



MONROE COUNTY  
**R O A D**  
COMMISSION

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840 S. Telegraph Road • Monroe, Michigan 48161 • Phone: (734) 240-5102 • Fax: (734) 240-5101

**PROPOSAL**

**FOR**

**SOUTH STONY CREEK ROAD TREE REMOVALS**

**BID OPENING:**

Thursday, April 26, 2018 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

**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 **Thursday, April 26, 2018** at their office located at 840 South Telegraph Road, Monroe, Michigan, 48161 for the following:

- 2018 Full Depth Reclamation Program
- Hurd Road & Vivian Road Drainage Improvements
- South Stony Creek Road Tree Removals

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](http://www.mcrc-mi.org/bids.html).

BOARD OF COUNTY ROAD COMMISSIONERS  
OF THE COUNTY OF MONROE, MICHIGAN

**MONROE COUNTY ROAD COMMISSION  
PROPOSAL  
SOUTH STONY CREEK ROAD TREE REMOVALS**

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

FOR: Tree removals, stump removals, restoration, tree trimming and maintaining traffic on South Stony Creek Road from Corkins Road to US-24 (Telegraph Road) in Ash and Frenchtown Townships

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 Director of Operations or the individual assigned by the Director of Operations 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 "**Bid for South Stony Creek Road Tree Removals.**"

BIDDER'S SURETY

A bid bond will not be required for this contract.

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 **Thursday, April 26, 2018** 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.

#### 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 twenty-five (25) percent. Changes in excess of that amount will be individually negotiated.

#### SAFETY REQUIREMENTS

The Contractor is responsible for protecting the life and health of all personnel on the project; the safety and health of the public; and property during the construction of the project in accordance with subsection 104.07.B of the Michigan Department of Transportation 2012 Standard Specifications for Construction. Prior to the commencement of work, the Contractor must submit a written "Construction Safety Program" that outlines the plan and procedures for preventing and mitigating accidents on the project and meeting all health and safety requirements of the contract.

#### 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 tree removals and trimming shall be completed on or before **July 20, 2018**.

All contract work shall be completed on or before **October 15, 2018**.

#### FAILURE TO COMPLETE ON TIME

Liquidated damages in the amount of **\$400** per day will be assessed for each calendar day that the work remains incomplete beyond the completion dates.

PAYMENTS TO CONTRACTOR

The Contractor shall invoice the Monroe County Road Commission for their work on the contract. Each invoice shall contain, at a minimum, the following information: road name and limits, date(s) the work was performed, pay items, quantities of work completed, and the contract unit prices

FINAL INSPECTION, ACCEPTANCE AND FINAL PAYMENT

The Engineer or their designated representative will make an inspection of all work included in the contract and notify the Contractor of defects to be remedied prior to acceptance and payment.

DISPUTES

The 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.

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

Maintain traffic in accordance with sections 104.07, 104.11, 812 and 922 of the Michigan Department of Transportation 2012 Standard Specifications for Construction and the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

The Contractor shall be responsible for the protection of vehicular and pedestrian traffic, work in progress and construction workers in the work zone through the implementation of procedures as described in this proposal, the MMUTCD, the Standard Specifications for Construction, and other applicable state and federal requirements.

The Contractor shall coordinate this work with any other contractors or maintenance agencies performing work within the work zone or adjoining areas to avoid conflicts in the maintenance of traffic, construction signing and the orderly progress of contract work.

Two-way traffic, with a minimum of one lane of traffic, shall be maintained at all times utilizing lane closures and flag control.

Advance warning signs for work outside the shoulder shall consist of, at a minimum, Road Work Ahead (W20-1) signs in accordance with the attached Typical MD-01. Tree Work Ahead signs may be substituted for the Road Work Ahead signs.

Advance warning signs for shoulder closures shall consist of, at a minimum, Road Work Ahead (W20-1) signs and a Right Shoulder Closed Ahead (W21-5b) sign in accordance with the attached Typical MD-11a. Temporary speed limit signs will not be required. Tree Work Ahead signs may be substituted for the Road Work Ahead signs.

Advance warning signs for a lane closure shall consist of Road Work Ahead (W20-1) signs, One Lane Road Ahead (W20-4) signs, Traffic Regulator Symbol (W20-7a) signs and Be Prepared to Stop (W3-4) signs in accordance with the attached Typical MD-21a. Temporary speed limit signs will not be required.

Channelizing devices for shoulder and lane closures shall be 28 inch traffic cones.

The Contractor shall notify the Engineer a minimum of 48 hours prior to the implementation of any lane closures.

All work shall be conducted during normal daytime hours unless otherwise approved by the Engineer. Normal daytime hours are considered to be Monday through Saturday from 7 a.m. to 7 p.m.

No work shall be performed during the Memorial Day, Independence Day or Labor Day holiday weekends as defined by the Engineer.

All labor, equipment, temporary signs and channelizing devices required for maintaining traffic is included in the unit price for Maintaining Traffic.

#### 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.

#### ITEMS OF WORK

Following is a description of the items of work on this contract:

**Tree, Rem, \_\_ inch to \_\_ inch (Each)** - The Tree, Rem, \_\_ inch to \_\_ inch items of work shall be in accordance with section 202 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. The tree removal items of work will be used to remove and dispose of trees as noted in the Log of Work. Removal of the stump, where required, will be paid for separately.

Stumps that are designated to be left in place shall be cut off to no greater than 6 inches above the existing ground surface and chemically treated with growth preventive material the same calendar day of the cut to prevent regrowth. The chemicals used will at the Contractor's option provided the manufacturer recommends the product for the above use. Safety Data Sheets shall be provided to the crew and the Engineer prior to use.

All burnable wood, excluding brush, from the tree removals shall be offered to the property owner. If the property owner wants the burnable wood, cut the wood in lengths of eight feet or less and stack outside of the right-of-way. If the property owner does not want the burnable wood, the Contractor shall dispose of the material.

**Stump, Rem, \_\_ inch to \_\_ inch (Each)** - The Stump, Rem, \_\_ inch to \_\_ inch items of work shall be in accordance with section 202 of the Michigan Department of Transportation 2012 Standard Specifications for Construction and the following. Remove stumps by chipping to a depth of at least 12 inches below the existing ground surface and restore the area. Backfill removal areas with topsoil, grass seed, fertilizer and mulch.



**Tree Trimming (Each)** – The Tree Trimming item of work consists of removing and disposing of one or more limbs from a tree that is scheduled to remain in place. The tree trimming item of work will be used to remove and dispose of tree limbs as noted in the Log of Work.

All burnable wood, excluding brush, from tree trimming shall be offered to the property owner. If the property owner wants the burnable wood, cut the wood in lengths of eight feet or less and stack outside of the right-of-way. If the property owner does not want the burnable wood, the Contractor shall dispose of the material.

**Maintaining Traffic (LSUM)** – The Maintaining Traffic item of work will be used for providing traffic regulators and for providing, maintaining, relocating and removing temporary traffic control devices as needed to maintain two-way traffic on South Stony Creek Road.

#### MEASUREMENT AND PAYMENT

The Engineer will measure and pay for **Tree, Rem, \_\_ inch to \_\_ inch (Each)** in accordance with the section 202 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. The Engineer will determine the size of trees by the diameter of the trunk, measured to the nearest full inch, at a point 4 ½ feet above the ground line at the base of the tree. The Engineer will measure trees with major limbs, lower than 4 ½ feet from the ground, at the smallest diameter below the limbs. Where more than one trunk as grown from a common stump, the Engineer will measure each trunk as a separate tree.

The Engineer will measure and pay for **Stump, Rem, \_\_ inch to \_\_ inch (Each)** in accordance with the section 202 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. The unit price for the stump removal items includes the cost of providing and placing topsoil, grass seed, fertilizer and mulch.

The Engineer will measure and pay for **Tree Trimming (Each)** by each tree trimmed regardless of the number of limbs.

The unit price for **Maintaining Traffic** includes the cost of the following:

1. Providing, maintaining, relocating, and removing temporary signs;
2. Providing traffic regulators; and
3. Providing, installing, maintaining, relocating, and removing traffic cones.

#### COMMUNICATIONS

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

Name: Ross Brown  
Phone: 734-240-5139  
Email: [RBrown@mcrc-mi.org](mailto:RBrown@mcrc-mi.org)

**MONROE COUNTY ROAD COMMISSION  
UNIT PRICE CONTRACT  
SOUTH STONY CREEK ROAD TREE REMOVALS**

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

The undersigned, having full knowledge of the proposal and specifications for the **South Stony Creek Road Tree Removals** including Bidders' Addenda \_\_\_\_\_ and the conditions of these Contract Documents, hereby agrees to furnish all labor, equipment, materials, transportation and incidentals necessary to perform the Work as specified in the Instructions to Bidders and General Provisions at the unit price named below:

Item Description	Estimated Quantity	Unit	Unit Price	Bid Amount
Tree, Rem, 19 inch to 36 inch	8	Ea	\$	\$
Tree, Rem, 37 inch or Larger	2	Ea	\$	\$
Tree, Rem, 6 inch to 18 inch	140	Ea	\$	\$
Stump, Rem, 19 inch to 36 inch	5	Ea	\$	\$
Stump, Rem, 37 inch or Larger	1	Ea	\$	\$
Stump, Rem, 6 inch to 18 inch	34	Ea	\$	\$
Tree Trimming	27	Ea	\$	\$
Maintaining Traffic	1	LSUM	\$	\$
<b>Total Bid =</b>				<b>\$</b>

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 **South Stony Creek Road Tree Removal** contract is to be completed by **July 20, 2018** and **October 15, 2018** 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.

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: \_\_\_\_\_, 2018

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.)

# **SOUTH STONY CREEK ROAD TREE REMOVALS**

## **PROPOSAL ATTACHMENTS**

1. Log of Work
2. Maintaining Traffic Typicals

South Stony Creek Road Tree Removals

Log of Work



Address	Side	Tree, Rem, 19 inch to 36 inch (Each)	Tree, Rem, 37 inch or Larger (Each)	Tree, Rem, 6 inch to 18 inch (Each)	Stump, Rem, 19 inch to 36 inch (Each)	Stump, Rem, 37 inch or Larger (Each)	Stump, Rem, 6 inch to 18 inch (Each)	Tree Trimming (Each)	Description of Trimming	Overhead Utilities?
7211	W							1	4 limbs	
N of 7211	W	1		33						
N of 7211	E	1	1	6						Telecom
Across from 7437	E			5						Telecom
7437	W							3	12 limbs	
7545	W							2	8 limbs	
7546	E							1	5 limbs	
Across from 7549	E	1								
Across from 7596	W			16						
7596	E	1	1		1	1				Telecom
E of Michelle St	W			3						Telecom
SW of Steiner Rd								1	4 limbs	Electric & Telecom
NW of Steiner Rd	W	1			1					Electric & Telecom
NW of Steiner Rd	W							3	Remove pine limbs to 10'	Telecom
Across from 8011	E							1	5 limbs	
Across from 8011	E			10			10			
8057	W							1	4 limbs	
8065	W							5	14 limbs	Electric & Telecom
8135	W							1	4 limbs	Electric & Telecom
8171	W			6			6			Telecom
Across from 8208	W			1			1			
8214	E							3	12 limbs	
N of 8333	W			8						Electric & Telecom
8400	E			3						
Across from 8400	W			2						Telecom
8484	E							2	14 limbs	
8485	W							1	5 limbs	Electric & Telecom
8520	E	1			1					
N of 8630	E			12						
N of 8615	W			4						Telecom
Across from 8916	W			5						Telecom
8916	E	2			2					
8979	W							2	14 limbs	Telecom
9025	W			8			8			
N of 9025	W			9						
SW of Corkins Rd	W			9			9			
<b>Totals</b>		<b>8</b>	<b>2</b>	<b>140</b>	<b>5</b>	<b>1</b>	<b>34</b>	<b>27</b>		

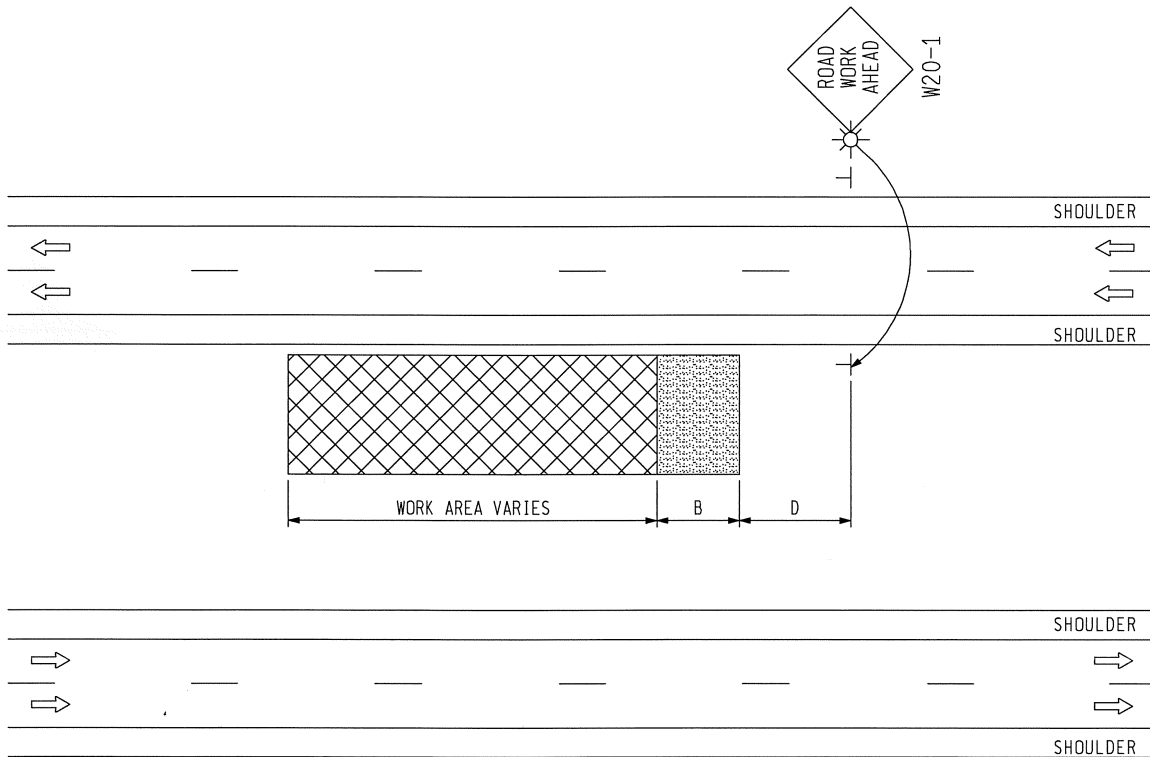
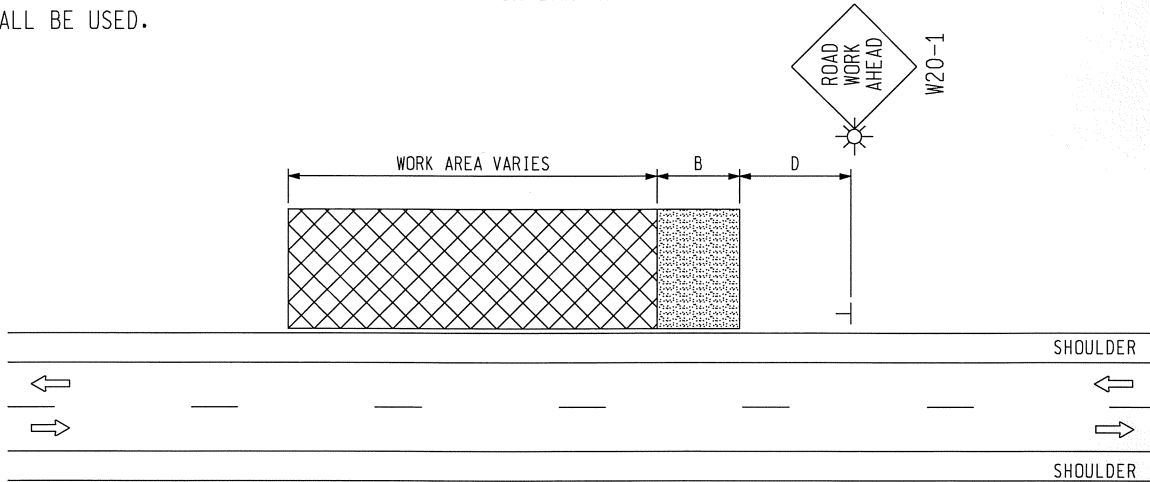
**NOTES**

NO SIGNS ARE REQUIRED IF DURATION IS SHORT-DURATION OR MOBILE.

IF THE OPERATION HAS A VEHICLE(S) PARKED ON THE SHOULDER, OR VEHICLES ACCESSING THE WORK SITE VIA THE HIGHWAY OR CROSSING THE HIGHWAY TO PERFORM OPERATIONS, A "ROAD WORK AHEAD" SIGN OR AN ARROW BOARD IN BAR MODE SHALL BE USED.

**KEY**

-  TYPE A WARNING FLASHER (REQUIRED ON PLYWOOD SIGNS)
-  TRAFFIC FLOW



NOT TO SCALE



**WORK OUTSIDE SHOULDER**

DURATION: APPLIES TO ALL DURATIONS

01/01/07  
REV. DATE:

MD - 01

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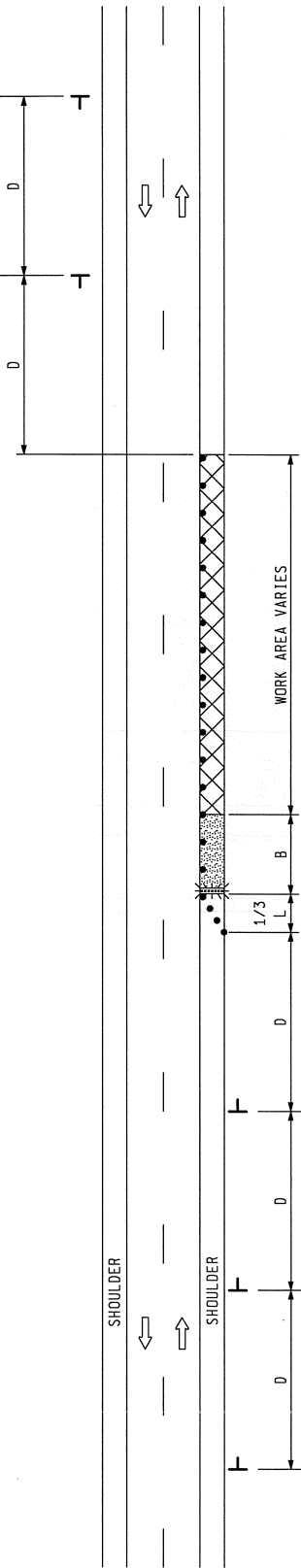




W20-1

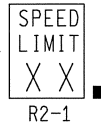


R2-1



**KEY**

- • • CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ☀ TYPE A WARNING FLASHER (REQUIRED ON PLYWOOD SIGNS)
- ⇨ TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT



R2-1

PLACE THROUGHOUT WORK AREA AS WARRANTED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.

NOT TO SCALE



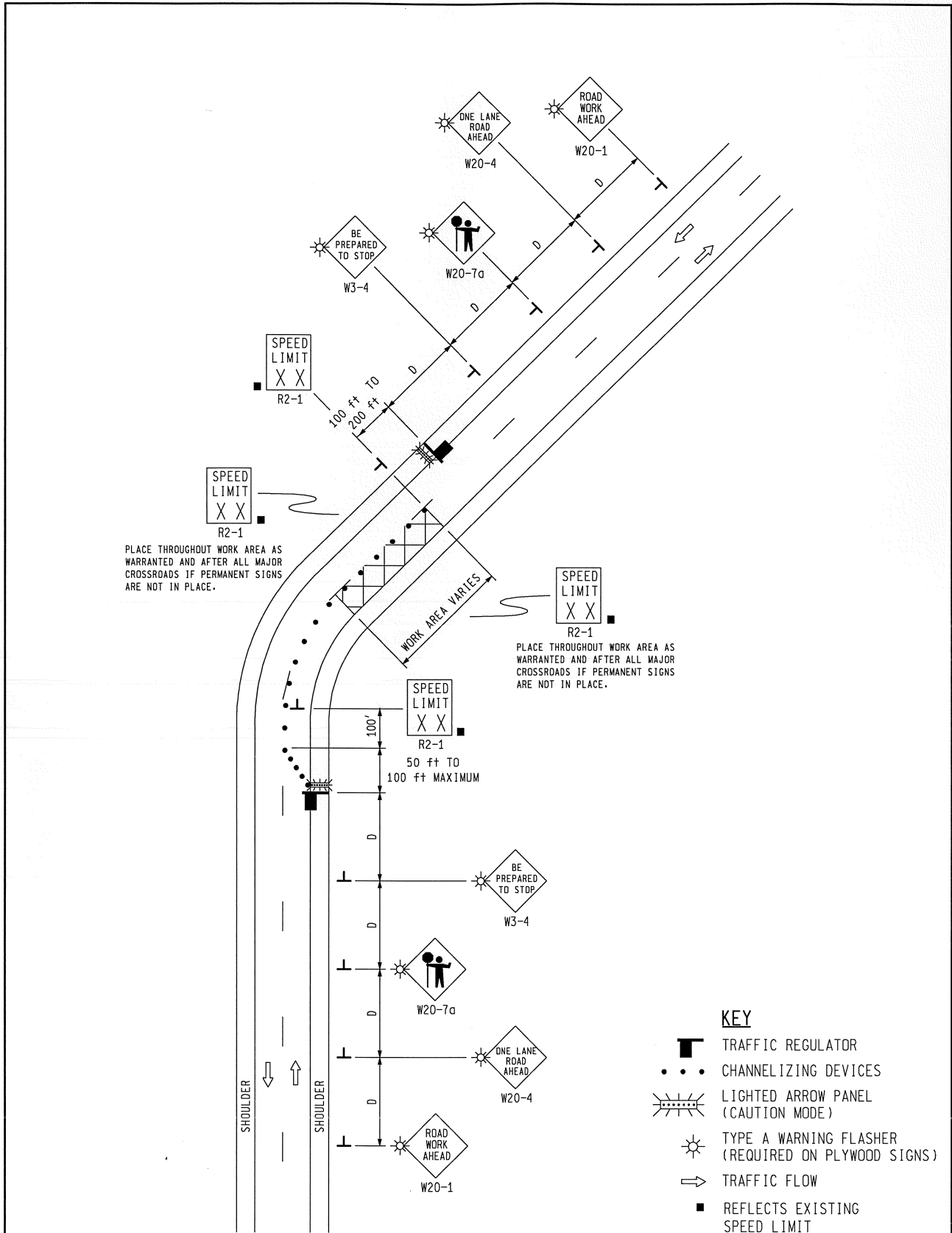
SHOULDER CLOSURE ON A  
TWO-LANE, TWO-WAY ROADWAY  
NO SPEED REDUCTION

DURATION: SHORT-TERM STATIONARY

01/01/07  
REV. DATE:

MD - 11a

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NOT TO SCALE



LANE CLOSURE FOR A  
TWO-LANE TWO-WAY ROADWAY  
UTILIZING TRAFFIC REGULATORS,  
NO SPEED REDUCTION

DURATION: SHORT-TERM STATIONARY

01/01/07  
REV. DATE:

MD - 21a

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