PROPOSAL

FOR

TIMBERS ROAD BRIDGE AT STONY CREEK
STEEL PILE REPAIR

EXETER TOWNSHIP
MONROE COUNTY, MICHIGAN

BID OPENING:
Tuesday, August 8, 2017 at 10:00 a.m.

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF MONROE

Paul Iacoangeli, Chairman
Dan Minton, Vice Chairman
Stephen J. Pace, Member
Charles A. Londo, Member
Greg W. Stewart, Member

MCRC Project # 490-006-179016
MONROE COUNTY ROAD COMMISSION
INVITATION TO BID

Sealed bids will be received by the Board of County Road Commissioners of the County of Monroe until 10:00 a.m. local time on Tuesday, August 8, 2017 at their office located at 840 South Telegraph Road, Monroe, Michigan 48161 for the Timbers Road Bridge at Stony Creek Steel Pile Repair project in Exeter Township, Monroe County, Michigan. Significant bid items of work and approximate quantities are as follows:

   Steel Pile Repair – 1 Lump Sum

Bids will be publicly opened and read aloud by the Bid Committee at 10:00 a.m. Proposals may be downloaded from the Road Commission’s website at www.mcrc-mi.org/bids.html.

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF MONROE, MICHIGAN
MONROE COUNTY ROAD COMMISSION
PROPOSAL
TIMBERS ROAD BRIDGE AT STONY CREEK
STEEL PILE REPAIR

TO: The Board of County Road Commissioners of the County of Monroe, Michigan

FOR: Repair center pier steel piling for the Timbers Road Bridge at Stony Creek, Exeter Township, Monroe County, Michigan.

Ladies and Gentlemen:

The undersigned bidder hereby affirms that:

1. The proposal is in all respects fair and without any collusion or fraud.

2. The undersigned have examined the site of the proposed project and have made a personal investigation and estimate of quantities.

3. The undersigned will contract to furnish all labor, equipment, tools, material and traffic control devices necessary at the unit prices stated on the attached bid forms and to complete the work in the time specified to the satisfaction of the Board of County Road Commissioners of the County of Monroe, Michigan.

Company: __________________________________________________________
Address: __________________________________________________________
City, State, ZIP: ____________________________________________________
Telephone: _________________________________________________________
By: _________________________________________________________________
Title: ______________________________________________________________
Date: _______________________________________________________________

Notes:

1. If the bidder is a partnership, each member must sign the proposal.

2. Corporations must execute the proposal by duly authorized officers in accordance with the Articles of Incorporation.
INSTRUCTIONS TO BIDDERS and
GENERAL CONDITIONS

The Michigan Department of Transportation 2012 Standard Specifications for Construction are incorporated as part of these bidding documents and shall govern except as provided in the Invitation to Bid, Instructions to Bidders and General Conditions, and Proposal. Reference to the Department or Commission in the Michigan Department of Transportation 2012 Standard Specifications for Construction shall for this project mean the Board of County Road Commissioners of the County of Monroe, hereinafter referred to as “Board”, unless otherwise specified.

OWNER
The owner of the project is the Board of County Road Commissioners of the County of Monroe, also referred to as the “Board.”

ENGINEER
The Engineer is the County Highway Engineer or the individual assigned by the County Highway Engineer to be in charge of the Contract. The person assigned as the Engineer may be an employee of the Board, a consultant or an outside contractor hired by the Board.

BIDDER
The Bidder is one who submits a signed bid with the required documentation directly to the Board at the time and place specified.

BID FORMS
Sealed proposals must be submitted on the bid forms furnished by the Board. The proposal shall be submitted in its entirety (pages 1 through 11) with no modifications or changes except as authorized by an addendum and with no pages removed. All proposals must be filled out in ink or typewritten and shall be legibly signed, giving the complete name and address of the Bidder.

All bids must be in a sealed envelope and clearly marked “Timbers Road Bridge Steel Pile Repair”.

BIDDER’S SURETY
The proposal must be accompanied by a cashier’s check, certified check or a bid bond made payable to the Board of County Road Commissioners of Monroe County, Michigan in the sum of five percent (5%) of the amount of the bid. Upon awarding and signing of a contract, or in the event of bid rejection, such bid surety will be returned to the Bidder. Bids may be held for a period of forty (40) days.

INTERPRETATION AND ADDENDA
All questions about the meaning or intent of the Bidding Documents are to be directed to the Engineer. Interpretation or clarification considered necessary by the Engineer to such questions will be issued by Addenda delivered to all parties recorded by the Engineer as having received the Bidding Documents. Questions received less than seven days prior to the date for opening the bids may not be answered. Only questions answered by formal written Addenda are binding. Oral and other interpretations or clarifications will be without legal effect.

OPENING OF BIDS
Bids will be received by the Board at 840 S. Telegraph Road, Monroe, Michigan, 48161 until 10:00 a.m. local time on Tuesday, August 8, 2017 at which time they will be publicly opened and read aloud.

REJECTION OF BIDS
The Board reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, nonresponsive, unbalanced, or conditional bids and to reject the bid of any Bidder if the Board believes that it would not be in the best interest of the project to make an award to that Bidder, whether because the bid is not responsive or if the Bidder is unqualified or of doubtful financial ability or fails to meet any pertinent standards or criteria established by the Board. The Board also reserves the right to waive all informalities in any bid should it be deemed in the best interest of the Road Commission.
to do so. Discrepancies between the multiplication of units of work and the unit prices will be resolved in favor of the unit price. Discrepancies between the indicated sum of any column of figures and the correct sum will be resolved in favor of the correct sum. Discrepancies between words and figure will be resolved in favor of words.

**TITLE VI ASSURANCE**
The Monroe County Road Commission, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC 2000d to 2000d-4) and Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, hereby notifies all bidders that it assures that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, gender, age, or disability in consideration for an award.

**PROHIBITION OF DISCRIMINATION**
In accordance with Act No. 453, Public Acts of 1976, the Contractor and subcontractors hereby 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, religion, national origin, age, sex, height, weight, or marital status. Further, in accordance with Act No. 220, Public Acts of 1976 as amended by Act No. 478, Public Acts of 1980, the Contractor and subcontractors hereby agree not to discriminate against an employee or applicant for employment tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of a disability that is unrelated to the individual’s ability to perform the duties of a particular job or position. A breach of the above covenants shall be regarded as a material breach of this contract.

**CONTRACT EXECUTION**
The Bidder to whom the Contract is awarded shall, within ten (10) calendar days after notice of award, enter into a written contract with the Board and furnish proof of insurance as hereinafter specified. Failure to execute the contract or furnish satisfactory proof of insurance will be considered cause for annulment of award.

**PERFORMANCE AND LIEN BONDS**
The successful Bidder to whom the contract is awarded shall furnish two (2) surety bonds as follows:

- **Performance Bond** - To the Board of County Road Commissioners of the County of Monroe, Michigan for the faithful fulfillment of the terms of the contract in the amount of one-hundred (100) percent of the contract amount.

- **Lien Bond** - To the Board of County Road Commissioners of the County of Monroe, Michigan for the payment of all labor and materials used in the work in the amount of one-hundred (100) percent of the contract amount.

**INCREASED OR DECREASED QUANTITIES**
The Board reserves the right to increase or decrease quantities from those originally estimated and such changes will be paid for at the unit price bid so long as the total contract amount is not changed more than ten (10) percent. Changes in excess of that amount will be individually negotiated.

**PROGRESS SCHEDULE**
In no case shall any work be commenced prior to receipt of formal notice of award by the Board.

The low Bidder for the work covered by this proposal will be required to meet with the Board’s representative to review the Contractor’s proposed work schedule. The schedule for this meeting will be set within one (1) week after the low bidder is determined.

The Board’s representative will arrange the time and place for the meeting.
TIME OF COMPLETION
All contract work shall be completed on or before October 28, 2017.

FAILURE TO COMPLETE ON TIME
Liquidated damages in the amount of $200 per day will be assessed for each calendar day that the work remains incomplete beyond the completion dates.

PAYMENTS TO CONTRACTOR
Payments will be made to the Contractor on a bi-weekly basis. The Board will make a partial payment to the Contractor on the basis of an estimate, prepared by the Engineer, of the work performed on the project during the preceding period less a five (5) percent retainer.

FINAL INSPECTION, ACCEPTANCE AND FINAL PAYMENT
The Engineer will make a final inspection of all work included in the contract and notify the Contractor of defects to be remedied prior to final acceptance. The Contractor is required to provide unconditional waivers of lien from all subcontractors and suppliers before preparing a final estimate. Upon satisfactory completion of the work by the Contractor, a final estimate will be prepared. Payment for all work completed and accepted, less previous payments, will be made within thirty (30) days of final acceptance.

DISPUTES
The County Highway Engineer's written decision on any question arising under the contract between the Board and Contractor shall be final and binding upon both the Board and the Contractor in the absence of fraud, bad faith, or abuse of discretion.

ARBITRATION
All claims, disputes and other matters in question between the Board and the Contractor arising out of, or relating to, the Contract Documents or the breach thereof (except for claims which have been waived by the making or acceptance of final payment) will be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining subject to the limitations of this section. This agreement so to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith will be specifically enforceable under the prevailing laws of any court having jurisdiction.

No demand for arbitration of any claim, dispute or other matter that is required to be referred to Engineer initially for decision will be made until the earlier of (a) the date on which Engineer has rendered a decision or (b) the tenth day after the parties have presented their evidence to Engineer if a written decision has not been rendered by Engineer before that date. No demand for arbitration of any such claim, dispute or other matter will be made later than thirty (30) days after the date on which Engineer has rendered a written decision in respect thereof; and the failure to demand arbitration within said thirty (30) days' period shall result in Engineer's decision being final and binding upon Board and Contractor. If Engineer renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but will not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned. No demand for arbitration of any written decision of Engineer will be made later than ten (10) days after the party making such demand has delivered written notice of intention to appeal.

Notice of the demand for arbitration will be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the thirty (30) day or ten (10) day period specified above as applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

No arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder or in any other manner any other person or entity who is not a party of this contract unless:
a) the inclusion of such other person or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration;

b) such other person or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings, and;

c) the written consent of the other person or entity sought to be included and of Board and Contractor has been obtained for such inclusion, which consent shall make specific reference to this paragraph; but no such consent shall constitute consent to arbitration of any dispute not specifically described in such consent or to arbitration with any party not specifically identified in such consent.

Notwithstanding the above paragraph, if a claim, dispute or other matter in question between Board and Contractor involves the Work of a Subcontractor, either Board or Contractor may join such Subcontractor as a party to the arbitration between Board and Contractor hereunder. Contractor shall include in all subcontracts a specific provision whereby the Subcontractor consents to being joined in arbitration between Board and Contractor involving the Work of such Subcontractor. Nothing in this paragraph nor in the provision of such subcontract consenting to joinder shall create any claim, right or cause of action in favor of Subcontractor and against Board or Board’s Consultants that does not otherwise exist.

The award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal.

ASSIGNMENT CLAUSE
The contract between the Board and the Contractor may not be assigned to a third party without the written consent of the Board.

TAXES
The Contractor shall include, and will be deemed to have included, in its base bid and contract price all applicable Michigan Sales and Use taxes which have been enacted into law as of the date the bid is submitted.

BOARD RESPONSIBILITY
The Board shall not supervise, direct or have control or authority over, nor be responsible for, the Contractor’s means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with laws and regulations applicable to the furnishing or performance of the work unless otherwise specified in the Special Provisions. The Board will not be responsible for the Contractor’s failure to perform or furnish the work in accordance with the Contract Documents.

INDEMNIFICATION, DAMAGE LIABILITY AND INSURANCE

A. Indemnification. The Contractor must hold harmless, indemnify, defend and represent the Board and its officers, agents and employees against any and all claims for bodily injury or property damage, or any other claim arising out of performance of the work on this contract. The Contractor will not be responsible for claims that result from the sole negligence or willful acts of said indemnitee.

B. Workers’ Compensation Insurance. The Contractor must carry the necessary Workers’ Compensation Insurance and submit a certification that it carries Workers’ Compensation to the Board.

C. Bodily Injury and Property Damage. The Contractor must carry adequate insurance, satisfactory to the Board, to afford protection against all claims for damage to public or private property and injuries to persons arising out of performance of the work. Copies of completed certificates must be submitted to the Board.
1. General Liability, Bodily Injury and Property Damage. The Contractor must provide the following minimum limits of property damage and bodily injury liability:

   Bodily Injury and Property Damage Liability:
   - Each Occurrence: $1,000,000
   - Aggregate: $2,000,000

2. Automobile Liability, Bodily Injury and Property Damage. The Contractor must provide the following minimum limits of property damage and bodily injury liability:

   Bodily Injury Liability:
   - Each Person: $500,000
   - Each Occurrence: $1,000,000

   Property Damage Liability:
   - Each Occurrence: $1,000,000

   Combined Single Limit for Bodily Injury and Property Damage Liability:
   - Each Occurrence: $2,000,000

3. Umbrella Policy. The Contractor may meet the requirements of above minimum limits of bodily injury and property damage liability through an umbrella policy.

    D. Additional Insured. The Bodily Injury and Property Damage Policy must include the following endorsements, verbatim:

    “Additional Insured: The Board of County Road Commissioners of the County of Monroe, the Monroe County Road Commission and its officers, agents and employees.”

    “Provide written notice ten (10) days prior to cancellation, expiration, termination or reduction in coverage for nonpayment of the premium and written notice thirty (30) days prior to cancellation, expiration, termination or reduction in coverage for all other reasons.”

    E. Per Project Aggregate. The Bodily Injury and Property Damage Policy must be endorsed with an endorsement that provides the General Aggregate Limit to each designated construction project.

    F. Notice. The Contractor must ensure that all insurance policies and binders include an endorsement by which the insurer agrees to notify the Department in writing at least 30 days before there is a cancellation or material change in coverage. The Contractor must stop operations if any insurance is canceled or reduced, and must not resume operations until new issuance is in force.

    G. Reports. The Contractor or insurance carrier shall report to the Board any claims received, inspections made and the disposition of claims. The Board will withhold final payment release until either the Contractor pays the claim or until final disposition of the claim by the Contractor’s insurance company has been received by the Board.

MAINTENANCE OF TRAFFIC
See the Special Provision for Maintaining Traffic attached to the proposal. All cost associated with furnishing, placing, operating, maintaining, and removing the traffic control as detailed in the Special Provision for Maintaining Traffic shall be considered included in the lump sum pay item Steel Pile Repair and will not be paid for separately.

SPECIFICATIONS
All work not otherwise specified shall be done in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction. Within these specifications all references to the Michigan Department of Transportation shall mean the Board.
MATERIALS
All materials shall be in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction except as modified herein.

SPECIAL PROVISIONS AND NOTICES TO BIDDERS
The following special provisions and notices to bidders are attached to this proposal:
1. Progress Clause
2. Special Provision for Maintaining Traffic
3. Special Provision for Steel Pile Repair
4. Log of Project
5. Notice to Bidders Utility Coordination

ERRATA
Errata to the 2012 Standard Specifications, MDOT 12SS-001A-13

The above referenced document can be found on the Michigan Department of Transportation website at www.michigan.gov/mdot.

UTILITY COORDINATION
For the protection of underground utilities, the contractor shall notify “Miss Dig” at 1-800-482-7171 or 811, a minimum of three working days, excluding weekends or holidays prior to excavating and otherwise fully comply with the provisions of Act 174 of 2013 and as amended. Miss Dig members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be part of the Miss Dig system.

The Contractor shall conduct operations in such a manner as to ensure that those utilities not requiring relocation will not be disturbed.

COMMUNICATIONS
Any questions regarding this bid shall be directed to the person listed below:

Name: Frank Westenkirchner
Phone: 734-240-5142
Email: fwestenkirchner@mcrc-mi.org
TO: Board of County Road Commissioners of Monroe County, Michigan

The undersigned, having full knowledge of the site, proposal, plans and specifications for the TIMBERS ROAD BRIDGE AT STONY CREEK STEEL PILE REPAIR in Exeter Township, Monroe County, Michigan including Bidders’ Addenda ______________, and the conditions of these Contract Documents, hereby agrees to furnish all services, labor, materials, tools, equipment, transportation, and incidentals necessary to perform the entire Work; to complete the contract by the date specified in the Instructions to Bidders and General Provisions, according to the Proposal, Plans and Specifications; and to accept in full, compensation for all work necessary to complete the project at the unit prices named below:

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Item Description</th>
<th>Approx. Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Bid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>7057051</td>
<td>Steel Pile Repair</td>
<td>1 LSUM</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

Total Bid = $ 

Contractor Signature: ____________________________

Printed Name and Title: ____________________________

Quantities are not guaranteed. Final payment will be based on actual quantities.

Bidder agrees that the work will be completed and ready for final payment in accordance with the General Conditions. Work on the TIMBERS ROAD BRIDGE AT STONY CREEK STEEL PILE REPAIR project is to be completed by October 28, 2017 as detailed in the Time of Completion section above.

Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the work on time.

The following documents are attached to and made a condition of this Bid:

Required Bid Security in the form of either:

Certified Check or a Bidder’s Bond in the amount of:

_________________________________________________ Dollars ($ ____________ )
Communications concerning this Bid shall be addressed to the Bidder’s representative.

Name of Representative: ________________________________
Address: __________________________________________
City, State, ZIP: ______________________________________
Telephone Number: __________________________________
Fax Number: _________________________________________
E-Mail Address: _______________________________________

The terms used in this Bid, which are defined in subsection 101.03 of the Michigan Department of Transportation 2012 Standard Specifications of the Construction, have the meanings assigned to them in the Standard Specifications for Construction.

SUBMITTED on: ________________________________, 2017
If Bidder is:

An Individual

By: ____________________________________________ (SEAL)

Individual's Name

Doing Business As: ____________________________________________

Business Address: ____________________________________________

Phone No: ____________________________________________

A Partnership

By: ____________________________________________ (SEAL)

Firm Name

General Partner

Business Address: ____________________________________________

Phone No.: ____________________________________________
A Corporation

By: _________________________________________________________________ (Corporate SEAL)

Corporate Seal

_________________________________________________________________

State of Incorporation

By: _________________________________________________________________

Name of Person Authorized to Sign

_________________________________________________________________

Title

Business Address:  ________________________________________________________________

________________________________________________________________

Phone No.:  ________________________________________________________________

A Joint Venture

By: _______________________________________________________________________________

Name

Business Address:  ________________________________________________________________

________________________________________________________________

Phone No.:  ________________________________________________________________

By: _______________________________________________________________________________

Name

Business Address:  ________________________________________________________________

________________________________________________________________

Phone No.:  ________________________________________________________________

(Each joint venture must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)
TIMBERS ROAD BRIDGE AT STONY CREEK
STEEL PILE REPAIR

PROPOSAL ATTACHMENTS

1. Progress Clause
2. Special Provision for Maintaining Traffic
3. Special Provision for Steel Pile Repair
4. Log of Project
5. Notice to Bidders Utility Coordination
Submit a complete, detailed and signed Progress Schedule (Form 1130) to the Engineer within seven (7) calendar days of confirmation of the low bid by the Monroe County Road Commission. Review and approval of the Progress Schedule by the Engineer is required prior to award of the contract.

The Progress Schedule must include, at a minimum, the controlling work items for the completion of the project and the planned dates (or work days for a work day project) that the work items will be the controlling operations. When specified in the proposal or contract documents, the open to traffic date, the final project completion date, all interim completion dates, and any other controlling dates must be included in the Progress Schedule.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The schedule for this meeting will be determined by the Engineer after submittal of the Progress Schedule. The Engineer will arrange the day, time and place for the preconstruction meeting.

The named subcontractor(s) for Designated and/or Specialty Items, as shown in the proposal, are recommended to be at the preconstruction meeting if such items materially affect the work schedule.

Start work within ten (10) days after receiving the Notice of Award or on a date agreed upon with the Engineer. In no case shall any work be commenced prior to the receipt of a formal notice of award from the Monroe County Road Commission.

All contract work shall be completed on or before **October 28, 2017**.

Failure by the Contractor to meet interim or final completion dates will result in the assessment of liquidated damages in accordance with the Proposal.
a. Description.
This work shall consist of all labor, materials, and equipment required to maintain traffic as specified herein.

b. General.
Maintain traffic in accordance with Sections 104.11 and 812 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, the Michigan Manual of Uniform Traffic Devices 2011 Edition as revised, any typical or supplemental specifications in the proposal as applicable and as herein stated and as directed by the Engineer.

The contractor shall notify the Engineer a minimum of 72 business hours prior to the implementation of lane closures and major traffic shifts.

The Contractor shall be responsible for furnishing, placing, operating, maintaining and removing all temporary traffic control signs and devices to completely close the bridge to all traffic for duration of the work.

Distances between construction warning, regulatory and guide signs shown on the typicals are approximate and may require field adjustment, as directed by the Engineer.

c. Construction Influence Area (CIA).
The Construction Influence Area (CIA) shall consist of the width of the existing right-of-way from the project point of beginning to the point of ending. The CIA shall extend a sufficient distance in each direction beyond the project beginning and ending to warn motorists of construction ahead. In addition, the CIA shall include the rights-of-way of any intersecting streets adjacent of the work zone for a distance of approximately 500 feet from the project road. Within the CIA, the Contractor shall provide, erect and maintain plastic drums and minor traffic devices and take all necessary precautions for the protection of the public in accordance with the MMUTCD, Section 812 of the Standard Specifications for Construction, or as otherwise directed by the Monroe County Road Commission.

d. Traffic Restrictions.
The bridge shall be completely closed to all traffic for the duration of the work. No detour route signing shall be required as part of the traffic control due to the local nature and low volume of traffic.

The Contractor shall provide local traffic reasonable access to their property within the road closure zone.

e. Traffic Control Devices.
Place and maintain temporary traffic control signs, devices, and barricades in accordance with the current Michigan Manual of Traffic Control Devices.
Place “Road Closed to Thru Traffic” signs at the South Stony Creek Road and Stout Road intersections along with two lighted Type III Double Sided Barricades at each intersection.

Place one “Road Closed Ahead” sign 500 feet north of Stout Road. Place two “Road Closed Ahead” signs on South Stony Creek 500 feet from the intersection with Timbers Road.

Place two lighted Type III Barricades, per side, at the south and north ends of the bridge with one “Road Closed” sign at the barricades per side. No overnight equipment or material storage will be permitted in the road right of way outside of these barricades.

All traffic control devices and their usage shall conform to the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), 2011 edition, and as specified herein.

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<thead>
<tr>
<th>Sign</th>
<th>Description</th>
<th>Size (inch)</th>
<th>Size (inch)</th>
<th>Quantity (Each)</th>
<th>Area (sft)</th>
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</thead>
<tbody>
<tr>
<td>R11-4</td>
<td>Road Closed to Thru Traffic</td>
<td>30</td>
<td>60</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>W20-3</td>
<td>Road Closed Ahead</td>
<td>48</td>
<td>48</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>R11-2</td>
<td>Road Closed</td>
<td>30</td>
<td>48</td>
<td>2</td>
<td>20</td>
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<td></td>
<td>Barricade, Type III, High Intensity, Double Sided</td>
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<td>Barricade, Type III, High Intensity, Lighted, Oper</td>
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</table>

**f. Measurement and Payment.**

All cost associated with furnishing, placing, operating, maintaining, and removing all temporary traffic control signs and devices as detailed in the Special Provision for Maintaining Traffic shall be considered included in the lump sum pay item **Steel Pile Repair** and will not be paid for separately.
PERFORATED SQUARE STEEL TUBE OPTION

ANGLE IRON OPTION

BARRICADE RAIL SHEETING OPTIONS

TYPE III BARRICADES

Other Type III Barricades meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE
Other temporary sign supports meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm
PLASTIC DRUM

### Symbols to Be Used on Plans

- **PLASTIC DRUM**
  - Proposed Type III Barricade
  - Existing Type III Barricade

### Notes:

- Plastic drums shall have at least 4 horizontal reflectorized stripes (2 orange and 2 white) of 6" uniform width, alternating in color with the topmost reflectorized stripe being orange. Non-reflectorized spaces between the horizontal reflectorized orange and white stripes shall be orange in color and equal in width.

- 2" perforated square steel tubes may be used to fabricate the horizontal base of the Type III barricade.

- Warning lights shall be placed according to the current standard specifications for construction and all other provisions in the contract when they are used on Type III barricades.

- See Road Standard Plans R-113-SERIES for typical location and spacing of plastic drums for placement of temporary concrete barriers.

- Sandbags shall be used when supplemental weight is required to achieve stability of the barricade. The sandbags shall be placed so they will not cover or obstruct any reflective portion of the traffic control device.

### Special Detail

- 2" perforated square steel tubes may be used to fabricate the horizontal base of the Type III barricade.

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- See Road Standard Plans R-113-SERIES for typical location and spacing of plastic drums for placement of temporary concrete barriers.

- Sandbags shall be used when supplemental weight is required to achieve stability of the barricade. The sandbags shall be placed so they will not cover or obstruct any reflective portion of the traffic control device.
a. **Description.** This work consists of providing all materials, labor, and equipment to clean the existing six (6) steel piles of debris and pack rust, install strengthening plates, install shear developers, excavate creek bed material, place pile jackets, and install grout as shown on the plans and described herein. All work shall be performed in accordance with Section 706, 707 and 715 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications, except as modified herein.

b. **Materials.** The materials shall meet the following requirements:

1. **Steel Plate Repairs and Top Angles:** AASHTO M 270 Grade 36. All members including bent plates and angles shall be uncoated.

2. **Shear Developers:** Use materials in accordance with subsection 906.09 of the Standard Specifications for Construction.

3. **Threaded Rod and Hardware:** All threaded rod and hardware shall be hot dipped galvanized.

4. **Epoxy Grout:** Epoxy for epoxy anchors shall be chosen from the MDOT qualified products list.

5. **Pile Jacket and Grout System:** Provide pile jacket and grout system in accordance with the following manufacturers or an approved equivalent. The diameter of the jacket, internal steel reinforcement, and grout mixture shall be per manufacturer recommendation:
   - Denso – Seashield Marine System – Series 500
   - Joinlox – PileJax
   - QuakeWrap – Pilemedic

**c. Construction.** The Contractor shall submit shop drawings providing details of the steel piling repair plates a minimum of 14 days prior to fabrication for review and approval by the Project Engineer.

Clean piles in accordance with the Pile Jacket and Grout System manufacturer's recommendations. At a minimum, piles shall be cleaned to SSPC-3; power tooled.

Install steel repair plates and top angles in accordance with Section 707 of the Standard Specifications for Construction and as shown on the plans with the exceptions noted in this special provision. Conform welding of steel plates to the current AWS D1.1. Plates shall be inspected in the field after fabrication and prior to placement of pile jacket and grout system.
Portions of the plates will likely be welded under water and will require the proper equipment to perform unless provisions are made to dewater.

Install shear developers in accordance with subsection 707.03.D.8.f of the Standard Specifications for Construction and as shown on the plans with the exceptions noted in this special provision. Conform welding of shear developers to the current AWS D1.1. Studs shall be inspected in the field after installation and prior to placement of pile jacket and grout system. Portions of the studs will likely be welded under water and will require the proper equipment to perform unless provisions are made to dewater.

Install pile jackets and grout system per the manufacturer recommendations. The placement of the jackets and grout system shall be performed after the inspection for the structural steel repairs and shear developer placement. The placement of the jacket and grout system shall be per the manufacturer’s recommendations.

The Contractor shall provide all labor, equipment, and materials for site access to perform all operations. Cutting or trimming, removal, and disposal of any trees and/or brush located within the road right-of-way that the Contractor deems necessary to perform work and access the site. Disassembly of existing guardrail elements and/or post removal that the Contractor deems necessary to perform work or access the site shall be performed under this item of work. This also includes the resetting of rail elements and posts that are temporarily removed after the work is complete. Restoration, seeding, and mulch blankets shall be provided within limits of roadside embankment/slope vegetation that is damaged by the Contractor operations.

d. Measurement and Payment. The completed work, as described, will be measured as a lump sum and paid for at the contract price using the following pay item:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Pile Repair</td>
<td>.........................................................................................................................Lump Sum</td>
</tr>
</tbody>
</table>

**Steel Pile Repair** includes all mobilization, site access work, materials, fabrication, welding, underwater welding, equipment, and labor required to clean the existing six (6) steel piles of debris and pack rust, install strengthening plates, install top angles and epoxy anchor threaded rod, install shear developers, excavate creek bed material, place internal steel reinforcement per pile jacket manufacturer’s recommendation, install pile jackets, install jacket grout, install and maintain any temporary road closure signing, as well as dewatering and/or cofferdam water control operations necessary for the completion of the work per this special provision and detail drawings shall be included in the lump sum pay item **Steel Pile Repair**.
MONROE COUNTY ROAD COMMISSION
IN COOPERATION WITH
EXETER TOWNSHIP
CONSTRUCTION PLANS FOR
TIMBERS ROAD BRIDGE OVER STONY CREEK
STEEL PILING REPAIR

EXETER TOWNSHIP
MONROE COUNTY

LOCATION MAP

PROJECT LOCATION

PREPARED UNDER THE SUPERVISION OF:

MATTHEW T. MIKOLAJSZIK
P.E.
REGISTRATION NO. 56573

COUNTY ROAD COMMISSION APPROVAL
APPROVED BY: FRANK WESTWICKNER, P.E.
DATE: 7/7/17

FILE: MONC005001.DGN
DRAWN BY: T.G.
CHECKED BY: W.W.

MONROE COUNTY ROAD COMMISSION
DESIGN UNIT: M. MIKOLAJSZIK
JN: 490-006-179016
TIMBERS ROAD OVER STONY CREEK
TITLE SHEET 001 1
SECTION A-A

LEN=6'6" LONG (TOP, EACH SIDE)

EPOXY ANCHORED 3/4" GALVANIZED THREADED ROD, WASHER, SPLIT RING LOCK WASHER, AND NUT. (TOP, EACH SIDE)

GROUT SHALL BE PLACED UP TO BOTTOM OF CONCRETE PIER CAP

1/2" STROE (TOP)

6"-6" PITCH (TOP)

SECTION B-B

* STAY-IN-PLACE FILE JACKET DIAMETER, CONSTRUCTION, LAY, AND GROUT SHALL BE PER THE SPECIAL PROVISION FOR STEEL PIPE REPAIR OR AN APPROVED EQUIVALENT.

+++ SHEAR STUD LENGTH DEPENDENT ON APPROVED FILE JACKET DIAMETER.

BENT PLATE SECTION

APPROXIMATE DAMAGE LOCATION

GROUT PLUG LOCATIONS PER MANUFACTURER RECOMMENDATION

LIMITS OF EXCAVATION KEY MEANS OF VACUUM TRENCH OR OTHER APPROVED METHOD

BENT PLATE DETAIL

TYPICAL 12 LOCATIONS

NOTES:

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS, OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HERIN, ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2002 EDITION.

BIDDERS WILL BE FURNISHED WITH SCANNED IMAGES OF PLAN SHEETS OF THE EXISTING STRUCTURE IF REQUESTED.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:

- STRUCTURAL STEEL: PLATES 45SHTO MET5 GRADE 36
  \( F_y = 36,000 \) psi
- EPOXY GROUT (MIN):
  \( f_c = 4,000 \) psi

PORTIONS OF THIS WORK INCLUDES UNDERWATER WELDING AND PRESSURE GROUT OPERATING CONTRACTOR SHALL SUBMIT CONSTRUCTION SEQUENCE, APPLICABLE TRAINING CERTIFICATION, AND PREVIOUS WORK COMPLETED IN ORDER TO PERFORM THE WORK.

SHOP DRAWINGS FOR STEEL PLATES AND JACKET SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL 7 DAYS PRIOR TO FABRICATION.
The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in subsection 104.08 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in subsection 107.12 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon subsection 108.09 of the Michigan Department of Transportation 2012 Standard Specifications for Construction.

For the protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor shall contact MISS DIG by calling (800) 482-7171 or by dialing 8-1-1 a minimum of three full working days, excluding Saturdays, Sunday and holidays, prior to beginning an excavation in an area 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 are not a part of the MISS DIG System.

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

**ELECTRIC**
Detroit Edison
8001 Haggerty Rd.
Belleville, MI  48111
Robert Warnke
734-397-4192
warnker@dteenergy.com

The owners of existing service facilities that are within the grading limits will protect or move them to locations designated by the Engineer or will remove them entirely from the highway Right-of-Way. 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.