meaning, operation or enforcement of this Contract or any provision of this Contract, the disputing parties agree to meet and confer to negotiate a resolution of the dispute. They further agree as follows:

- A. Mediation. If they are unable to resolve the dispute themselves and before formally instituting any other dispute mechanism, they shall utilize the services of a mutually acceptable neutral mediator, who meets the qualifications of MCR 2.411, to bring them together in at least one mediation session.
- B. Arbitration. If they are unable to resolve the dispute through mediation, it shall be decided by final and binding arbitration according to the rules and procedures of an arbitration service as the parties may agree. Judgment upon the award rendered by the arbitrator may be entered in Circuit Court.
- C. Venue. All meetings, hearings and actions to resolve the dispute shall be in Grand Traverse County.
- D. Notice. Written notice of a dispute shall be given to the other party not later than 90 days after the occurrence giving rise to the dispute becomes known or should have become known. Negotiations and mediation shall occur within 60 days after such notice. Unless a longer time is agreed upon, arbitration must be demanded within 120 days after such notice and, if not, the claim is deemed waived. Arbitration must be demanded within this time limit even if negotiation or mediation has not occurred, but the arbitrator must direct the parties to mediation before issuing an award.
- E. Work Continuance and Payment. Unless otherwise agreed in writing, Contractor shall continue the Work and maintain the approved schedules during any dispute resolution proceedings. If Contractor continues to perform, the Road Commission shall continue to make payments in accordance with this Agreement.
- F. Emergency Injunctive Relief. Nothing in this Contract shall prohibit the Road Commission from seeking emergency injunctive relief, should the situation warrant it under MCR 3.310.
- G. Agent Dispute Resolution. Notwithstanding the above, at the option of the Road Commission, the Road Commission and the Contractor shall submit the following matters to a person with background, training, and experience in similar projects:

1. To determine whether there has been a delay for reasons that were within the control of the Contractor, and the period of time that delay has been caused, continued, or aggravated by actions of the Contractor.
2. To determine whether there has been an unacceptable delay by the contractor in the performance of the remaining Work under the contract any time after 94% of the Work is in place.

The agent selected shall be mutually agreeable to the Road Commission and the Contractor provided that the Road Commission and the Contractor can mutually agree within 10 days from the date of the dispute. In the event that the parties cannot agree, the agent shall be selected by the Road Commission. The agent shall not be an employee of either party. This process shall be governed by and subject to the provisions of MCL 125.1564(4) – (8).

24. Entire Contract. This Contract, together with all items incorporated herein by reference, constitutes the entire Contract of the parties and there are no valid promises, conditions or understandings which are not contained herein.

25. Amendments. This Contract may be modified from time to time, but such modifications shall be in writing and signed by both parties.

26. Interpretation. This Contract shall be governed by the laws of the State of Michigan, both as to interpretation and performance. This Contract was drafted at the joint direction of the parties. The pronouns and relative words used herein are written in the neuter and singular. However, if more than one person or entity joins in this Contract on behalf of Contractor, or if a person of masculine or feminine gender joins in this Contract on behalf of Contractor, such words shall be interpreted to be in the plural, masculine or feminine as the sense requires.

In the event that any term, clause or provision of this Contract conflicts with any term, clause, or provision contained in any attachments to this Contract, this Contract's terms shall prevail. In the event any term, clause or provision of a standard, specification, manual, or code published or prepared by any entity other than the Road Commission or its agents conflicts with any term, clause, provision or specification prepared by the Road Commission or its agents, the term, clause, provision or specification prepared by the Road Commission or its agents shall prevail except as otherwise required by law.0020

References to standards, specifications, manuals, or codes of any technical society organization, or association shall mean the standard, specification, manual, code, or law or regulation in effect at the time of opening the Bid or the date of this Agreement, whichever occurs first, except as otherwise stated or required by law or regulation. References to any law, rule, or regulation shall mean the law, rule, or regulation in effect at the time the Work or any portion thereof is performed by the Contractor.

27. Record Drawings. Record drawings are **not** required. Contractor shall create and submit 3 sets of record drawings of the finished Work to the Road Commission. Final Payment shall not be due until the drawings are reviewed and accepted by the Road Commission.

28. Authority to Execute. The parties agree that the signatories appearing below have the authority and are duly authorized to execute this Contract on behalf of the party to the Contract.

29. Third Party Beneficiaries. This Contract confers no rights or remedies on any third party, other than the parties to this Contract and their respective successors and permitted assigns.

30. Reuse of Documents. All documents and electronic files delivered to the Road Commission are instruments of service in respect of the project. Nevertheless, all documents and electronic files delivered to the Road Commission shall become property of the Road Commission upon completion of the Work and payment in full of all monies due the Contractor. Copies of the Road Commission-furnished data that may be relied upon by the Contractor are limited to the printed copies (also known as hard copies) that are delivered to the Contractor. Files on electronic media of text, data or graphics or of other types that are furnished by the Road Commission to the Contractor are only for convenience of the Contractor. Any conclusion of information obtained or derived from such electronic files will be at the user's sole risk. Economic benefit to the Road Commission for having these files is predicated on the files being in media form, software release number and hardware operating system number as utilized by the Contractor. Copies of documents that may be relied upon by the Road Commission are limited to the printed copies (also known as hard copies) that are signed or sealed by the Contractor. Files on electronic media of text, data or graphics or of other types that are furnished by the Contractor to the Road Commission shall be in a compatible software format for use by the Road Commission. Any conclusions or information obtained or derived from such electronic files will be at the user's sole risk. Electronic file copies of drawings will not contain the Contractor's seal or the identification of the Contractor in the title block.

31. Digital Signatures. The parties hereto acknowledge and agree under the Uniform Electronic Transactions Act, MCL 450.832, *et seq.* that this Contract may be executed with the electronic signature of any person authorized and required to sign on behalf of the parties hereto.

32. Execution in Counterparts. This Contract may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.

33. No Waiver. No waiver by any party of any default by another party in the performance of any portion of this Contract shall operate or be construed as a waiver of any future default, whether like or different in character.

34. Costs and Expenses. Contractor shall be responsible for reasonable attorney fees and costs incurred by the Road Commission in connection with recovery under the bonds furnished by Contractor or any of its subcontractors under this Contract as well as any reasonable attorney fees and costs incurred by the Road Commission in connection with the Contractor's performance or failure to perform under this Contract. Costs that may be charged to the Contractor include, but are not limited to, all costs and expenses incurred by the Road Commission in connection with performing any portion of the Work that the Contractor fails and refuses to perform following notice to the Contractor. In case of an emergency, where in the opinion of the Engineer, delay would cause serious loss or damage, or presents a safety hazard to the traveling public, corrective work may be undertaken without advance notice to Contractor, and Contractor shall be liable for all costs and expenses incurred. The remedies set forth in this paragraph are cumulative of any other remedies the Road Commission may have.

IN WITNESS WHEREOF, the parties hereto have executed this Contract on the date and year first above written.

**CONTRACTOR**

By \_\_\_\_\_

Its \_\_\_\_\_

**GRAND TRAVERSE COUNTY ROAD  
COMMISSION**

By \_\_\_\_\_,  
Chairperson

By: \_\_\_\_\_  
Debra J.M. Hunt, Clerk

APPROVED AS TO SUBSTANCE:

\_\_\_\_\_  
Road Commission Manager

APPROVED AS TO FORM:

\_\_\_\_\_  
Karrie A. Zeits  
Road Commission General Counsel



## GENERAL SPECIFICATIONS

### 1. DEFINITIONS.

For the purpose of these specifications, the following terms are used herein and are respectively defined as follows:

- A. "Road Commission" shall mean the Grand Traverse County Road Commission represented by the County Highway Engineer.
- B. "Engineer" shall mean the County Highway Engineer of the Road Commission.
- C. "Board" shall mean the Board of Grand Traverse County Road Commissioners.
- D. "Contractor" shall mean the individual, partnership, corporation or a combination of any or all jointly, undertaking the execution of the Work under the terms of the Contract and acting directly or through agents or employees.

### 2. ENGINEER'S STATUS.

The Engineer will be the Road Commission's representative during construction of the Project. The Engineer has authority to stop the Work whenever such stoppage may be necessary to insure proper execution of the Contract. The Engineer shall also have authority to reject all Work and materials which do not conform to the Contract.

### 3. CONTRACT DOCUMENTS.

If the Contractor believes a conflict, error, ambiguity, or discrepancy exists within the Contract Documents or between the Contract Documents and any provisions of any law or regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any supplier, Contractor shall report it to the Engineer in writing at once and request an amendment or supplement to the Contract documents by the Engineer. In the event that the Contractor proceeds with the Work without an amendment or supplement issued by the Engineer, Contractor shall assume all risk in performing the Work without such amendment or supplement, which shall include but not be limited to the risk that the Work performed shall be required to be removed, replaced, or corrected by the Road Commission.

### 4. SUBSURFACE AND PHYSICAL CONDITIONS

A. Reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been provided to the Contractor are as follows: \_\_\_\_\_

\_\_\_\_\_

B. Reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been provided to the Contractor are as follows: \_\_\_\_\_

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5. INSURANCE.

The Contractor is required to provide the following insurance. If any part of the Contract is sublet, insurance shall be provided by the Contractor on behalf of subcontractors to cover their operations. The insurance shall be contracted with a company licensed to do business in the State of Michigan and shall be subject to the approval of the Road Commission. Certified copies in duplicate, setting forth the limits and coverage shall be furnished to the Road Commission before commencing with any Work and at the time of executing this Contract. The policy shall contain endorsements stating that a 10 day notice will be given to the Road Commission prior to termination or any change in the policy, shall provide an endorsement stating that the Road Commission, its board, officers, employees, and agents have been named as additional insureds onto such policy for all claims arising out of the Contractor's Work, and shall describe the construction project and provide coverage for the following terms:

A. Contractor's General Liability and Property Damage. The Contractor shall procure and shall maintain during the life of this Contract Contractor's General Liability Insurance in an amount not less than \$2,000,000 per occurrence for injuries, including accidental death, for each person; and subject to the same limit for each person, in an amount not less than \$2,000,000 per occurrence on account of each accident; and Contractor's Property Damage Insurance in an amount not less than \$1,000,000 each occurrence; and combined Single Limit for Bodily Injury and Property Damage Liability in an amount not less than \$2,000,000 for each occurrence, including property damage coverage for the following terms:

1. Underground Damage to facilities due to drilling and excavating with mechanical equipment in streets and highways, easements or public property.
2. Collapse or Structural Injury to structures due to blasting or explosion, excavation, tunneling, pile driving or cofferdam Work.

Coverage shall include language that states: It is understood and agreed that by naming the Road Commission, its board, officers, agents, and employees as additional insured, coverage afforded is considered to be primary and any other insurance that the Road Commission may have in effect shall be considered secondary or excess.

B. Automobile Insurance. The Contractor shall procure and maintain during the life of this Contract Owned, Contract Hired and Non-Ownership Motor Vehicle Bodily Injury Insurance (comprehensive form) in an amount not less than \$500,000 for injuries, including accidental death for each person; and in an amount not less than \$1,000,000 for each accident; and Property Damage Liability Insurance in an amount not less than \$1,000,000 for each accident; and combined single limit for Bodily Injury and Property Damage Liability

Insurance in an amount not less than \$1,000,000 for each occurrence. These requirements may be met through an Umbrella Policy.

C. Worker's Compensation. The Contractor shall comply with the requirements of the Michigan Worker's Compensation Law and shall maintain such insurance as will protect him from claims under said law, and from any other claim for personal injury, including death, which may arise from operations by himself or by any other Contractor, or anyone directly or indirectly employed by either of them, and will give proof of such insurance to the Road Commission Engineer at the time of filing its bonds and Contract.

D. Owner's (Road Commission's) Protective Liability. The Contractor shall furnish to the Road Commission, in duplicate, an Owner's Protective Liability Policy insuring the Road Commission in an amount not less than \$1,000,000 with respect to any one person, and \$1,000,000 with respect to any occurrence in the case of bodily injury, and \$1,000,000 for each occurrence and a \$1,000,000 aggregate for property damage liability; and combined single limit for Bodily Injury and Property Damage in an amount not less than \$1,000,000 for each occurrence.

E. All Risk Builder's Insurance. The Contractor shall procure and maintain, in the name of the Road Commission and of the Contractor, as their respective interests may appear during the life of the Contract, All Risk Builder's Risk Insurance on a completed value basis in an amount not less than the Contract amount plus the value of all material furnished by the parties other than the Contractor for installation in the project to cover all project structures and materials, supplies, machinery, equipment and fixtures including the installation cost thereof which are owned by the insured or for which the insured is legally liable. This policy covers the property of the insured (a) while in transit at the risk of the insured; (b) while on the premises of construction or installation; and (c) during construction, installation or testing. This policy insures against all risk of direct physical loss or damage to the property insured hereunder and shall specifically cover loss due to fire, wind, flood and collapse, but may be subject to exclusion of losses from wear and tear, misappropriation of business, defective materials, collapse due to faulty Workmanship, nuclear or radiation war, insurrection, riot or civil disobedience.

☐ F. Railroad Protective Liability Insurance. If checked, Contractor shall procure and maintain, railroad protective liability insurance with limits of not less than \$2,000,000 combined single limit for bodily injury or property damage per occurrence and an aggregate annual limit of \$6,000,000.

G. Cancellation. If any of the insurance is canceled, the Contractor and all subcontractors shall cease operations, and shall not resume until new insurance is obtained.

6. BONDS.

The Contractor will be required to furnish surety bonds from a surety company with an A.M. Best rating of 'A' or better, U.S. Treasury Department listed and admitted to do business in the State of Michigan effective on the date the Notice to Proceed is issued.

The surety shall be acceptable to the Road Commission and shall be provided at the time this Contract is executed by the Contractor. Each bond shall be on the AIA Document A312 forms provided as follows:

A. Performance Bond. The Contractor, as Principal, shall furnish a surety bond in an amount at least equal to one-hundred (100%) percent of the Contract Price as security for faithful performance of this Contract. The Road Commission shall be Obligee under said bond. The bond shall guarantee the faithful performance and shall indemnify and save harmless the Road Commission from all costs and damages by reason of the Contractor's failure to perform in accordance with the Contract provisions. The Contract, by reference, shall be an integral part of the bond.

The above mentioned AIA Document A312 shall be modified to include the maintenance and guarantee obligations in the amount of not less than one hundred percent (100%) of the Contract Price in favor of the Road Commission to keep in good order and repair any defects in all of the Work extending for a period of one year from the date of payment of the final pay request or acceptance of construction pursuant to paragraph 7 of the Construction Contract.

B. Payment Bond. The Contractor, as Principal, shall furnish a surety bond in an amount equal to one-hundred (100%) percent of the Contract Price as security for the prompt payment to all subcontractors and persons supplying labor, equipment and material in the performance of all Work under said Contract, and any and all authorized modifications under this Contract. The Contract, by reference, shall be an integral part of the bond.

7. PERMITS.

The Contractor shall obtain all permits required for the Work by any federal, state, or local law, rule, code, or regulation. Contractor shall pay for same at Road Commission's own expense. Any inspection fees associated with such permits shall be paid for by the Contractor and Contractor shall conduct construction operations in accordance with provisions of such permits including tunneling of utilities where reburied. Contractor shall also furnish any required bonds and pay the cost of same.

8. PRE-CONSTRUCTION MEETING. A pre-construction meeting X **will** ☐ **will not** be required.

After the award of the Contract by the Road Commission, the Road Commission will organize and a principal member of the Contractor's organization and any other person or entities that the Road Commission requires shall attend a pre-construction meeting with all subcontractors to be held at a place and on a date mutually agreed upon. At this time, at a minimum, the requirements of the project, the Contractor's schedule of operations and construction methods, work zone traffic plan, and, if applicable, testing orders, job mix formula shall be provided. The Contract documents shall be delineated in order to obtain an understanding of the overall construction program by the Consultant and subcontractors.

9. CONSTRUCTION SCHEDULE AND SAFETY PLAN.

A. At the pre-construction meeting and prior to starting Work, the Contractor shall prepare and submit to the Engineer two copies of a construction progress schedule showing in a clear, graphical manner the proposed dates for the commencement, progress and completion of the Work. The progress schedule shall be predicated on the completion of the Work on or before the date of completion as stated in the Contract. Upon approval of the Progress Schedule by the Engineer in writing, it shall become a part of the Contract Documents. The Pre-construction meeting minutes approved by the Road Commission shall become a part of the Contract Documents.

B. If, during the course of the Work, it becomes apparent that the Progress Schedule is unrealistic or will not be met, it shall be revised and resubmitted to the Engineer for approval. Upon approval of the revised Progress Schedule, it shall become a part of the Contract documents. Approval of the revised Progress Schedule is in the sole discretion of the Engineer.

C. No later than the pre-construction meeting and prior to starting Work, the Contractor shall prepare and submit to the Engineer two copies of a Safety Plan showing in a clear, graphical manner the Contractor's plan for taking all necessary precautions for the safety of and provision of necessary protection to prevent damage or injury to all persons on the project site or who may be affected by the Work, all the Work and materials and equipment to be used, and other property at the project site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction. Upon approval of the Safety Plan, it shall become a part of the Contract documents.

Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

10. CONTRACTOR'S SUPERVISION AND ORGANIZATION.

A. The Work under this Contract shall be under the direct charge and direction of the Contractor at all times. The Contractor shall give superintendence to the Work, using his or her best skill and attention. The Contractor shall at all times keep competent persons and any and all necessary supervisors and assistants on the site of the Work during its progress. The Contractor shall designate a Project Supervisor and a Safety Supervisor who shall have the authority and responsibilities as set forth in Section 104.07 of the MDOT Standard Specifications for Construction and such other positions as the Engineer may require.

B. The Contractor shall employ only competent, efficient workers and shall not use on the Work any unfit person or one not skilled in the Work assigned and Contractor shall at all times enforce strict discipline and good order among Contractor's employees.

C. The Road Commission may request replacement of the Project Supervisor in the event that the Project Supervisor fails to provide efficient and effective superintendence to the Work or cooperate with the Road Commission. In the event that the Road Commission

requests replacement, the Contractor shall replace the Project Supervisor with a competent Project Supervisor unless the Contractor has a reasonable objection to replacement of the Project Supervisor and the Contractor provides sufficient assurance to the Road Commission that the Project Supervisor shall cooperate with the Road Commission and provide efficient and effective superintendence to the Work. Such assurance may be required by the Road Commission to be in writing and include detailed specifications to assure the Project Supervisor's performance.

D. Contractor shall be responsible for all costs incurred by the Road Commission, including attorney fees, in connection with Contractor's failure to properly provide superintendence of the Work or failure to be at the site of the Work on the dates or times indicated to the Road Commission without providing at least 12 hours' notice to the Road Commission.

#### 11. SUBCONTRACTING.

A. Contractor shall not employ any subcontractor, supplier, or other individual or entity, whether initially or as a replacement, against whom the Road Commission may have reasonable objection. Contractor shall not be required to employ any subcontractor, supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. The Contractor shall give personal attention to the fulfillment of the Contract and shall keep the Work under its control.

C. No subcontractor will be recognized as such, and all persons engaged in the Work or construction will be considered as employees of the Contractor and the Contractor will be held responsible for their Work, which shall be subject to the provisions of this Contract. Contractor shall be fully responsible to the Road Commission for all acts and omissions of the subcontractors, suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for its own acts and omissions.

D. The Contractor shall perform with its own organization Contract Work amounting to not less than 40% percent of the original total Contract Price.

E. When a portion of the Work which has been subcontracted by the Contractor is not being executed in a manner satisfactory to the Road Commission, the subcontractor shall be removed immediately on the request of the Engineer and shall not again be employed on the Work.

F. The subcontractors do **not** need to be pre-qualified by the Michigan Department of Transportation to perform the classification of Work proposed.

#### 12. PROTECTION OF WORK AND PROPERTY.

A. The Contractor shall continuously maintain adequate protection of all Contractor's Work from damage and shall protect all public property and private abutting property from injury or loss arising in connection with damage, injury or loss, and shall indemnify, defend and hold harmless the Road Commission from all such damages or injuries occurring because of

Contractor's Work. Contractor shall furnish and maintain all passageways, barricades, guard fences, lights and danger signals, provide watchmen and other facilities for protection required by public authority or local conditions, all at no additional cost to the Road Commission.

B. The Contractor shall assume full responsibility of loss or damage to the Work during the entire construction period resulting from conditions, and from all other causes whatsoever not directly due to the acts or neglect of the Road Commission, including fire, vandalism, flood, and malicious mischief, and shall turn the finished Work over to the Road Commission in good condition and repair at the time of the request for a certificate of Substantial Completion.

C. The Contractor shall not Work, store, or operate equipment outside designated Work areas as shown on plans without permission of the Road Commission Engineer. Permission shall not be granted unless the Contractor provides the Road Commission with documentation evidencing the consent of the person or entity having ownership or control of area.

D. Contractor shall provide the Road Commission with access to the site at all times during the project. No work performed by the Road Commission on the Project or at the Site shall be the basis for any claim of increased Contract Price or Contract Time under this Contract. Nor shall the Road Commission's performance of any of the Work under the Contract be the basis for a claim for damages or anticipated profits on the Work performed by the Road Commission. Further, the Contractor shall make available to the Road Commission any traffic control or other safety measures installed by the Contractor at the time the Road Commission performs any work at the site.

### 13. LIMITATIONS ON USE OF SITE OR OTHER AREAS.

A. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the construction Site and other areas permitted by laws and regulations, and shall not unreasonably encumber the construction Site and other areas with construction equipment or other materials or equipment.

B. Contractor shall keep the construction Site and other areas free from accumulations of waste, materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable laws and regulations.

C. Prior to substantial completion of the Work, Contractor shall clean the Site and make it ready for the Road Commission's use. At the completion of the Work, Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by this Contract.

14. CHANGES IN THE WORK.

A. The Engineer shall have the right to require changes in or additions to the Work required by the Contract documents. The Engineer shall have the right to make any deductions for the Work. Adjustments in the Contract Price, if any, because of any change, addition or deduction in the Work shall be determined as set forth in sections 109.03 and 109.05 of the MDOT Standard Specifications for Construction, and any claims for extension of time for completion shall be adjusted at the time of ordering the change, addition or deduction. No claim for change, addition, deduction, or adjustment of price, or extension of time for completion thereof, shall be made or allowed unless done pursuant to an order from the Engineer specifically authorizing such change, addition or deduction and, in the case of an addition of labor, materials, equipment and appliances, specifically setting forth the agreed upon price for the additional labor, materials, equipment and appliances. Contractor shall be assumed to have agreed to the terms and conditions of any Change Order 14 days following issuance by the Road Commission notwithstanding Contractor's failure to sign the Change Order.

B. Where the order diminishes the quantity of Work to be done, this shall not constitute a basis for a claim for damages or anticipated profits on the Work that may be dispensed with.

C. It is understood and agreed that in case any change in, addition to, or deduction from the Work is required, said change shall in no way invalidate the Contract and shall not affect or discharge the bonds furnished by the Contractor. Further, no notice to the surety shall be required.

D. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided herein.

E. During the term of the Contract, the Road Commission may add locations to the Scope of the Work under this Contract by change order. Any additional locations added to the Scope of the Work and the plans and details and other specifications for the additional locations shall be deemed to be a part of this Contract and subject to the terms and conditions of this Contract and shall become a part of the Scope of the Work contemplated by this Contract following acceptance of the additional location(s) by the Contractor.

F. Any addition to the Work resulting in an increase in the Contract Price of more than 5% shall (1) be approved by the Board of County Road Commissioners for Grand Traverse County and (2) require the Contractor to obtain a rider to the Performance and Payment Bonds required under this Contract to increase the amount of the surety bonds unless this requirement is waived in writing by the Road Commission.

G. The Contractor may not make a claim for an adjustment under the Contract after 28 days following the issuance of the Certificate of Substantial Completion to the Contractor by the Road Commission.



15. DIFFERING SITE CONDITION.

Contractor has represented that it has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions, including subsurface conditions that may affect cost, progress, and performance of the Work. As such, Contractor assumes the risk in encountering differing site conditions and all costs associated therewith. In the event that the Contractor encounters a differing site condition that materially and substantially causes an increase in the cost or time required for the performance of the Work, Contractor may request an increase in Contract Time or Contract Price prior to performing the increased work. Engineer may consider such request, but shall not be obligated to grant the request. In no case shall the Contractor request any increase in Contract Time or Contract Price for work already performed nor may the Contractor stop or delay the Work because of the differing site condition. In the event that the Engineer denies the request, Contractor shall be obligated to perform the Work required under this Contract. This provision shall supersede and replace any differing site condition or similar provision contained in any incorporated standard or specification referenced in the Contract.

16. SUBSTITUTES.

Substitution may only be offered following the Notice of Award. Whenever an item of material or equipment is specified or described in the Contract documents by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification indicates that no like, equivalent, or “or-equal” item or no substitution is permitted, other items of material or equipment or material or equipment of other suppliers may be submitted to the Engineer for review. The Engineer in his or her sole discretion may allow the use of substitutes or “or-equal” material or equipment. The Engineer may require that the Contractor provide such assurances as the Engineer may determine are necessary to allow a proposed substitute or “or equal” item. The Contractor shall at its own expense provide all data in support of any proposed substitute or “or equal” material or equipment.

17. CONTRACTOR’S GENERAL WARRANTY AND GUARANTEE.

Contractor’s obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract or a waiver of Contractor’s obligation to perform the Work in accordance with the Contract:

- A. observation or failure to observe by the Road Commission, its agents, or employees;
- B. payment by the Road Commission of any progress payment;
- C. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Road Commission;
- D. use or occupancy of the Work or any part by the Road Commission;
- E. any acceptance by the Road Commission, its agents, or employees or any failure to do so;

F. any inspection or test by the Road Commission, its agents, or employees;

G. approval by others; or

H. any correction of defective Work by the Road Commission.

18. SHOP DRAWINGS AND SAMPLES.

A. Contractor shall submit shop drawings to the Road Commission Engineer for review and approval in accordance with the schedule of shop drawings acceptable to the Road Commission. All submittals will be identified as the Engineer may require and in the number of copies specified. The data shown on the shop drawings will be complete with respect to quantities, dimension, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information.

B. Contractor shall also submit samples to Engineer for review and approval in accordance with the acceptable schedule of shop drawings. Each sample will be identified clearly as to material, supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as Engineer may require to enable Engineer to review the submittal.

C. Before submitting each shop drawings or sample, Contractor shall have determined and verified all field measurements, quantities, dimension, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto; all materials with respect to intended use, fabrications, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; all information relative to means, methods, techniques, sequences, and procedures of contraction and safety precautions and programs incident thereto; and the Contractor shall also have reviewed and coordinated each shop drawings or sample with other shop drawings and samples and with the requirements of the Work and the Contract documents.

D. At the time of each submittal, Contractor shall give Engineer specific written notice of such variation, if any, that the shop drawings or sample submitted may have from the requirement of the Contract documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made in each shop drawing and sample submitted to Engineer for review and approval of each variation.

E. Engineer will timely review the shop drawings and samples to determine if the items covered by the submittals, will after installation or incorporation in the Work, conform to the information given in the Contract documents. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto. Engineer's review and approval of shop drawings or samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to the variance at the time of the submittal and the Engineer has approved the variance in writing.

#### INSPECTION OF CONSTRUCTION.

A. The Contractor shall maintain an inspection system and perform such inspections as will insure that the Work performed under the Contract conforms to Contract requirements. The Contractor shall maintain complete inspection records and make them available to the Road Commission.

B. The Road Commission Engineer may appoint resident project representatives who shall be under the direction of the Road Commission Engineer. The project representative will inform the Engineer as to the progress of the Work, the manner in which it is being done, and the quality of the materials being used. The representative may call to the attention of the Contractor any failure to follow the plans and specifications that he or she observes. The representative shall have the authority to reject materials or suspend the Work until any questions on the performance of the Work can be referred to and decided by the Engineer. The representative shall have no authority to supervise the Contractor's operations or to change the Contract or specifications. The Contractor shall not be a third party beneficiary of a Contract between the Road Commission and its project representatives. Any project representative is for the sole benefit of the Road Commission and the Contractor may not rely on any actions or omissions of the project representative.

C. The Contractor shall promptly furnish, at no increase in Contract Price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Road Commission. The Road Commission may charge to the Contractor any additional cost of inspection or test when Work is not ready at the time specified by the Contractor for inspection or test, or when prior rejections makes reinspection or retest necessary.

D. Road Commission inspections and tests are for the sole benefit of the Road Commission and in no instance shall any action or omission on the part of the project representatives or the Road Commission release the Contractor of the responsibility of completing the Work in accordance with the plans or specifications, constitute a waiver by the Road Commission of any standards or specifications required by the Contract, or act as a warranty as to the propriety of the Contractor's performance; nor shall an action or omission of the representative constitute acceptance by the Road Commission of Work and materials that do not conform to the Contract.

E. The Contractor shall, without charge, remove, replace or correct Work found by the Road Commission not to conform to Contract requirements and project specifications, unless in the public interest the Road Commission consents in writing to accept the Work with an appropriate adjustment in Contract Price. All corrective measures shall be as approved by the Engineer. The Contractor shall promptly segregate and remove rejected material from the premises. If the Contractor does not promptly remove, replace or correct rejected Work, the Road Commission may (1) remove, replace or correct the Work and charge the cost, including overhead cost and attorney fees, to the Contractor; or (2) terminate for default the Contractor's right to proceed.

F. If, before acceptance of the Work as set forth in subparagraph (G), the Road Commission decides to examine already completed Work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the Work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the Work is found to meet Contract requirements, the Road Commission shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the Work was thereby delayed, an extension of time.

G. Work under the Contract shall be considered accepted only after the Contractor has notified the Road Commission in writing that the Work is complete and the Road Commission inspects the Work and notifies the Contractor in writing that the Work is completed. In no case shall portions of the Work be considered to be accepted prior to acceptance of the entire Work unless the Contractor requests and the Road Commission determines that portions of the Work be accepted separately in writing, the Contractor notifies the Road Commission that the portion of the Work is complete, and the Road Commission accepts the portion of the Work in writing. The determination of whether portions of the Work may be separately accepted is within the sole discretion of the Engineer.

H. Inspection of the Work or a portion of the Work if applicable by the Road Commission shall be conducted as soon as practicable by the Road Commission following receipt of notification from the Contractor that the Work or portion of the Work is complete. In no case shall the Road Commission be responsible for any delay in the progress of the Work as a result of the Contractor's request to have a portion of the Work inspected and accepted. Further, in no case shall the Road Commission's delay in inspecting the Work or portion of the Work be deemed an acceptance of the Work. This provision shall supersede and replace any inspection timeline contained in any incorporated standard or specification referenced in the Contract.

I. The Road Commission shall accept non-defective Work as promptly as practicable after notification by the Contractor of completion and inspection of the Work, and for the entire Work, verification of punch list items, completed project documentation, and material testings. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Road Commission's rights under any warranty or guarantee. This provision shall supersede and replace any acceptance timeline to the contrary contained in any incorporated standard or specification referenced in the Contract.

#### **19. ESTIMATES AND PAYMENTS.**

- A. The Road Commission shall pay and the Contractor shall receive the Unit Prices bid in the Bid form or agreed upon, less any deduction for any uncompleted portion based upon measurements made by the Engineer or as otherwise herein stipulated, and such measurements shall be final and conclusive.
- B. The Road Commission shall make progress payments on account of the Contract Price on the basis of a reconciliation of the Road Commission's Draft Pay

Estimate and the Contractor's application for payment on monthly intervals as provided herein.

- C. While the Work is being performed, the Contractor and the Road Commission or Road Commission's agent or representative shall confer daily on the quantity and amount of Work completed each day.
- D. Monthly, the Contractor shall provide the Road Commission with an application for payment within 7 days from receipt of the Road Commission's Draft Pay Estimate. In the event that the Contractor fails to provide the Road Commission with an application for payment within 14 days following receipt of the Road Commission's Draft Pay Estimate, the Road Commission's Draft Pay Estimate shall be deemed approved by the Contractor and the quantities and payments set forth therein may not be altered unless such alteration would result in a reduction in the total payment applied for or as agreed by the Road Commission in writing. For purposes of this paragraph, receipt is defined as the business day following the day the Road Commission's Draft Pay Estimate was emailed to the Contractor or, if mailed, the day the Road Commission's Draft Pay Estimate post marked.
- E. In the event that the Contractor's application for payment is timely provided and different than the Road Commission's Draft Pay Estimate, the Road Commission and Contractor shall resolve the discrepancy within 14 days from the date that the Contractor's application for payment is received by the Road Commission otherwise the Road Commission's Draft Pay Estimate shall be deemed approved by the Contractor and the quantities and payments set forth therein may not be altered unless such alteration would result in a reduction in the total payment or as agreed by the Road Commission in writing. For purposes of this paragraph, receipt is defined as the business day following the day the Road Commission's Draft Pay Estimate was emailed to the Contractor or, if mailed, the day the Road Commission's Draft Pay Estimate is post marked.
- F. Prior to substantial completion, the Contractor shall submit to the Road Commission an application for each payment and shall submit a Contractor's Declaration stating that it has not performed any work, furnished any material, sustained any loss, damage or delay for any reason, including soil conditions encountered or created, or otherwise done anything for which the Contractor will ask, demand, sue for or claim compensation from the Road Commission other than as indicated on the Contractor's Declaration and shall submit receipts or other vouchers showing its payments for materials and labor, including payments to subcontractors. Proof of payment made to all subcontractors and suppliers for all prior applications in the form of a release executed by the subcontractor or supplier indicating that it has been paid for the Work performed.

- G. ☒ Contract Price \$30,000 or more or Contract Price to be paid in more than three (3) payments:

Payments, based on progress estimates, will be made within 30 days from approval for Ninety (90%) percent of the Work completed as set forth in the progress estimate, until the Work is Fifty (50%) in place. Thereafter, additional retainage shall not be withheld unless it is determined that the Contractor is not making satisfactory progress, or that there is other specific cause relating to the Contractor's performance under the Contract. If such a determination is made, not more than Ten (10%) percent of the dollar value of the work more than Fifty (50%) percent in place shall be retained as additional retainage. No payment estimate shall be paid until approved by the Engineer, and shall be less any deductions or reservations which may be made in accordance with the terms of the Contract. No allowance will be made for materials furnished, unless incorporated in the finished Work, unless otherwise stated.

OR

- ☐ Contract Price less than \$30,000 or Contract Price to be paid in three (3) or less payments.

Payments, based on progress estimates, will be made within 30 days from approval for 90% of the Work completed as set forth in the progress estimate and approved by the Engineer, less any deductions or reservations which may be made in accordance with the terms of the Contract. No allowance will be made for materials furnished, unless incorporated in the finished Work, unless otherwise stated.

- H. The Road Commission may withhold the payment of any estimate or portion of estimate until the Contractor shall have furnished satisfactory evidence that he has paid all claims of every nature.
- I. No payment shall be considered as acceptance of the Work or any portion thereof prior to the final acceptance of the Work, and the payment of the final estimate.
- J. The Contract will not be finalized until all submittals, guarantees, bonds, warranties, insurance, certifications, licenses and affidavits required for the Work as specified are satisfactorily filed with the Road Commission.

When required, the Contractor shall provide notarized copies of all valid licenses and certificates required for performance of the Work. The notarized copies shall be delivered to the Road Commission Engineer no later than ten (10) days after the Contractor received the Notice of Award from the Road Commission Engineer. Current notarized copies of licenses and certificates shall be provided to the Road Commission Engineer within twenty-four hours of demand at any time

during the Contract term. Licenses and certificates required for this Contract include, by way of illustration and not limitation, the following:

None  
\_\_\_\_\_  
\_\_\_\_\_

- K. When Contractor considers the entire Work ready for its intended use, Contractor shall notify the Road Commission in writing that the entire Work is substantially complete and request that the Engineer issue a certificate of Substantial Completion. On a form provided in this contract document made part of.
- L. Within thirty (30) days after the issuance of the Certificate of Substantial Completion and the Contractor's completion of the Contract and in accordance with all and singular terms and stipulations herein contained, the Road Commission shall make payment from an invoice approved by the Engineer sufficient to achieve total payments to 100% of the Work completed less 150% of the value of the Work to be completed or corrected as identified in the certificate of Substantial Completion.
- M. Before final payment is made, the Contractor shall submit a Contractor's Affidavit stating that all claims of every nature have been paid or a release secured from the surety or sureties approving payment of the final estimate by the Road Commission.
- N. Upon final completion of the Work and any correction to the Work as set forth in the Certificate of Substantial Completion, the Road Commission shall pay the remaining Contract Price to the Contractor. The final payment, when made, shall be considered as final approval and acceptance of the completed Work subject to any guarantees or warranties provided herein. The acceptance by the Contractor of the final payment aforesaid shall operate as and shall be a release to the Road Commission and its agents from all claims and liability to the Contractor for anything done or furnished for relating to the Work or for any act of neglect of the Road Commission or of any person relating to or affecting the Work any reservation or protest notwithstanding.
- O. Only those items mentioned in the bid form are pay items. It is the Contractor's responsibility to complete those items and to furnish all other materials, workers, and machines to obtain a complete and satisfactory job. All other necessary items for a complete job shall be considered incidental and not pay items.

20. ESTIMATED QUANTITIES.

The quantities of the various classes of Work to be done and materials to be furnished under this Contract, which have been estimated as stated elsewhere herein, are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the Work under this Contract; and neither the Road Commission nor its agents is to be held responsible should any of the said estimated quantities be found incorrect during the construction of the Work; and the Contractor shall make no claim for anticipated profit nor for loss of profit, because of a difference between the quantities of the various classes of Work actually done or materials actually delivered, and the estimated quantities as herein stated.

21. PAYMENTS WITHHELD.

- A. The Road Commission may withhold or nullify the whole or a part of any certificate for progress payment to such extent as may be necessary to protect itself from loss on account of:
1. Defective Work not remedied;
  2. Defective materials not replaced;
  3. Claims filed or reasonable evidence indicating probable filing of claims;
  4. Failure of the Contractor to make payments properly to subcontractors or for material or labor;
  5. A reasonable doubt that the Contract can be completed for the balance then unpaid;
  6. Damage to another contractor; or
  7. Liquidated Damages.
- B. When the above grounds are removed, payment shall be made for amount withheld because of them.

22. TIME FOR COMPLETION; LIQUIDATED DAMAGES.

A. The Work which the Contractor is required to perform under this Contract shall be commenced and fully completed at the time stipulated by the Road Commission in a written "Notice to Proceed" to the Contractor.

B. This is to be a daytime operation (8:00 a.m. - 5:00 p.m.), Monday through Friday, unless otherwise approved by the Engineer.

C. Liquidated Damages for Road Commission Oversight Costs. The Contractor shall be responsible for liquidated damages in the amount set forth in the Schedule of Liquidated Damages for Oversight **in Table 108-1 of the 2012 Standard Specifications for Construction** per calendar day for each day after the substantial completion date the Work



remains substantially incomplete until the Work is substantially complete unless approved by the Road Commission in writing. Additionally, the Contractor shall be responsible for liquidated damages in the amount of the greater of one-half (1/2) of the amount set forth in the Schedule of Liquidated Damages for Oversight in Table 108-1 of the 2012 Standards Specifications or the actual expenses incurred by the Road Commission each day after the Work is substantially complete but outstanding items (Punch List Items) remain incomplete unless the Punch List Items are completed within the deadline set forth by the Road Commission in writing.

Sums assessed as liquidated damages are not penalties, but fixed and agreed upon damages due to the Road Commission from the Contractor representing the Road Commission's added cost of engineering and supervision and other items causing the expenditure of public funds due to the Contractor's failure to substantially complete or complete the Work within the specified time period.

23. USE OF REFERENCES.

- A. Work specified by reference to the published standard or specification of a government agency, technical association, trade association, professional society or institute, testing agency, or other organization shall conform to or surpass the minimum standards of quality for materials and Workmanship established by the designated standard or specification.
- B. Where so specified, products or Workmanship shall also conform to the additional prescriptive or performance requirements included within the Contract Document to establish a higher or more stringent standard of quality than that required by the referenced standard.
- C. Where two or more standards are specified to establish quality, the product and Workmanship shall conform to or surpass the requirements of both.
- D. In case of conflict between referenced standards, the more stringent shall apply.
- E. Where both a standard and a brand name are specified for a product on the Contract Document, the proprietary product named shall conform to or surpass the requirements of the specified reference standard. The listing of a trade name in a Contract Document shall not be construed as warranting that such product conforms to the respective reference standard.
- F. Copies of applicable referenced standards have not been bound in this Contract Document. Where copies of standards are needed by the Contractor for superintendence and quality control of the Work, the Contractor shall obtain a copy or copies directly from the publication source and maintain it in an orderly manner at the jobsite where it is available to the Contractor's personnel, subcontractors, Road Commission personnel and the Engineer.

24. CONTRACT SUBMITTALS.

- A. Record Drawings. Will **not** be required. Unless otherwise directed by the Engineer, at the time of substantial completion, the Contractor shall submit to the Engineer a current listing and description of each change incorporated into the Work since the preceding submittal.
- B. Warranties. The Contractor shall furnish one copy of all manufacturers' warranties, if any, for products or systems installed in the Project.
- C. Material Certifications. The Contractor shall submit as requested by the Engineer, material tickets, site measurements, and material certifications.

**PROGRESS CLAUSE:** The Contractor shall prepare and submit a complete, detailed and signed MDOT Form 1130, Progress Schedule according to 12SP-101A. The Engineer for this project is as follows:

Joe Slonecki, PE  
Grand Traverse County Road Commission  
1881 LaFranier Road  
Traverse City, MI 49696  
jslonecki@gtrc.org

The Progress Schedule must include, as a minimum, the controlling work items for the completion of the project, as well as the planned dates or work days that these work items will be the controlling operations. All contract dates, including open to traffic, project completion, interim completion and any other controlling dates in the contract, must be included in the progress schedule.

If the bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

The Owner anticipates that construction can begin no earlier than **April 15, 2019**. In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The duration of the detour shall be limited to 4 weeks.

The anticipated delivery date for the timber structure is no later May 20th. The Contractor is to verify all dates with the supplier and coordinate efforts accordingly.

The Project shall be completed in its entirety, including final site restoration and clean up, by **June 28, 2019**.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project. The named subcontractor(s) for, Designated and/or Specialty Items, as shown in the proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

Liquidated Damages shall be assessed in accordance with Section 108.10 of the 2012 Standard Specifications for Construction.

The Contractor may be required to meet with Department representatives for a post-construction review meeting, as directed by the Engineer. The Engineer will schedule the meeting.

Failure on the part of the Contractor to carry out the provisions of this Progress Clause may be considered sufficient cause to prevent bidding future projects.

# GRAND TRAVERSE COUNTY ROAD COMMISSION

## SPECIAL PROVISION FOR MAINTAINING TRAFFIC

KPM:PJM

Page 1 of 2

02/14/19

**a. General.** Traffic will be maintained in accordance with the 2012 Standard Specifications for Construction, including any supplemental specifications, and as herein specified. All traffic control devices and their usage shall comply with the 2011 edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

The Grand Traverse County Road Commission (GTCRC) may perform maintenance work within or adjacent to the Construction Influence Area (CIA). GTCRC will coordinate their operations to minimize the interference to the Contractor. No additional payment will be made to the Contractor for the joint use of the traffic control items.

**b. Construction Influence Area (CIA).** The CIA limits shall include the area within the right-of-way for East Duck Lake Road in Green Lake Township, plus a distance in advance as required for the advanced construction signing and traffic control devices. The CIA shall also extend down all intersecting roadways a distance of 550 feet.

**c. Traffic Restrictions.** Conduct all work between sunrise and sunset local time. "Work" is defined as any activity on the project, including set up and take down of traffic control devices. No work shall be permitted on Sundays, holidays, or during special events as defined by the Engineer.

East Duck Lake Road will be closed adjacent to the Timber Bridge construction as directed by the engineer.

The Contractor shall provide 48 hour notice prior to implementation of the road closure.

Commercial and residential driveways shall remain accessible at all times.

**d. Traffic Control Devices.** All warning signs shall be 48" x 48" mounted at 7 ft minimum bottom height. All construction signs left in place for a duration exceeding 14 days will be on driven posts as per WZD-100-A. Temporary Traffic Control Devices shall conform to WZD-125-E.

**e. Measurement and Payment.** The completed work for Maintaining Traffic including furnishing and placement of all materials, labor, and equipment, will be measured and paid for at the contract unit price for the following contract items (pay items).

<u>Contract Item</u>	<u>Pay Unit</u>
Traffic Control.....	LSUM

See the Road Closure/Detour Signing Plan on the following sheet for estimated sign types, locations, barricades etc. included in the **Traffic Control** item. Minor Traf Devices shall not be paid for separately.

# ROAD CLOSURE/DETOUR SIGNING PLAN

## EAST DUCK LAKE ROAD

### ROAD CLOSURE BETWEEN HILLTOP RD & FALL RD

	MMJTC DESIGN	LEGEND	QUANTITY	SIZE
①	M4-9(LT)	DETOUR LEFT	1	30" x 24"
②	M4-10(RT)	DETOUR RIGHT	1	48" x 18"
③	M4-9(LT)	DETOUR LEFT	1	30" x 24"
④	M4-9(RT)	DETOUR RIGHT	1	30" x 24"
⑤	M4-9(ST)	DETOUR STRAIGHT	1	30" x 24"
⑥	M4-8A	END DETOUR	2	24" x 18"
⑦	R11-2	ROAD CLOSED	2	48" x 30"
⑧	W20-2	DETOUR AHEAD	1	48" x 48"
⑨	D3-VAR 1	E DUCK LAKE RD	5	30" x 12"
⑩	R11-VAR 1	E DUCK LAKE RD CLOSED TO THRU TRAFFIC	1	60" x 30"
⑪	W20-3	ROAD CLOSED AHEAD	3	48" x 48"
⑫	R11-3a	ROAD CLOSED 2 MILES AHEAD LOCAL TRAFFIC ONLY	2	60" x 30"
		BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED	10	

DETOUR  
---  
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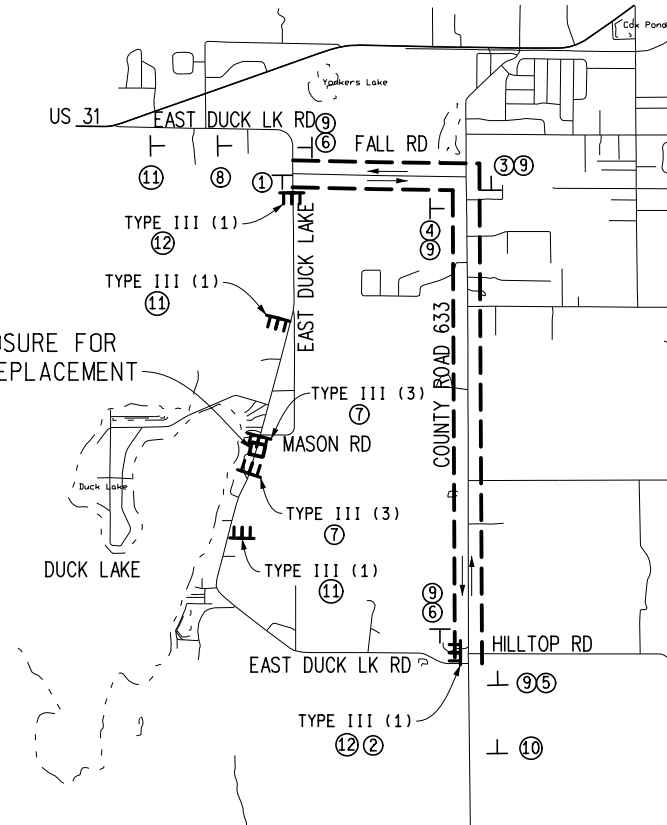
E DUCK LAKE RD

⑨  
D3-VAR 1  
30" x 12"  
6" "C" LETTERS  
BLACK ON ORANGE

E DUCK LAKE RD  
CLOSED  
TO THRU TRAFFIC

⑩  
R11-VAR 1  
60" x 30"  
4" "C" LETTERS  
BLACK ON ORANGE

ROAD CLOSURE FOR  
CULVERT REPLACEMENT



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
800-482-7171  
OR 811

NO SCALE



EAST DUCK LAKE ROAD

GREEN LAKE TOWNSHIP

ROAD CLOSURE/DETOUR SIGNING PLAN

**GRAND TRAVERSE**  
County Road Commission

JOB NO.	SHEET NO.	TOTAL
	2	2

GRAND TRAVERSE COUNTY ROAD COMMISSION  
SPECIAL PROVISION  
FOR  
**HMA APPLICATION ESTIMATE**

KPM:PJM

1 of 1

02-14-19

**a. Description:**

This work shall be done in accordance with the requirements of section 501 of the 2012 Edition of the Michigan Department of Transportation Standard Specifications for Construction, except as specified herein. **The use of Reclaimed Asphalt Pavement (RAP) shall be limited to Tier 1 (0% to 17% RAP binder by weight of the total binder in the mixture). The use of shingles (RAS) shall not be permitted.**

**b. Construction Methods:**

Acceptance of HMA, LVSP mixture shall be based on the Special Provision for Acceptance of HMA Mixture on Local Agency Projects (12SP501(J)) and the direct density method.

**c. Materials:**

The Target Air Void percentage shall be 3.5% for all HMA on this project.

The HMA, LVSP (Top course) shall have a yield of 220 pounds per square yard.

The HMA, LVSP (Leveling course) shall have a yield of 220 pounds per square yard.

The Asphalt Cement for the HMA, LVSP Mixture shall be 58-28 performance grade.

The top course of HMA pavement shall have a minimum AWI of 220.

The Bond Coat material shall be as specified in the 2012 MDOT Standard Specifications for Construction. The application rate on existing or between courses for HMA, LVSP shall be 0.05 - 0.15 gallon per square yard.

**d. Measurement and Payment:**

Measurement and Payment shall be at the contract unit price of HMA, LVSP.

# GRAND TRAVERSE COUNTY ROAD COMMISSION

## SPECIAL PROVISION FOR SLOPE RESTORATION

KPM/PJM

1 of 1

02-14-19

### a. Description:

This work shall be done in accordance with the requirements of section 816 of the 2012 Edition of the Michigan Department of Transportation Standard Specifications for Construction, except as specified herein.

### b. Materials:

The following materials shall meet the requirements of Section 917 of the 2012 Standard Specifications for Construction, and as shown below:

<u>Material</u>	<u>Application Rate</u>
Topsoil Surface	3 inches minimum
Seeding, Mixture TDS	220 #/Acre
Fertilizer, Chemical Nutrient, CI A	176 #/Acre
High Velocity Mulch Blanket	(Must be from MDOT Qualified Products list)

### c. Construction Methods:

Topsoil, seed, fertilizer and high velocity mulch blanket meeting the requirements of the 2012 MDOT Standard Specifications for Construction will be placed on disturbed areas, or other areas as directed by the engineer, beyond the roadway shoulder. Topsoil shall be furnished by the contractor but salvaged topsoil may be used as approved by engineer. Topsoil depth shall be not less than 3 inches. The Contractor is responsible for determining the amount of existing topsoil that can be salvaged.

### d. Measurement and Payment:

The completed work shall be measured and paid for at the contract unit price for the following contract pay item and includes all materials, equipment and labor necessary to complete this item as described above.

#### Pay Item

#### Unit

Slope Restoration

Square Yard

Payment for **Slope Restoration** will be measured by area in square yard in place. All materials, labor and equipment required to install **Slope Restoration**, which includes Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and High Velocity Mulch Blanket will not be paid for separately but shall be included in the contract unit price bid for **Slope Restoration**.

GRAND TRAVERSE COUNTY ROAD COMMISSION

SPECIAL PROVISION  
FOR  
**CLEARING - SPECIAL**

KPM/PJM

1 of 1

02-14-19

**a. Description.** Cut, remove from the ground, and dispose of trees (regardless of size), stumps, brush, roots, logs, and other vegetation to the limits shown on the plans.

**b. Materials.** Refer to Section 201 of the Standard Specifications for Construction.

**c. Construction.** Complete Clearing, Special according to Section 201 of the Standard Specifications for Construction.

**d. Measurement and Payment.** The completed work will be measured and paid for at the contract unit price for the following contract item (pay item):

Contract Item (Pay Item)	Pay Unit
--------------------------	----------

Clearing - Special.....	Station
-------------------------	---------

**Clearing - Special** shall apply as shown on the plans or where directed by the Engineer. It will be measured along the centerline of the mainline pavement. In areas where work is performed on both sides of the road, each side of the road will be measured and paid for separately.

Payment for **Clearing - Special** includes all labor, equipment, and materials required to complete the work as described. Providing and placing backfill where needed to fill voids resulting from stump removals and any related miscellaneous grading shall be including in the item.

Slope Restoration will be paid for separately.



GRAND TRAVERSE COUNTY ROAD COMMISSION

SPECIAL PROVISION  
FOR  
**RIPRAP - SPECIAL**

KPM/PJM

1 of 1

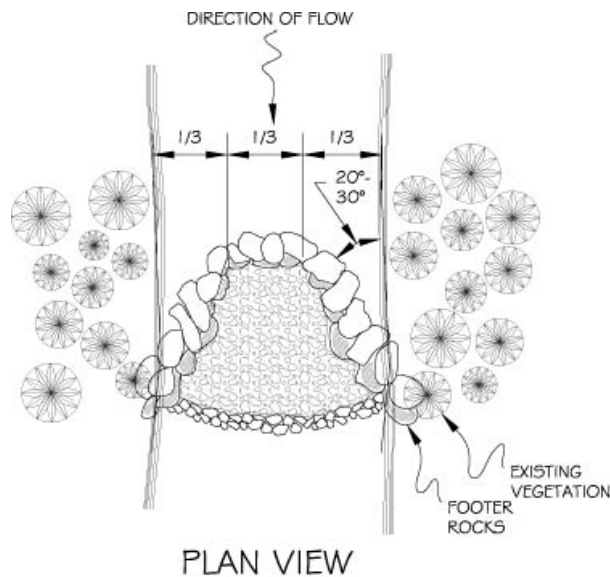
02-14-19

**a. Description.** This work consists of constructing a rock weir across and adjacent to the stream according to the plans, the standard specifications and as specified herein. Excavate, backfill, and reestablish turf for all disturbed areas as required for the construction of the rock weir.

**b. Materials.** Use natural rock meeting the requirements for Riprap, Plain for the rock weir. Broken concrete will not be allowed.

**c. Construction.** Excavate and backfill as required for construction of the rock weir in accordance with section 205 of the Standard Specifications for Construction.

Construct the rock weir as shown, per plans and in accordance with section 813 of the Standard Specifications for Construction. Place footer rocks below the elevation of the final grade, to support a second row of rocks. Place top row of rocks against the footer rocks and slightly upstream so they are supported by multiple points of contact. Key rocks at the ends of the weir well back into banks. Geotextile liner is not required.



**d. Measurement and Payment.** The completed work will be measured and paid for at the contract unit price for the following contract item (pay item):

**Contract Item (Pay Item)**

**Pay Unit**

Riprap - Special.....Ton

**Riprap - Special** includes all labor, equipment, and materials as specified, including excavation, backfill, rock, and turf establishment.

# GRAND TRAVERSE COUNTY ROAD COMMISSION

## SPECIAL PROVISION FOR STRUCTURE, TIMBER - INSTALL

KPM:PJM

1 of 1

02-14-19

### **a. Description:**

Install a timber bridge as shown on the Engineer's plans and the Fabricator's plans. All Timber Bridge materials, including piles and hardware, will be supplied by the Grand Traverse County Road Commission (GTCRC) and delivered to the project site.

### **b. Construction:**

Construction methods shall be in accordance with subsection 709.03 of the 2012 Standard Specifications for Construction. Drive nails and spikes with sufficient force to set the heads flush with surface of the wood, thus ensuring that the surface is free from deep and frequent hammer marks. Handle lumber and timber with sufficient care to avoid breaking through portions penetrated by the treatment, and thereby exposing untreated wood. Do not use chains, peavies, cant hooks, picaroons, timber dogs, pike poles and other pointed tools that would burr, blemish, penetrate or deform the contacted timber. Use only rope, rubber or fabric slings.

Secure ship lapped joints with drive spikes. Connect multiple panels with spreader beams and secure through the deck panels with bolts and locking hardware.

The supplier shall be responsible for assisting the contractor with construction of the structure.

### **c. Measurement and Payment:**

The completed work as described will be paid for at the contract unit price for the following contract item (pay item)

#### **Pay Item**

#### **Unit**

Structure, Timber – Install

Lump Sum

Furnishing pile driving equipment, driven timber piles and treated timber test piles are not part of **Structure, Timber – Install** and will be paid for separately.

## GRAND TRAVERSE COUNTY ROAD COMMISSION

### NOTICE TO BIDDERS UTILITY COORDINATION

KPM:PJM

Page 1 of 1

02-14-19

The contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 108.09 and 109.05 of the 2012 MDOT Standard Specifications for Construction.

For protection of underground utilities and in conformance with Public Acts 174 of 2013, the contractor shall dial 1-800-482-7171 or 811 a minimum of three full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the contractor of the responsibility of notifying utility owners who may not be a part of the MISS DIG alert system.

#### **Public Utilities:**

The following Public Utilities have facilities located within the Right-of-Way:

##### **Telephone**

AT&T  
142 East State Street, FL 2W  
Traverse City, MI 49686  
231-348-8013  
Contact: Ron Ouellette

##### **Electric**

Cherryland Electric  
5930 US-31 South  
Grawn, MI 49637  
231-486-9229  
Contact: Jeff Butcher

##### **Gas**

DTE Energy  
609 Bjornson St  
Big Rapids, MI 49307  
(231) 592-3244  
Contact: Larry Bourke

The owners of existing service facilities that are within grading or structure limits will move them to locations designated by the Engineer or will remove them entirely from the highway Right-of-Way, when feasible. Owners of Public Utilities will not be required by the County to move additional poles or structures in order to facilitate the operation of construction equipment unless it is determined by the Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor's operations.

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS, OR IN THE SPECIFICATIONS, ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS, AS AMENDED.

THE DESIGN OF THIS STRUCTURE IS BASED ON 1.2 TIMES THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION HL-93 LOADING WITH THE EXCEPTION THAT THE DESIGN TANDEM PORTION OF THE HL-93 LOAD DEFINITION SHALL BE REPLACED WITH A SINGLE 60K AXLE LOAD BEFORE APPLICATION OF THE 1.2 FACTOR. THE RESULTING LOAD IS DESIGNATED HL-93 MODIFIED. LIVE LOAD PLUS DYNAMIC LOAD ALLOWANCE DEFLECTION DOES NOT EXCEED 1/425 OF SPAN LENGTH.

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH AASHTO: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2011.

A DETOUR SHALL BE USED FOR CONSTRUCTION OF THIS PROJECT. PLACING OF TEMPORARY TRAFFIC CONTROL ITEMS SHALL BE DONE IN ACCORDANCE WITH THE 2011 EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS REVISED.

THE DESIGN OF THE FOUNDATION PILING IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:

WOOD PILES  $F_{co} = 0.900$  ksi

### PLAN INDEX

SHEET NUMBER	SHEET DESCRIPTION
1	TITLE SHEET
2	PLAN OF SITE
3	SOIL BORING SHEET
4	PLAN OF STRUCTURE

### TRAFFIC DATA

YEAR	2018	2038
A.D.T.....	928	1250
% COMMERCIAL.....	3%	3%
DESIGN SPEED.....	55 MPH	



COUNTY KEY

# GRAND TRAVERSE COUNTY ROAD COMMISSION

## AND THE

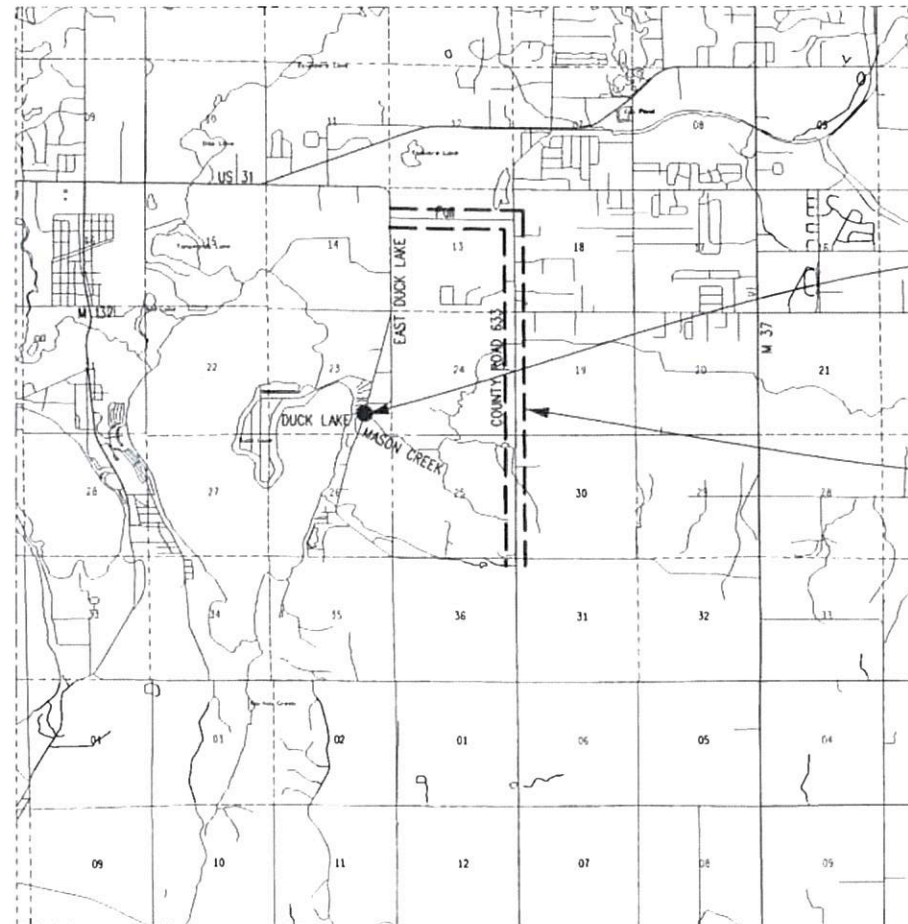
## CONSERVATION RESOURCE ALLIANCE

### PLANS OF PROPOSED IMPROVEMENTS

## BRIDGE CONSTRUCTION

## EAST DUCK LAKE ROAD OVER MASON CREEK

GRAND TRAVERSE COUNTY - GREEN LAKE TOWNSHIP



PROJECT LOCATION

DETOUR



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
800-482-7171  
OR 811

NATIONAL CONSERVATION PRACTICE STANDARDS  
AQUATIC ORGANISM PASSAGE - 396

PLANS FOR: SINGLE SPAN TIMBER BRIDGE CONSTRUCTION INCLUDING EARTHWORK, GUARDRAIL, HMA PAVING & DETOURING TRAFFIC

GRAND TRAVERSE COUNTY ROAD COMMISSION APPROVAL

*[Signature]*

7-12-18  
DATE

TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, JUDGMENT AND BELIEF, THE DESIGN, CONSTRUCTION DRAWINGS AND SPECIFICATIONS MEET APPLICABLE NRCS STANDARDS AND SPECIFICATIONS

*[Signature]*  
PATRICK MIDDLETON, PE

7-10-18  
DATE

NRCS IS ACCEPTING THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON THE BASIS THAT THEY HAVE BEEN SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. BASED ON THE INFORMATION PROVIDED BY THE PROFESSIONAL ENGINEER, THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS APPEAR TO MEET APPLICABLE NRCS STANDARDS AND SPECIFICATIONS. ANY DEFICIENCIES IN THE DESIGN, CONSTRUCTION DRAWINGS OR SPECIFICATIONS ARE THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THE CONSTRUCTION DRAWINGS.

*[Signature]*  
NRCS REPRESENTATIVE

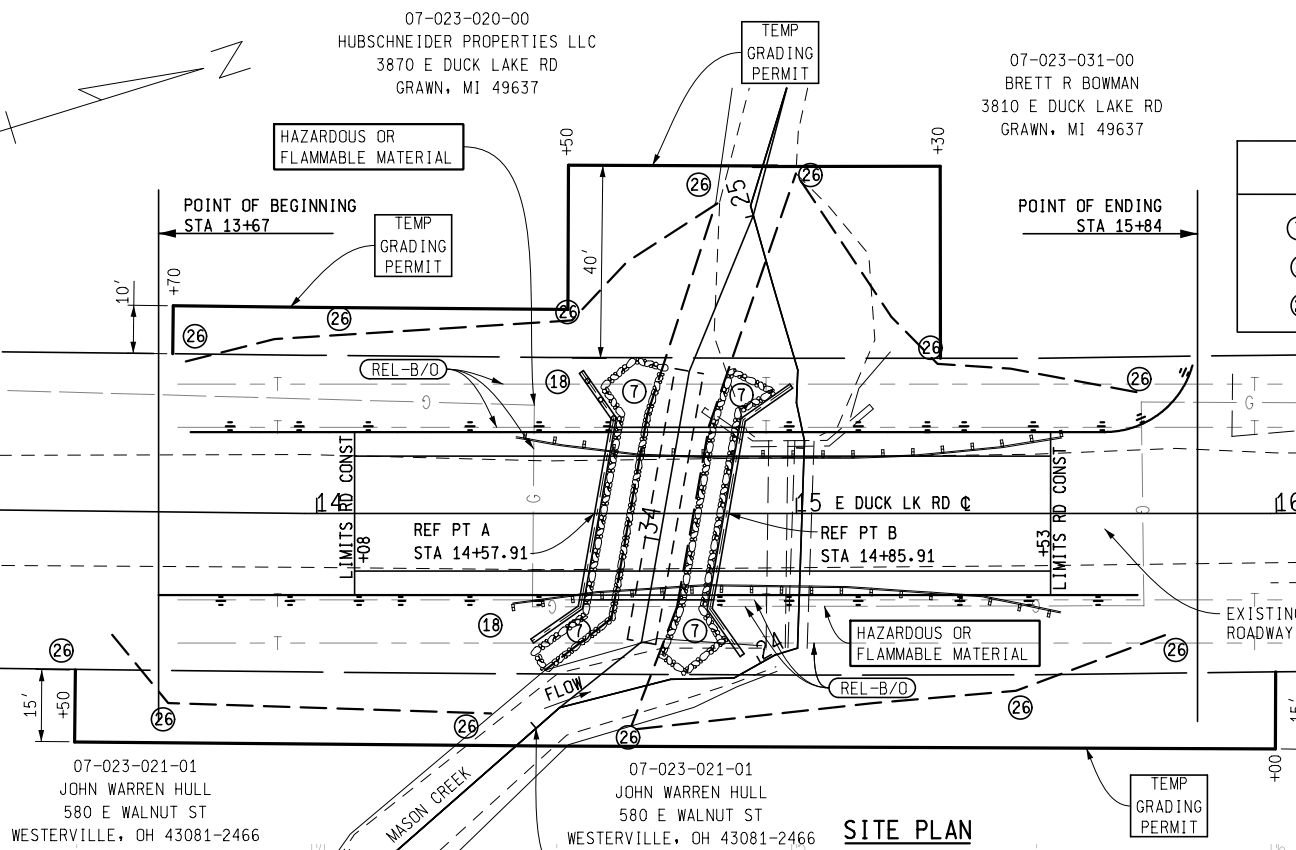
7/18/18  
DATE

PREPARED UNDER SUPERVISION OF  
PATRICK J. MIDDLETON, P.E. 45673  
REGISTERED PROFESSIONAL ENGINEER REGISTRATION NUMBER

**KPM ENGINEERING**  
CIVIL ENGINEERING CONSULTANTS

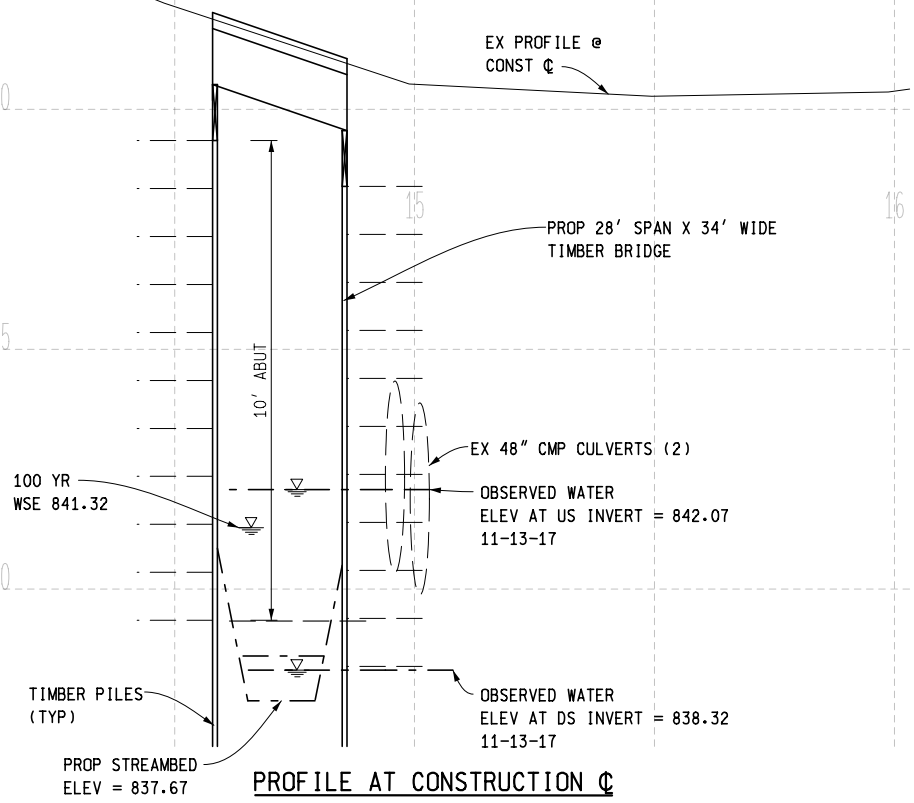


DATE	SHEET NO.	TOTAL SHEETS
6/27/2018	1	4



SITE PLAN

AT STATION 33+50± FOR TEMPORARY GRADE CONTROL  
PLACE RIPRAP - SPECIAL (50 TO 75 LBS EACH STONE)  
ALONG STREAM BANKS AND BOTTOM ("V" SHAPED  
POINTED UPSTREAM) AS DIRECTED BY THE ENGINEER.



PROFILE AT CONSTRUCTION C

ADT
2018 = 928
2038 = 1250

SOIL EROSION AND SEDIMENTATION CONTROL ITEMS
⑦ HEAVY RIPRAP W/GEOTEXTILE LINER
⑱ FILTER BAG
⑳ SILT FENCE

EXISTING STRUCTURE
48" CMP (2)
43' LONG

PROPOSED STRUCTURE
28' SPAN X 34' WIDE
TIMBER BRIDGE

BENCHMARKS
CS S SIDE ELM
STA 13+25, 20' RT
ELEV 857.70

CONTROL POINTS
APPROX STA 10+72, 17' RT
N = 481,853.50
E = 19,332,318.08
Z = 860.30
APPROX STA 17+51, 31' LT
N = 482,515.63
E = 19,332,473.29
Z = 851.02

THE WORK COVERED BY THESE PLANS INCLUDES REMOVAL OF THE EXISTING CULVERT, MAINTAINING TRAFFIC, CONSTRUCTION OF THE PROPOSED BRIDGE AND APPROACHES, SLOPE RESTORATION, RIPRAP SCOUR PROTECTION AND HMA PAVING.

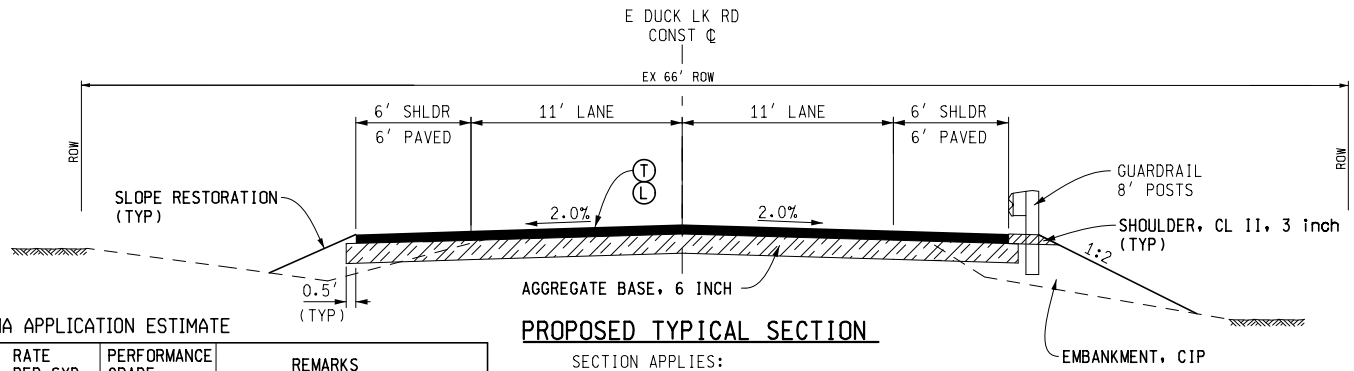
MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE. IF DEBRIS FALLS INTO THE WATERWAY, IT SHALL BE REMOVED WITHIN 24 HOURS. SINCE DISTURBANCE OF THE WATERWAY BOTTOM MAY BE AS HARMFUL AS THE DEBRIS ITSELF, THE PREVENTIVE MEASURES MUST BE EFFECTIVE.

WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING A DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.

IMMEDIATELY AFTER CONSTRUCTION OF AN ABUTMENT IS COMPLETED, SLOPE PROTECTION AND SEEDING OR SODDING SHALL BE PLACED ON THE ADJACENT SLOPES.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, 1974, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH-DISTURBING ACTIVITIES. PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODIBLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED/MULCH OR MULCH BLANKET AS DIRECTED BY THE ENGINEER.

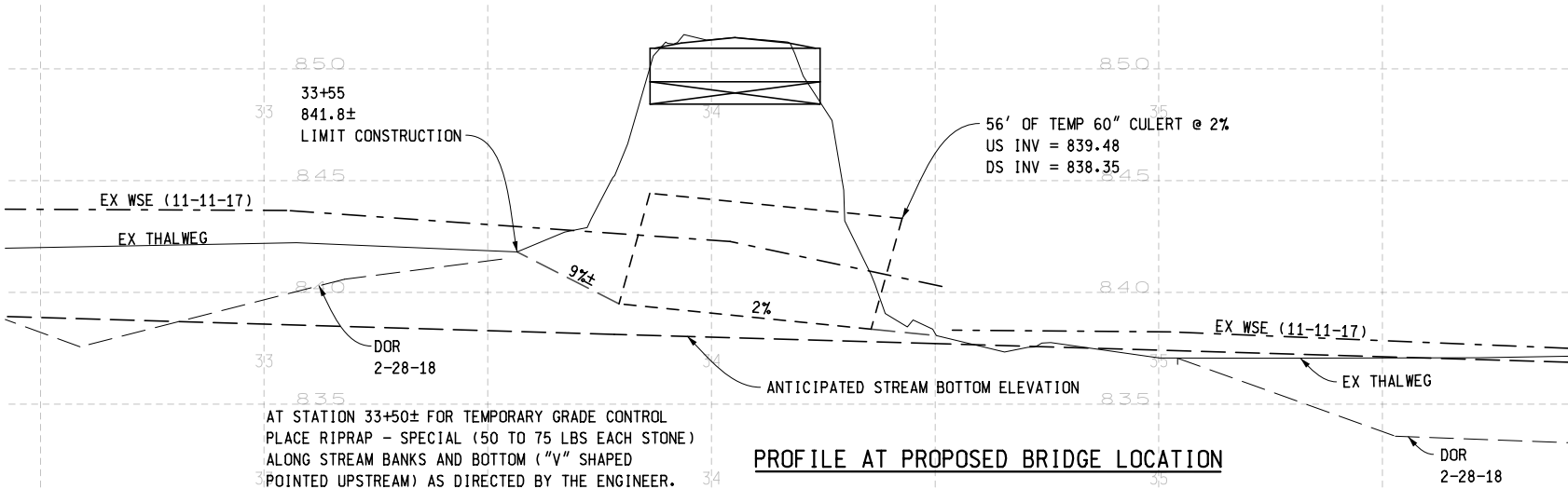


PROPOSED TYPICAL SECTION

SECTION APPLIES:  
STA 14+08 TO STA 14+57.91  
STA 14+85.91 TO STA 15+53

HMA APPLICATION ESTIMATE				
IDENT NO.	ITEM	RATE PER SYD	PERFORMANCE GRADE	REMARKS
①	HMA, LVSP	220#	PG 58-28	TOP COURSE, AWI = 220
②	HMA, LVSP	220#	PG 58-28	LEVELING COURSE
	* BOND COAT	0.05-0.15 GAL/SYD		

\* FOR INFORMATION ONLY



PROFILE AT PROPOSED BRIDGE LOCATION

**811**  
3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
800-482-7171  
OR 811

Conservation Resource Alliance

**GRAND TRAVERSE**  
County Road Commission

**KPM ENGINEERING**  
CIVIL ENGINEERING CONSULTANTS

PLAN OF SITE				SHEET NO.
DATE	TOWNSHIP	EAST DUCK LAKE OVER		2
12/11/2018	GREEN LAKE	MASON CREEK		

12/11/2018 9:55:53 AM

SB-1 STA 14+85, 5' RT

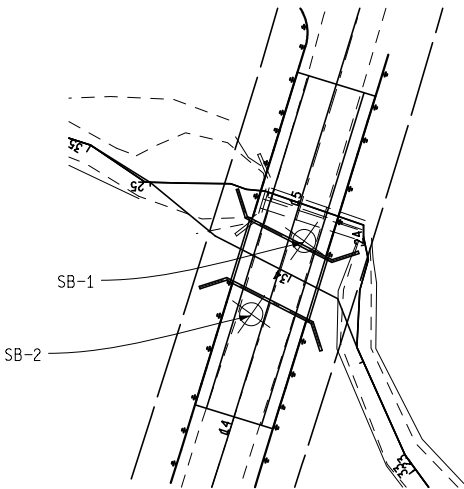
SS=Split Spoon ST=Shelby Tube G=Grab					Site/Surface Conditions:		Driller: J. Birgy Helper: J. Musselman Logged By: J. Musselman Drilling Rig: Acker Rig # 19	
Depth (FT)	Sample Interval	Sample Method	Blow Count per 6"	Penetration Number (N)	Soils Description	Profile	Comments	
SOIL BORING ELEV - 851.02	1-2.5	SS	4-7-10	17	1.5'-13.5' fine to medium brown sand		6" asphalt	
							6" road gravel	
							6" gravel	
PROP STREAMBED ELEV - 837.67	3.5-5	SS	3-3-6	9	13.5'-40' fine to medium tan sand with trace of fine gravel			
	5-6	SS	1-2-2	4				
	6-7.5							
EST SCOUR ELEV - 831.67	8.5-10	SS	1-2-2	4	13.5'-40' fine to medium tan sand with trace of fine gravel			
MIN PILE TIP ELEV - 821±	13.5-15	SS	2-2-3	5	13.5'-40' fine to medium tan sand with trace of fine gravel		11'-13' medium gravel seam	
							13.5' wet sample low recovery	
							13.5' 1" lense of organics	
END BORING ELEV - 811.02	18.5-20	SS	3-2-3	5	EOB @ 40'			
	23.5-25	SS	5-7-16	23	EOB @ 40'			
	28.5-30	SS	4-7-17	24	EOB @ 40'			
	33.5-35	SS	7-8-11	19	EOB @ 40'			
	38.5-40	SS	9-12-11	23	EOB @ 40'			

BORING DATE: 03-01-18  
WATER LEVEL DURING DRILLING = 13'  
BORING PERFORMED BY PEARSON DRILLING COMPANY

SB-2 STA 14+51, 5' LT

SS=Split Spoon ST=Shelby Tube G=Grab					Site/Surface Conditions:		Driller: J. Birgy Helper: J. Musselman Logged By: J. Musselman Drilling Rig: Acker Rig #19	
Depth (FT)	Sample Interval	Sample Method	Blow Count per 6"	Penetration Number (N)	Soils Description	Profile	Comments	
SOIL BORING ELEV - 852.08	1-2.5	SS	4-8-12	20	13"-9.5' fine to medium brown sand		7" Asphalt	
							6" Gravel	
PROP STREAMBED ELEV - 837.67	3.5-5	SS	6-7-8	15	9.5'-40' tan fine to medium sand with trace of fine gravel			
	5-6	SS	12-13-7	20				
	6-7.5							
EST SCOUR ELEV - 833	8.5-10	SS	6-4-6	10	11'-13' Layer of medium gravel			
MIN PILE TIP ELEV - 823±	13.5-15	SS	1-1-1	2	EOB @ 40'			
END BORING ELEV - 812.08	18.5-20	SS	1-1-2	3	EOB @ 40'			
	23.5-25	SS	7-8-10	18	EOB @ 40'			
	28.5-30	SS	7-8-9	17	EOB @ 40'			
	33.5-35	SS	4-5-7	12	EOB @ 40'			
	38.5-40	SS	2-4-6	10	EOB @ 40'			

BORING DATE: 03-01-18  
WATER LEVEL DURING DRILLING = 13'  
BORING PERFORMED BY PEARSON DRILLING COMPANY



BORING LOCATION PLAN

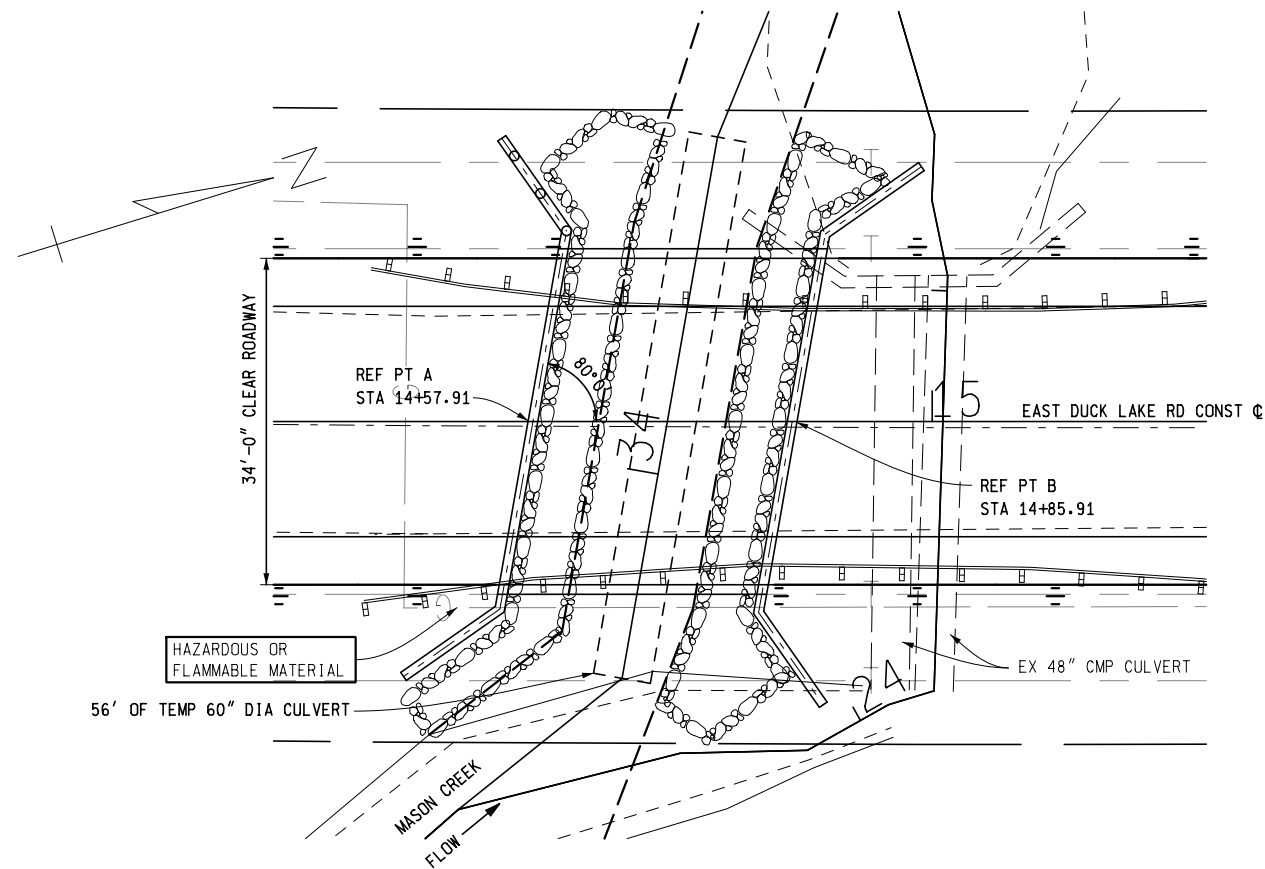
NOTES:

BLOW COUNT NUMBERS DENOTE NUMBER OF BLOWS REQUIRED TO DRIVE A 2" O.D. (1 1/2" I.D.) SPLIT SPOON SAMPLER 3 SUCCESSIVE 6" INCREMENTS USING A 140# HAMMER FALLING 30".

CONSISTENCY WAS DETERMINED BY INSPECTION OF SAMPLES AND SUBSTANTIATED BY SOILS RESISTANCE TO DRILLING TOOLS.

THE SOIL BORING LOGS REPRESENT POINT INFORMATION. PRESENTATION OF THIS INFORMATION IN NO WAY IMPLIES THAT SUBSURFACE CONDITIONS ARE THE SAME AT LOCATIONS OTHER THAN THE EXACT LOCATION OF THE BORING.





#### CONSTRUCTION QUANTITIES

1	LSUM	Mobilization, Max. (\$15,000)
3	Sta	Clearing - Special
2	Ea	Culv. Rem, 24 inch to 48 inch *
231	Cyd	Embankment, CIP
455	Syd	Aggregate Base, 6 inch
52	Syd	Shoulder, C II, 3 inch
371	Syd	HMA Surface, Rem
95	Ton	HMA, LVSP
38	Ft	Guardrail, Type B
13	Ft	Guardrail, Curved, Type B
4	Ea	Guardrail Anch, Bridge, Det T3
3	Ea	Guardrail Approach Terminal, Type 2B
1	Ea	Guardrail Departing Terminal, Type B
2	Ea	Guardrail Reflector
1	LSUM	Traffic Control
765	Syd	Slope Restoration
404	Cyd	Backfill, Structure, CIP
794	Cyd	Excavation, Fdn
2	Ea	Erosion Control, Filter Bag
300	Ft	Erosion Control, Silt Fence
1	Ea	Culv. Temp
1	LSUM	Pile Driving Equipment, Furn
1100	Ft	Pile, Treated Timber, Driven
2	Ea	Test Pile, Treated Timber
1	LSUM	Structure, Timber - Install
2	Ton	Riprap - Special (50 TO 75 LB STONES)
82	Syd	Riprap, Heavy

\* INCLUDES REMOVAL OF CONCRETE HEADWALLS.

SUMMARY OF HYDRAULIC ANALYSIS							
EXISTING				PROPOSED			
FLOOD DATA	DIS-CHARGE (CFS) *	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE	VELOCITY IN D/S CHANNEL (FPS)	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE	VELOCITY IN D/S CHANNEL (FPS)	WATERWAY AREA PROVIDED (SFT)	CHANGE IN WS EL 300' U/S OF PROPOSED STRUCTURE
2 YEAR	29	842.34	1.26	838.85	1.80	26.58	-1.75
50 YEAR	204	842.67	4.57	840.88	2.99	72.27	-2.48
100 YEAR	274	843.26	5.61	841.32	3.35	82.59	-4.83

THE CONTRIBUTING DRAINAGE AREA TO THIS CROSSING IS 15.4 SQUARE MILES. THE MAXIMUM BRIDGE AREA BELOW LOW CHORD IS 289 SQUARE FEET.

THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON THIS HYDRAULIC TABLE ARE TO BE USED FOR COMPARISON PURPOSES ONLY AND ARE NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN.

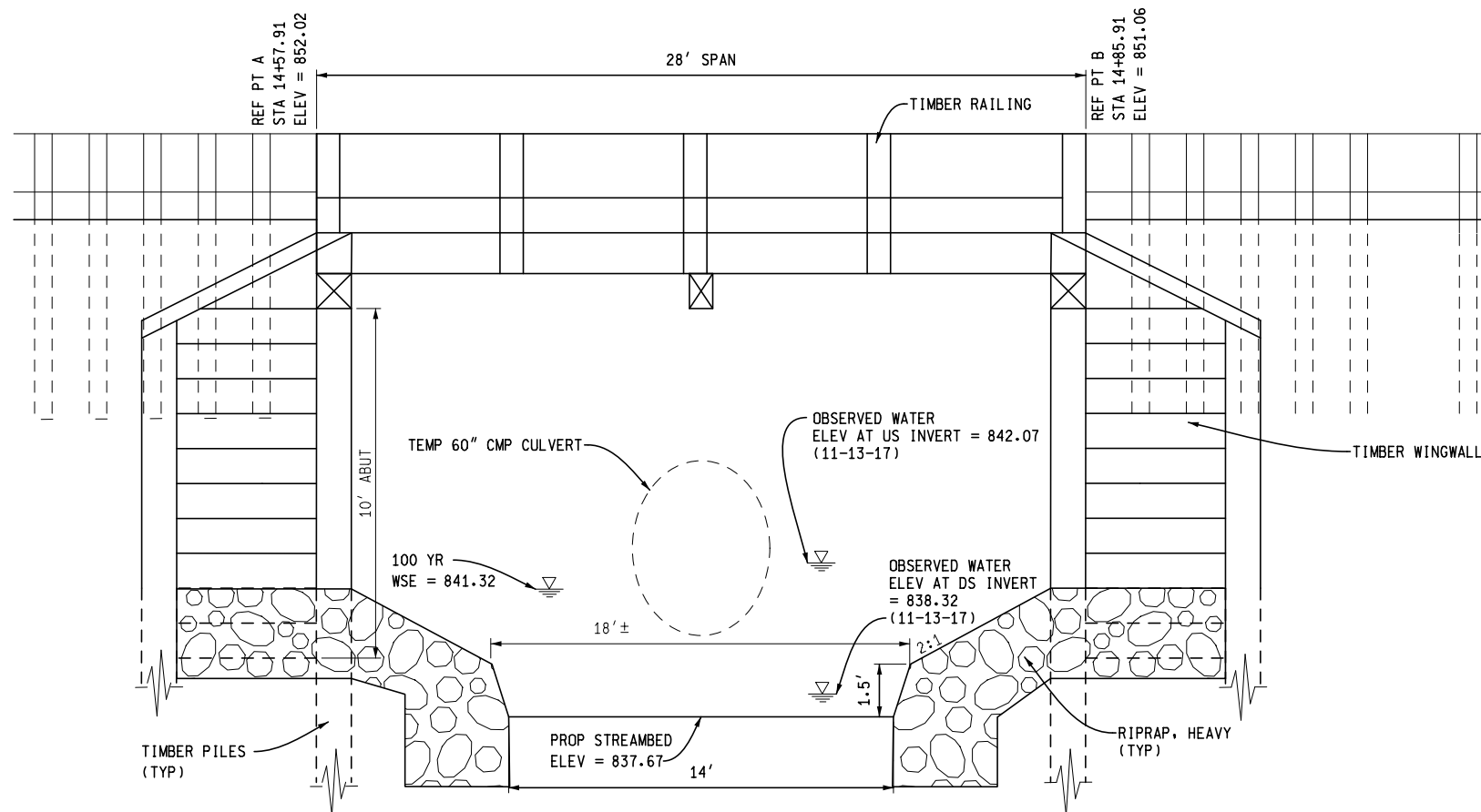
\* INCLUDES AN ESTIMATED 14 CFS OF ADDITIONAL BASE FLOW

THE DESIGN OF THIS STRUCTURE IS BASED ON 1.2 TIMES THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION HL-93 LOADING WITH THE EXCEPTION THAT THE DESIGN TANDEM PORTION OF THE HL-93 LOAD DEFINITION SHALL BE REPLACED WITH A SINGLE 60K AXLE LOAD BEFORE APPLICATION OF THE 1.2 FACTOR. THE RESULTING LOAD IS DESIGNATED HL-93 MODIFIED. LIVE LOAD PLUS DYNAMIC LOAD ALLOWANCE DEFLECTION DOES NOT EXCEED 1/425 OF SPAN LENGTH.

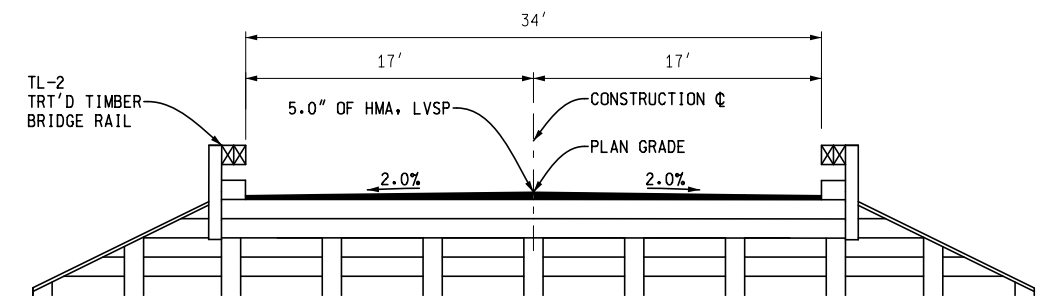
THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PLAN FOR DEWATERING AND MAINTAINING STREAM FLOW DURING BRIDGE CONSTRUCTION TO THE ENGINEER. THE PLAN MUST BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING ANY CULVERT RELATED WORK.

WITHOUT THE PREVENTATIVE MEASURES SHOWN ON THESE PLANS, THERE IS A POSSIBILITY THAT STREAM BED SCOUR MAY OCCUR. THE ESTIMATED TOTAL SCOUR DEPTH IS CALCULATED TO BE 5.2 FEET AT ABUTMENTS. THESE DEPTHS ARE BASED ON A 100 YEAR RUN OFF EVENT.

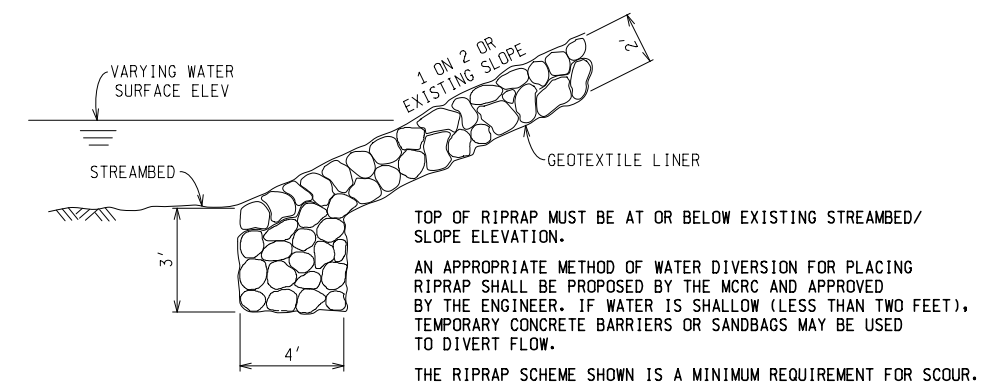
GEOTEXTILE LINER SHALL BE PLACED ON ALL SLOPES PRIOR TO PLACING RIPRAP. PAYMENT FOR GEOTEXTILE LINER SHALL BE INCLUDED IN PAYMENT FOR RIPRAP, HEAVY.



STRUCTURE ELEVATION



TYPICAL DECK SECTION



RIPRAP HEADER DETAIL



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
800-482-7171  
OR 811



Conservation Resource Alliance

**GRAND TRAVERSE**  
County Road Commission



DATE  
2/14/2019

TOWNSHIP  
GREEN LAKE

EAST DUCK LAKE OVER  
MASON CREEK

SHEET NO.  
4

PLAN OF STRUCTURE

SPECIFICATIONS:

**GRADING**  
ALL DOUGLAS FIR-LARCH TO BE GRADED PER WCLIB STANDARD GRADING RULES.

**MATERIALS & TREATMENT**  
TIMBER PRESERVATIVE TREATMENT SHALL BE IN ACCORDANCE WITH CURRENT STATE AND/OR AASHTO SPECIFICATIONS. ALL TIMBER SHALL BE COPPER NAPHTHENATE TREATED UNLESS NOTED OTHERWISE.

ALL PILING IS TO BE IN ACCORDANCE WITH CURRENT STATE SPECIFICATIONS.

DECK TO BE DOUGLAS FIR-LARCH, S1S.

BRIDGE RAILPOST TO BE DOUGLAS FIR-LARCH, DENSE SELECT STRUCTURAL.

GLU-LAM RAIL TO BE DOUGLAS FIR.

ABUTMENT TO BE DOUGLAS FIR-LARCH.

CURBS & SCUPPERS TO BE DOUGLAS FIR - LARCH.

BALANCE OF TIMBER TO BE DOUGLAS FIR - LARCH, IN ACCORDANCE WITH DESIGN REQUIREMENTS.

ALL TIMBER IS ROUGH UNLESS OTHERWISE NOTED.

**MISCELLANEOUS**  
ALL TIMBER TO BE CUT TO EXACT LENGTH, DRESSED TO SIZE REQUIRED AND ALL PRACTICAL FRAMING TO BE DONE PRIOR TO TREATMENT.

ALL DECK PLANKS SHALL BE PREDRILLED PRIOR TO TREATMENT.

ALL PLANK FOR DECK PANELS SHALL BE PRECISION END TRIMMED TO LENGTH WITH 1/4" UNDERLENGTH & NO OVERLENGTH TOLERANCE PERMITTED.

DECK PANELS SHALL BE ASSEMBLED WITH 3/8" DIAMETER RING SHANK DOWELS. ALL DOWELS ARE TO BE SIMULTANEOUSLY DRIVEN WITH EQUAL FORCE USING A MECHANICAL PRESS THE FULL LENGTH OF THE DECK, ENSURING ALL HEADS ARE FLUSH WITH THE SURFACE OF THE TIMBER PLANK. MULTIPLE IMPACT TOOLS ARE NOT TO BE USED TO SET DOWELS BECAUSE OF POTENTIAL FOR WOOD FIBER RUPTURE.

DECK PANELS WILL BE DELIVERED TO JOBSITE AFTER BEING FULLY ASSEMBLED AT FABRICATION PLANT.

ALL HARDWARE TO MEET ASTM A307-97 GALVANIZED TO A153. ALL HIGH STRENGTH HARDWARE TO MEET ASTM A325 OR A449 GALVANIZED TO A153. ALL STRUCTURAL STEEL TO MEET ASTM A36, GALVANIZED TO A123. 3/4" GALVANIZED CABLE TO BE ASTM A741-98.

**CONSTRUCTION NOTES:**  
TIMBER DECK PANELS ARE MARKED IN THE SHOP FOR USE IN FIELD PLACEMENT OF THE PANELS ON THE CAPS, e.g. A1, B1, C1 FOR SPAN 1.

DOWEL LAMINATED DECK: PANEL "A" IS PLACED FIRST IN ITS FINAL POSITION ON THE CAPS. NEXT DRILL THE 11/16" DIA. HOLES THRU PANEL INTO CAP IN EACH END OF PANEL AT THE LOCATIONS SHOWN AND FASTEN THE 3/4" DIA. DM. HD. DR. SPKS. NEXT PLACE PANEL "C" SO THAT ITS UPPER SPLICE BLOCK IS DIRECTLY OVER THE LOWER SPLICE BLOCK ON PANEL "A" AND DRAW TIGHT TOGETHER. THEN DRILL THE 9/16" DIA. HOLES THRU LOWER SPLICE BLOCK AND DRIVE THE 5/8" DM. HD. DR. SPIKES IN LOCATIONS SHOWN. THEN DRILL HOLES THRU PANEL INTO CAP AND FASTEN THE 3/4" DM. HD. DR. SPKS. THEREAFTER, SUCCESSIVELY PLACE PANELS "C" AND "B" IN THE SAME MANNER, ENSURING ALL PANELS ARE DRAWN TIGHT TOGETHER BEFORE ANY FASTENING OCCURS.

STEEL BANDING ON PANELS IS TO BE REMOVED AFTER PANELS HAVE BEEN PLACED IN THEIR FINAL POSITION ON THE CAPS.

ALL HOLES DRILLED IN THE FIELD WHERE SPIKES ARE USED ARE TO BE 1/16" SMALLER THAN SPIKE SIZE.

ALL HOLES DRILLED FOR BOLTS ARE TO BE 1/16" LARGER THAN BOLT SIZE.

HOLES DRILLED FOR 3/4" LAG BOLTS ARE TO BE 9/16" IN DIAMETER FOR THE THREADED PORTION OF THE BOLT AND 13/16" FOR THE SHANK.

ANY NUT OR MACHINE BOLT HEAD IN DIRECT CONTACT WITH TIMBER TO HAVE ONE PLATE WASHER BETWEEN NUT & TIMBER, OR BOLT HEAD & TIMBER.

ANY NUT OR MACHINE BOLT HEAD IN DIRECT CONTACT WITH STEEL TO HAVE ONE CUT WASHER BETWEEN NUT & STEEL, OR BOLT HEAD & STEEL.

SET THREADS ON ALL BOLTS AT NUT WITH A CENTER PUNCH AFTER TIGHTENING.

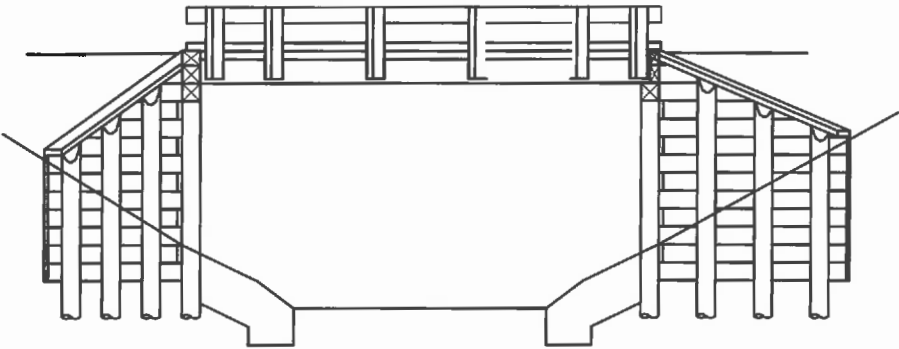
ABUTMENTS TO BE BACKFILLED WITH A CLEAN GRANULAR FILL.

ALL TIMBER CUT OR DRILLED IN THE FIELD SHALL BE TREATED WITH AN APPROVED PRESERVATIVE.

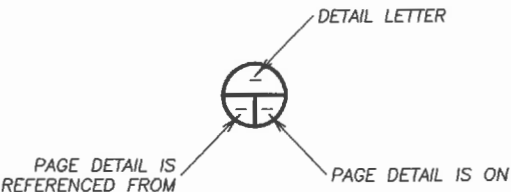
CONSTRUCTION REQUIREMENTS SHALL CONFORM TO STATE SPECIFICATIONS UNLESS OTHERWISE NOTED.

ALTHOUGH ALL PRACTICAL PRE-FRAMING WILL BE DONE PRIOR TO TREATING, SOME CUTTING & DRILLING WILL BE REQUIRED IN THE FIELD.

GRAND TRAVERSE COUNTY, MICHIGAN  
EAST DUCK LAKE ROAD  
SINGLE SPAN PANEL-LAM BRIDGE



BRIDGE ELEVATION



CALLOUT LEGEND  
DO NOT SCALE DRAWINGS

PLAN SHEET INDEX	
SHEET	DESCRIPTION
1	COVER SHEET & SPECIFICATIONS
2	GENERAL BRIDGE PLAN & ELEVATION
3	ABUTMENT PLAN & ELEVATION
4	ABUTMENT SECTION
5	SECTIONS THRU DECK
6	RAILPOST SECTION & DETAILS

BRIDGE SPAN RATINGS		
BRIDGE IS DESIGNED TO AASHTO HL-93 MODIFIED LOADING		
RATINGS BASED ON FLEXURE		
LOAD	HL93 RATING FACTOR	
INVENTORY		
OPERATING		

MICHIGAN OPERATING	
MICHIGAN OVERLOAD	

REVISION	DESCRIPTION	DATE	INITIALS
1			
2			
3			

COVER SHEET & SPECIFICATIONS

28'-0" TREATED TIMBER SPANS  
34'-0" CLEAR ROADWAY  
EAST DUCK LAKE ROAD  
GRAND TRAVERSE COUNTY, MICHIGAN

Wheeler

9531 W. 78th Street, Suite 100  
Eden Prairie, MN 55344  
952-929-7854  
info@wheeler1892.com  
wheeler1892.com

DATE: 2/8/19

TRACKING NO. T20259C

SHEET NO.

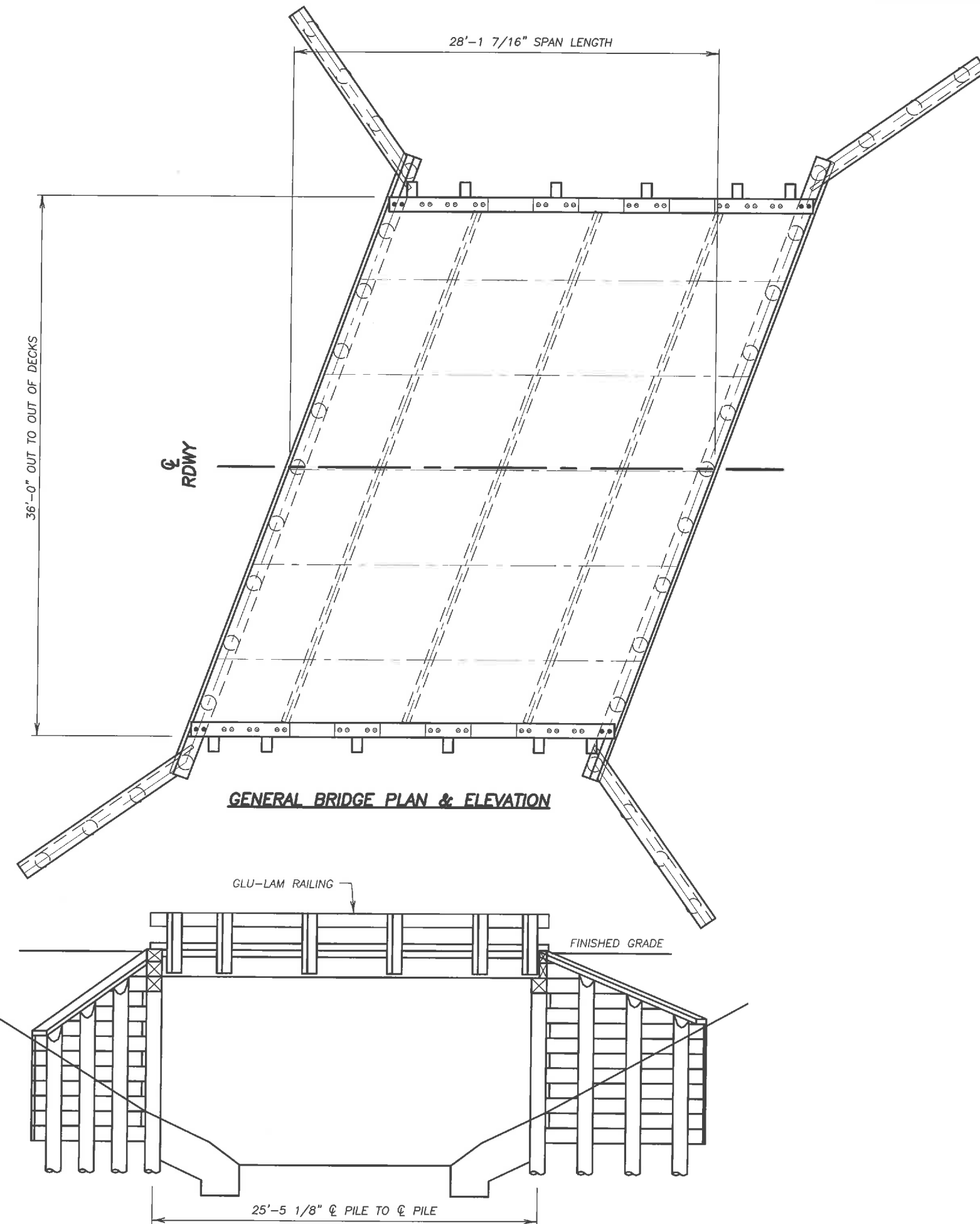
DWN: WEH

CHK: RLD

ORDER NO.

1 OF 6





**GENERAL BRIDGE PLAN & ELEVATION**  
EAST DUCK LAKE ROAD, GRAND TRAVERSE CO., MICHIGAN

**Wheeler**

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TRACKING NO. T20259C

SHEET NO.

DWN: WEH

CHK: RLD

ORDER NO.

2 OF 6

**ABUTMENT PILE NOTES:**

- (14) Q-NAP TRTD. WING PILE  
(18) Q-NAP TRTD. DEADMAN PILE  
(20) Q-NAP TRTD. ABUTMENT PILE  
(2) Q-NAP TRTD. TEST PILE

PILE LENGTHS TO BE DETERMINED ON  
TEST PILE DATA.

MINIMUM PILE PENETRATION TO BE 12 FT.  
BELOW GROUND LINE.

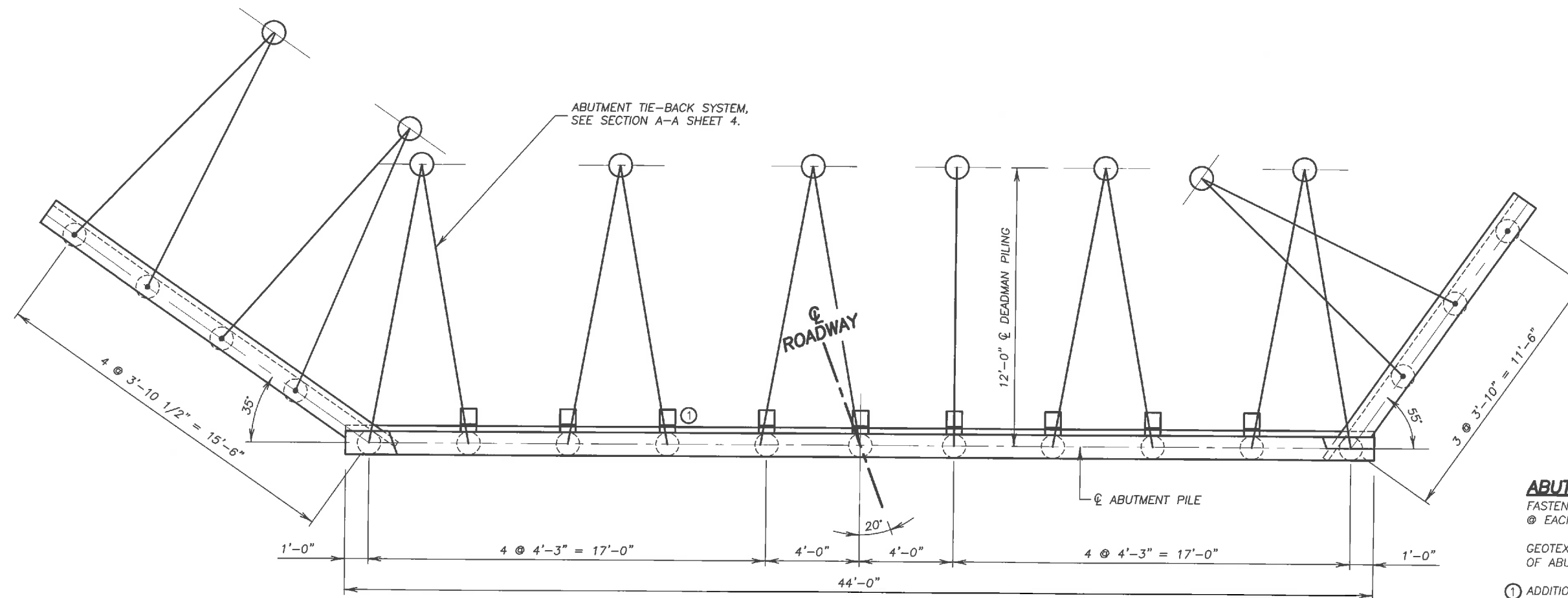
**ABUTMENT NOTES:**

FASTEN BACKING TO PILES WITH (2) 60d NAILS  
@ EACH INTERSECTION.

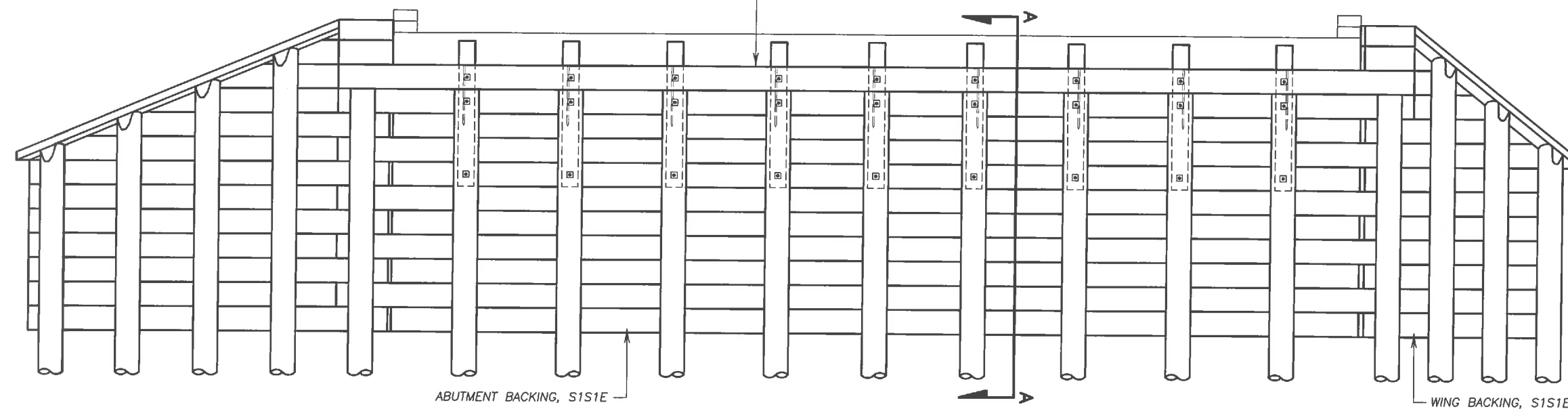
GEOTEXTILE FABRIC TO BE STAPLED TO BACKSIDE  
OF ABUTMENTS & WINGS. STAPLES BY CONTRACTOR.

- ① ADDITIONAL FILLER WEDGES MAYBE NEEDED FOR DIRECT CONTACT WITH END OF DECK PANELS.

PILE CUT-OFFS TO BE FIELD TREATED WITH AN APPROVED PRESERVATIVE AND ONE COAT ASPHALT PAINT SUPPLIED BY BRIDGE MANUFACTURER.



12" X 12" X 44'-0" ABUTMENT  
CAP, ATTACH TO EA. PILE WITH (1)-  
3/4" X 30" DRIFT PIN EA., (TYP.)



**ABUTMENT PLAN & ELEVATION**

**ABUTMENT PLAN & ELEVATION**

EAST DUCK LAKE ROAD, GRAND TRAVERSE CO., MICHIGAN

# Wheeler

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wheeler1892.com

DATE: 2/8/19

TRACKING NO. T20259C
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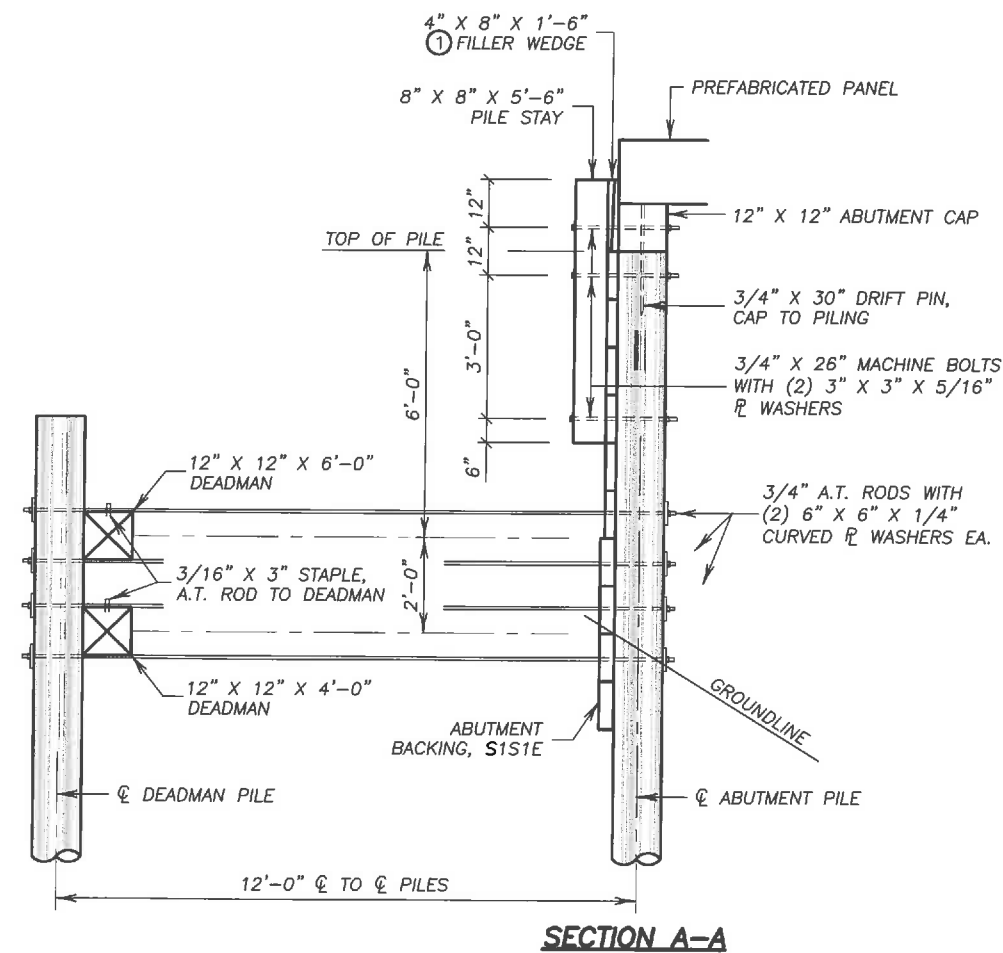
SHEET NO.

DWN: WEH

CHK: RLD
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ORDER NO.
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3 OF 6



#### ABUTMENT NOTES:

FASTEN BACKING TO PILES WITH (2) 60d NAILS  
@ EACH INTERSECTION.

GEOTEXTILE FABRIC TO BE STAPLED TO BACKSIDE  
OF ABUTMENTS & WINGS. STAPLES BY CONTRACTOR.

① ADDITIONAL FILLER WEDGES MAYBE NEEDED FOR DIRECT  
CONTACT WITH END OF DECK PANELS.

PILE CUT-OFFS TO BE FIELD TREATED WITH AN APPROVED  
PRESERVATIVE AND ONE COAT ASPHALT PAINT SUPPLIED BY  
BRIDGE MANUFACTURER.

**ABUTMENT SECTION**  
EAST DUCK LAKE ROAD, GRAND TRAVERSE CO., MICHIGAN

**Wheeler**

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DATE: 2/8/19

TRACKING NO. T20259C

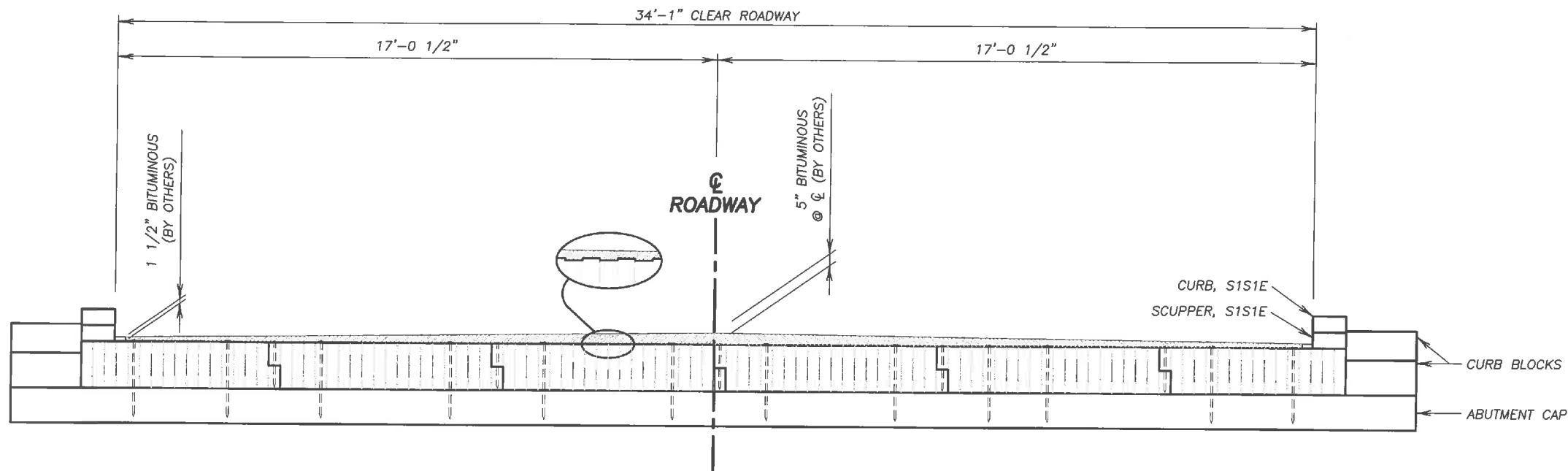
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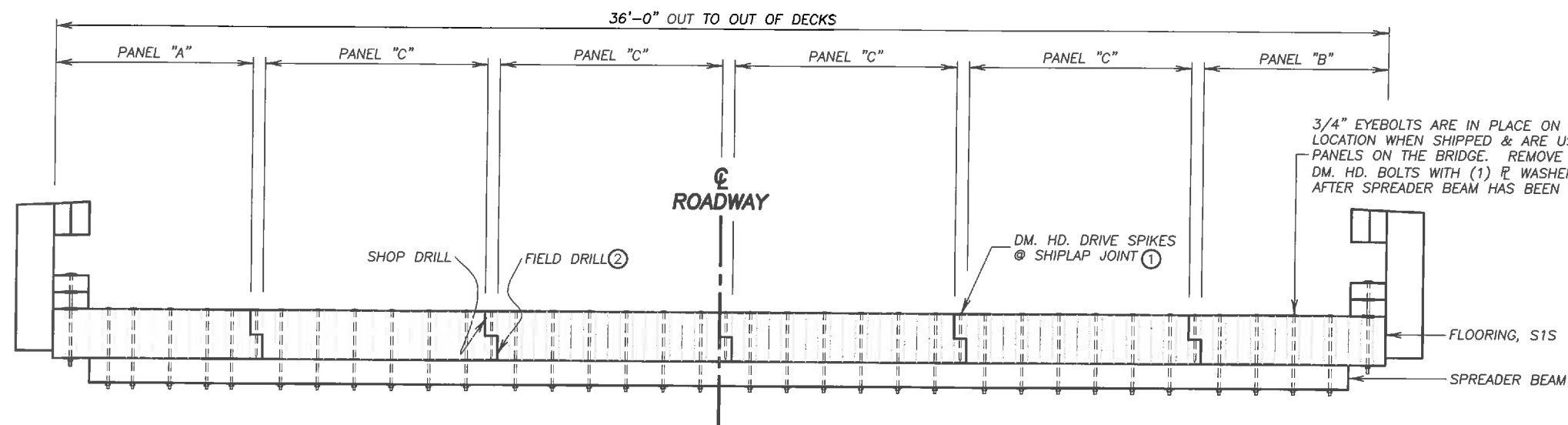
CHK: RLD

ORDER NO.

4 OF 6



**SECTION THRU DECK @ ABUTMENT**



**SECTION THRU DECK @ SPREADER BEAM**

**NOTES:**

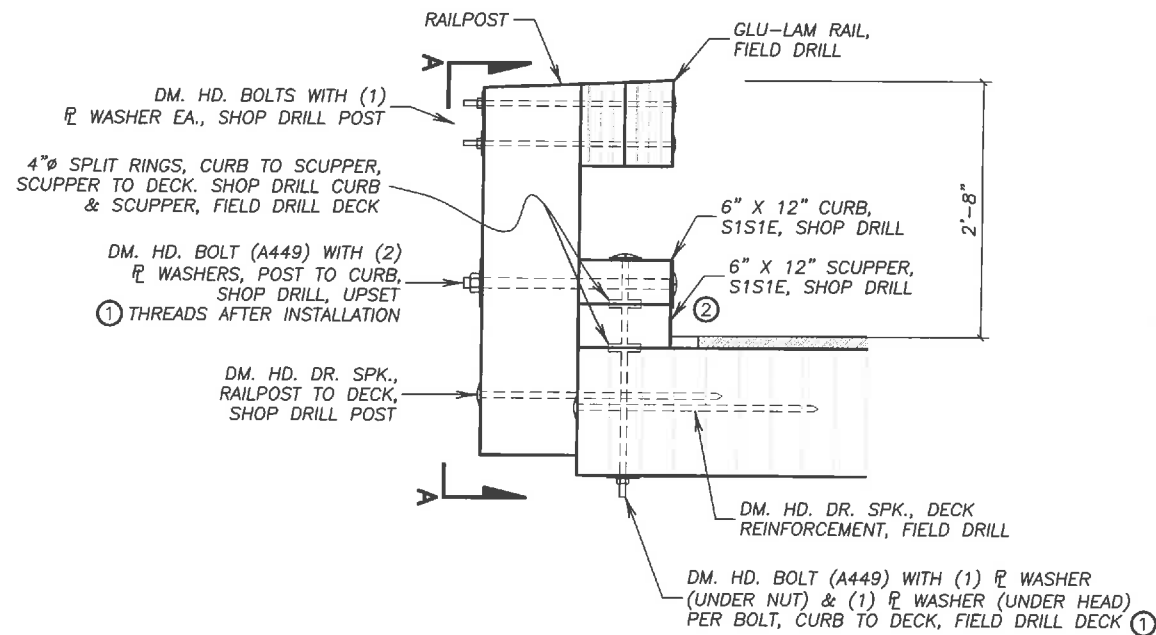
- ① ALL HARDWARE PENETRATING THE TOP OR BOTTOM EDGE OF THE DECK PLANK SHALL PASS THROUGH THE CENTER OF THAT EDGE DIMENSION.
- ② FIELD DRILLED HOLES IN THE LOWER SPLICE BLOCK OF EACH PANEL ARE TO BE DRILLED COMPLETELY THROUGH THE BLOCK TO PREVENT SPLITTING WHEN INSTALLING THE 5/8" DRIVE SPIKES.
- ③ THE CONTRACTOR SHALL INSTALL NELSON 8" COMPOSITE SHIMS (SUPPLIED BY BRIDGE MANUFACTURER) IN ALL LOCATIONS WHERE THE TOP OF THE SPREADER BEAM DOES NOT CONTACT THE BOTTOM OF THE DECK PANEL UPON TIGHTENING TO ENSURE SNUG FIT ACROSS ENTIRE DECK WIDTH. THE CONTRACTOR SHALL RETIGHTEN ALL NUTS ON THE LAST DAY OF CONSTRUCTION IN THE PRESENCE OF THE ENGINEER TO ENSURE ALL NUTS ARE PROPERLY TIGHTENED. SET THREADS ON ALL BOLTS AT NUT WITH A CENTER PUNCH AFTER TIGHTENING.

**SECTIONS THRU**  
EAST DUCK LAKE ROAD, GRAND TRAVERSE CO., MICHIGAN

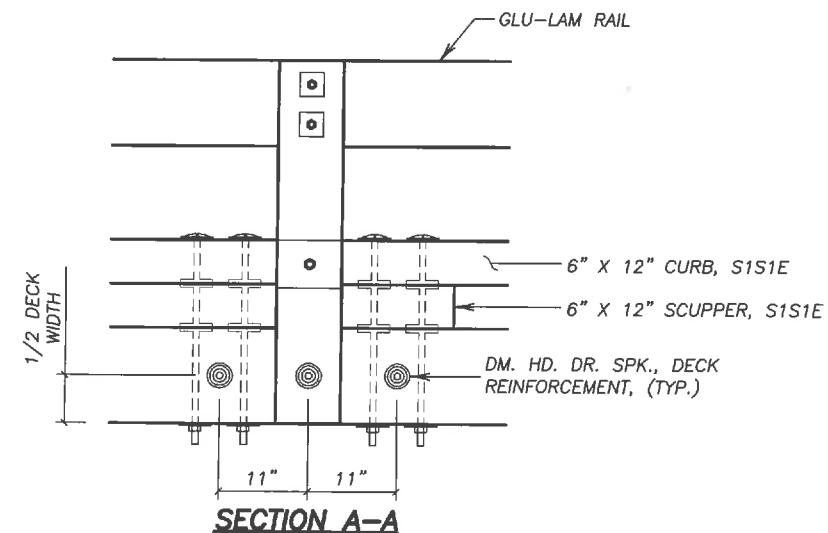
**Wheeler**

9531 W. 78th Street, Suite 100  
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952-929-7854  
info@wheeler1892.com  
wheeler1892.com

DATE: 2/8/19	TRACKING NO. T20259C	SHEET NO.
DWN: WEH	CHK: RLD	ORDER NO. 5 OF 6

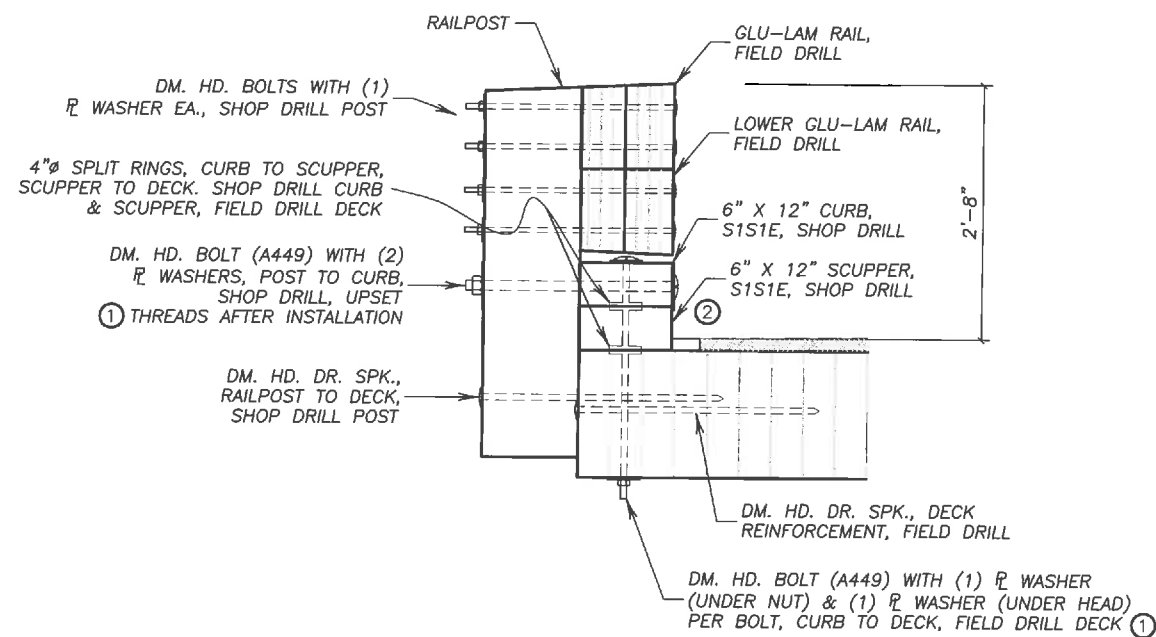
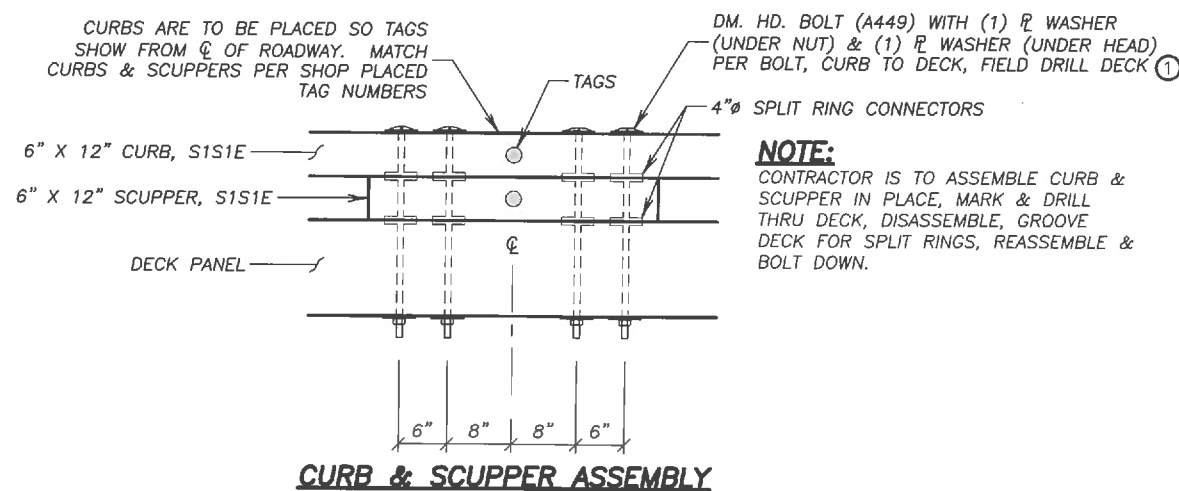


**SECTION 1 RAILPOST**

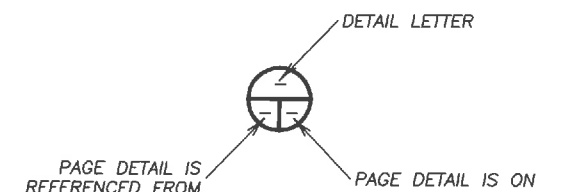
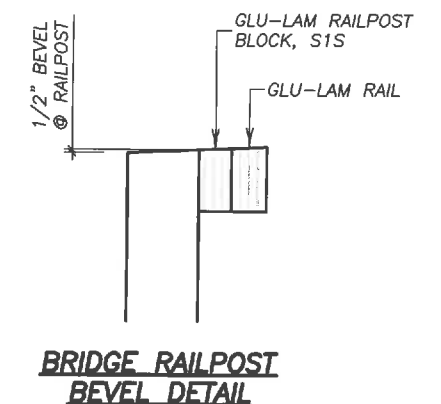
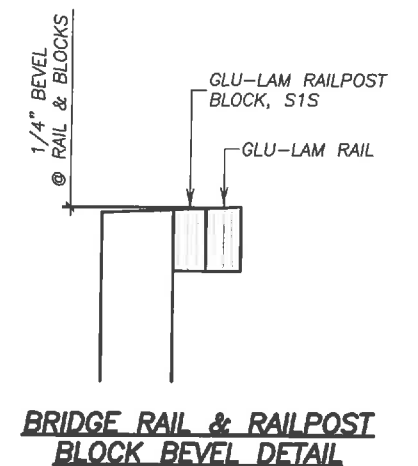


**NOTES:**

- ① HIGH-STRENGTH (A449) DOME HEAD BOLTS DO NOT HAVE FINS UNDER THE HEAD AT THE SHANK.
- ② FASTEN 2" X 4" PAVING STRIP, RGH, TO DECK WITH (2) 20d NAILS @ 18" CENTERS. PREDRILL HOLES TO AVOID SPLITTING.

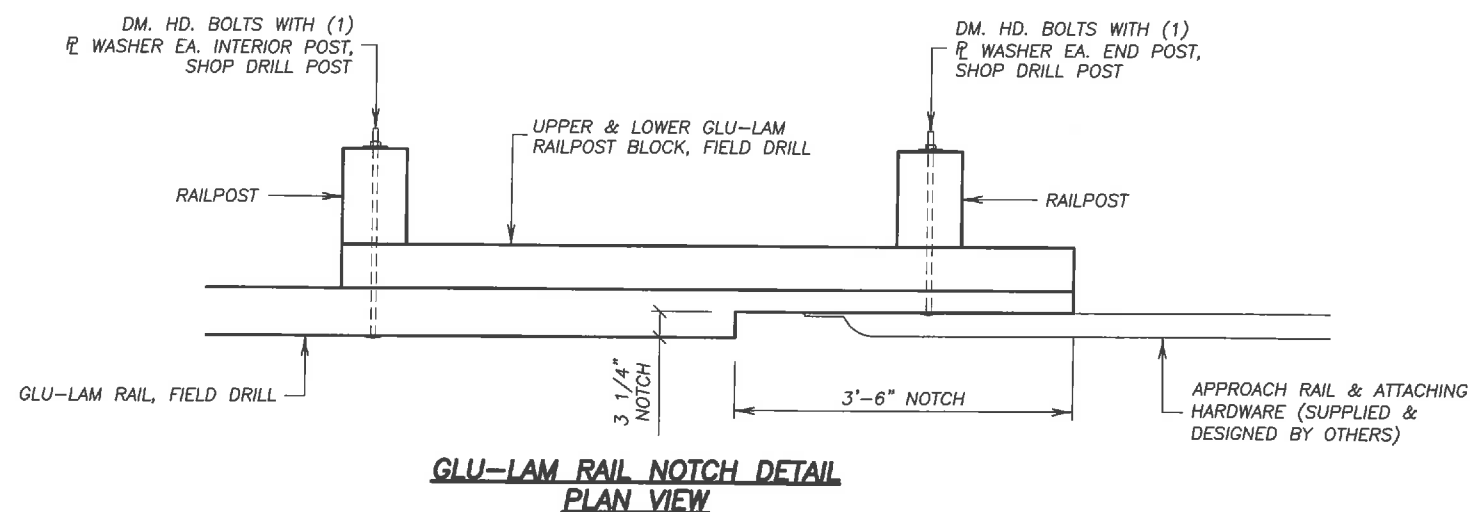


**SECTION 2 END RAILPOST**



**CALLOUT LEGEND**

**DO NOT SCALE DRAWINGS**



**RAILPOST SECTION & DETAILS**  
EAST DUCK LAKE ROAD, GRAND TRAVERSE CO., MICHIGAN

**Wheeler**

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info@wheeler1892.com  
wheeler1892.com

DATE: 2/8/19	TRACKING NO. T20259C	SHEET NO.
DWN: WEH	CHK: RLD	ORDER NO.
		6 OF 6

## **BID FORM**

### **PROJECT IDENTIFICATION:**

GRAND TRAVERSE COUNTY ROAD COMMISSION  
2019 CRACK FILL PROGRAM  
CONTRACT #: 19E100

### **OWNER PROJECT NUMBER:**

**18E005: Mason Creek Timber Bridge**

### **THIS BID IS SUBMITTED TO:**

GRAND TRAVERSE COUNTY ROAD  
COMMISSION  
1881 LAFRANIER ROAD  
TRAVERSE CITY, MI 49696-8911

- 1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the Road Commission in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2.01 Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance and the prices guaranteed for 45 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of the Road Commission.
- 3.01 In submitting this Bid, Bidder represents, as set forth in the Agreement, that:
  - A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum No.                      Addendum Date

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions, including subsurface conditions, that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state and local laws, rules, and regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site which may have been provided, if any, and (2) reports and drawings of a Hazardous Environmental Condition, if any, which may have been provided.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the materials, means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific materials, means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by the Road Commission and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. The Bidder understands that if it is the Successful Bidder, it is being selected by the Road commission to perform the Work because of Bidder's skill and expertise to

perform the Work and Bidder specifically represents and agrees that it has the experience, knowledge, and competency necessary to perform the Work or oversee the performance of the Work and assumes the responsibility for the performance of the Work pursuant to the Contract documents and assumes the risk in performing the Work.

- 4.01 Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over the Road Commission.
- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**UNIT PRICE BID:**

See included bid blank:

Unit Prices have been computed in accordance with the Instructions to Bidders.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

- 6.01 Bidder agrees that the Work will be substantially completed and completed and ready for final payment in accordance with the General Specifications on or before the dates or within the number of calendar days indicated in the Contract Documents.
- 7.01 Bidder accepts the provisions of the Contract as to liquidated damages in the event of failure to complete the Work within the times specified above, which shall be stated in the Contract.
- 8.01 The required Bid security is attached to and made a condition of this Bid.
- 9.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Bidding Documents.



SUBMITTED on \_\_\_\_\_, 20\_\_\_\_

*Note to Bidders - Complete only one of the following three sections as appropriate for your business status: individual, partnership or corporation.*

If Bidder is:

An Individual

Name (typed or printed): \_\_\_\_\_

By: \_\_\_\_\_  
(Individual's signature)

Doing business as: \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

A Partnership

Name (typed or printed): \_\_\_\_\_

By: \_\_\_\_\_  
(Authorized Individual's signature)

Doing business as: \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

A Corporation/Limited Liability Company/Professional Liability Company

Name (typed or printed): \_\_\_\_\_

State of Formation \_\_\_\_\_

Type: \_\_\_\_\_

By \_\_\_\_\_  
(signature)

Name: \_\_\_\_\_  
(type or printed)

Title \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

e-mail: \_\_\_\_\_

**East Duck Lake Road over Mason Creek  
Grand Traverse County - Green Lake Township  
Bid Form**

PAY ITEM CODE	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	ESTIMATED AMOUNT
1500001	Mobilization, Max. ____ \$15,000	1	LSUM		
2017002	Clearing - Special	3	Sta		
2030006	Culv, Rem, 24 inch to 48 inch	2	Ea		
2050011	Embankment, CIP	231	Cyd		
2060002	Backfill, Structure, CIP	404	Cyd		
2060010	Excavation, Fdn	794	Cyd		
2080014	Erosion Control, Filter Bag	2	Ea		
2080036	Erosion Control, Silt Fence	300	Ft		
3020016	Aggregate Base, 6 inch	455	Syd		
3070125	Shoulder, CI II, 3 inch	52	Syd		
5010005	HMA Surface, Rem	371	Syd		
5010703	HMA, LVSP	95	Ton		
7050002	Pile Driving Equipment, Furn	1	LSUM		
7050011	Pile, Treated Timber, Driven	1100	Ft		
7050015	Test Pile, Treated Timber	2	Ea		
7097000	Timber Bridge Materials Use Tax	13,127	DLR	\$1.00	\$13,127.00
7097051	Structure, Timber - Install	1	LSUM		
8070000	Guardrail, Type B	38	Ft		
8070010	Guardrail, Curved, Type B	13	Ft		
8070024	Guardrail Anch, Bridge, Det T3	4	Ea		
8070042	Guardrail Approach Terminal, Type 2B	3	Ea		
8070050	Guardrail Departing Terminal, Type B	1	Ea		
8070080	Guardrail Reflector	2	Ea		
8120090	Culv, Temp	1	Ea		
8127051	Traffic Control	1	LSUM		
8130005	Riprap, Heavy	82	Syd		
8137031	Riprap - Special	2	Ton		
8167011	Slope Restoration	765	Syd		
<b>TOTAL PRICE</b>					

(numerals)

<b>TOTAL PRICE</b>	
--------------------	--

(words)

Bidder	
--------	--

## AFFIDAVIT OF NON-COLLUSION BY CONTRACTOR

STATE OF MICHIGAN            )  
  )  
COUNTY OF \_\_\_\_\_)

I, \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_, state:

1. That I have submitted a bid to the Grand Traverse County Road Commission.
2. That the bid was not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or corporation.
3. That the bid is genuine and not collusive or a sham.
4. That I have not directly or indirectly by agreement, communication, or conference with anyone, attempted to induce action prejudicial to the interest of the Grand Traverse County Road Commission or of any other bidder, or anyone else interested in the proposed contract.
5. That prior to the public opening and reading of the bids, I:
  - a. Did not directly or indirectly induce or solicit anyone else to submit a false or sham bid.
  - b. Did not directly or indirectly collude, conspire, connive, or agree with anyone else that I or anyone would submit a false or sham bid or that anyone should refrain from bidding or withdraw a bid.
  - c. Did not, in any manner, directly or indirectly, seek by agreement, communication, or conference with anyone to raise or fix the bid of said bidder or of anyone else or to raise or fix any overhead, profit, or cost element of a bid price of that of anyone else.
  - d. Did not, directly or indirectly, submit a bid price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof or to any individual or group of individuals, except to any person or persons who have a partnership or other financial interest with me in my business.

\_\_\_\_\_  
Its: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public  
\_\_\_\_\_ Co., MI  
Acting in \_\_\_\_\_ Co., MI  
My Commission Expires: \_\_\_\_\_