CITY OF SAULT STE. MARIE

REQUEST FOR PROPOSAL
Bridge Preventative Maintenance
B-06-24

The City of Sault Ste. Marie will receive sealed bids in the office of the City Clerk, City Hall - 225 East Portage Ave., Sault Ste. Marie, Michigan 49783, for Bridge Preventative Maintenance.

Sealed bids will be publicly opened on **Friday, March 22, 2024, at 2pm (local time)** in the City Clerk's office.

To order bid documents or for questions regarding the bidding process please contact the City Clerk's Office at (906) 632-5715 or visit www.saultcity.com.

The City reserves the right to reject any and all bids and to waive irregularities in bids and to accept any bids which in the opinion of the City Commission may be most advantageous to the City of Sault Ste. Marie and in accordance with the City's "Award Process" and other bidding documents.

ROBIN R. TROYER MMC, DEPUTY CITY MANAGER



PROPOSAL

CITY OF SAULT STE. MARIE BRIDGE PREVENTATIVE MAINTENANCE B-06-24

Friday, March 22, 2024 2:00 p.m.

City of Sault Ste. Marie Engineering Department 225 E. Portage Avenue Sault Ste. Marie, MI 49783 (906) 632-5730

CITY OF SAULT STE. MARIE BRIDGE PREVENTATIVE MAINTENANCE

B-06-24

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CITY OF SAULT STE. MARIE MICHIGAN

NOTICE TO BIDDERS

Sealed Bids marked "BRIDGE PREVENTATIVE MAINTENANCE- B-06-24" will be accepted at the office of the Purchasing Agent, City Hall, 225 E. Portage Avenue, Sault Ste. Marie, Michigan, 49783 until 2:00 P.M. on Friday, March 22, 2024, at which time and place all Bids will be opened and publicly read. The Bid will be for furnishing the following:

BRIDGE PREVENTATIVE MAINTENANCE for six (6) bridges; Fort St, Spruce St, W. Portage Ave, Riverside Dr, Bingham Ave, and Johnstone St. Work on each of the bridges includes routine repairs to extend the life of these structures including deck cleaning, joint work and other miscellaneous repairs.

Specifications, bid forms, and additional information may be obtained at the office of the City Clerk at the above address on (March 8, 2024) and on the City's website. All prospective bidders must register their bid document with the City Clerk in order to receive Addendums if they are issued.

All Bid Proposals shall be submitted in sealed envelopes marked as to the Bidder and the contents therein.

The CITY reserves the right to reject any or all Bids, waive irregularities in any Bid and make the award in the best interest of the City.

City Clerk/Purchasing Agent Robin R. Troyer, MMC

NB-1

INFORMATION FOR BIDDERS

1. STANDARDS OF CONSTRUCTION

The undersigned understands that this project will be awarded and constructed in accordance with the Michigan Department of Transportation 2020 Standard Specifications for Construction and proposes to furnish all necessary machinery, tools, apparatus and other means of construction, do all work, furnish all materials except as otherwise specified and, for each unit price, lump sum, or one each named in the itemized bid, to complete the work in strict accordance with any other special provisions and supplemental specifications as may be a part of the proposal for this project.

The undersigned further proposes to do such extra work as may be authorized by the City of Sault Ste. Marie, prices for which are not included in the itemized bid. Compensation shall be made on the basis agreed upon before such extra work is begun.

Then undersigned hereby certifies that if it is not pre-qualified in all classifications required by the advertisement for this project, it has taken such preparatory steps as may be necessary and will within the time specified in section 102.14 of the 2020 MDOT Standard Specifications for Construction designate subcontractor(s) that are fully prequalified in the classification(s) to perform the work.

2. PROPOSALS

Each Proposal shall be made on a form prepared therefore by the CITY and included as one of the Contract Documents, and shall be submitted, in a sealed envelope bound together with the other Contract Documents that are specified to be returned with the Bid Proposal, except the Plans, bearing the title of the Project and the name of the Bidder. The Plans may be returned in a separate package but are not required to be returned.

The Bid Proposal shall be legibly prepared in ink or typewritten. All Unit Price or Lump Sum entries made on the Schedule of Items page in the Bid Proposal by the Bidder in the 'Unit Price" column and the "Bid Amount" column shall be handwritten in ink or typed in place.

Where a LUMP SUM (LS) is called for, it shall be entered only in the "Bid Amount" column.

The unit prices, as stated, will govern in determining the correct total of the Bid Proposal. In case of a difference between the stipulated amounts in the Proposal written in words and the stipulated amount written in figures, the stipulated amounts in written words shall govern.

If a unit price or a lump sum already entered by the Bidder on the Bid Proposal is to be altered, it shall be crossed out in ink. The new unit price or lump sum shall be entered above or below it and initialed in ink by the Bidder on the line of the change each time the unit price or lump sum is altered.

The Bid Proposal shall be legally signed and the complete address of the Bidder given where requested.

Proposals shall be delivered by the time and to the place stipulated in the Advertisement. It is the sole responsibility of any Bidder to see that his Proposal is received in proper time. Any Proposal received after the scheduled time for opening of Proposals shall be returned to the Bidder unopened.

Proposals will be opened and publicly read aloud at the time and place set forth in the Advertisement.

Any Bidder may withdraw his Proposal, either personally or by telegraphic or written request, at any time prior to the scheduled time for opening of Proposals.

Proposals shall not contain any recapitulations of the work to be done. Alternate proposals will not be considered unless expressly requested. Oral proposals or modifications will not be considered.

Any financial or propriety information submitted in response to this Bid Proposal will become a public record subject to disclosure under the Freedom of Information Act. THE INFORMATION WILL NOT BE TREATED AS CONFIDENTIAL.

3. EXAMINATION OF DOCUMENTS AND VISIT TO SITE

Before submitting a Proposal, Bidders shall carefully examine the Plans, read the elements of the Contract Documents, shall visit the site of the work, and shall fully inform themselves as to all existing conditions to be encountered, the nature of the ground, the difficulties and limitations involved in completing the Project and all other factors affecting the work proposed on this Project.

It is the intent of the Contract Documents to provide that the Project to be constructed under this Proposal shall be complete and ready for use, in every respect. Any minor items not specifically called for in the Plans or Specifications, but which are clearly necessary, are to be included, at no increase in the Contract Price.

The Proposal shall include a sum to cover the cost of all items of work to be performed such that the Project to be constructed under this Proposal shall be complete and ready for use in every respect.

The Bidder to whom this Project is awarded will not be entitled to any additional compensation or extension of time by reason of his failure to fully acquaint himself with the conditions at the site or by his failure to fully examine the Contract Documents.

4. SUBCONTRACTS; MATERIAL AND EQUIPMENT QUOTATIONS

The Bidder to whom an award is made will not be entitled to additional compensation or extension of time by reason of his failure to fully understand all sub-proposals or quotations.

The Bidder is responsible for all coordination between Subcontractors and suppliers during the bidding and construction so that a complete Project is furnished for the Contract Price and within the Contract Time. The completed Project includes the furnishing of all equipment, accessories and appurtenances necessary for the proper operation and maintenance of the Project.

5. AWARD OR REJECTION

The Contract will be awarded to the lowest and/or best qualified and responsible Bidder complying with these instructions and with the Advertisement. The CITY reserves the right to reject any or all Proposals or to waive any irregularities or technicality in any Proposal in the best interest of the CITY.

6. INTERPRETATION OF DOCUMENTS

Interpretations of the meaning of the Plans, Specifications or other elements of the Contract Documents will not be valid if made orally to any Bidder. Oral interpretations, if given, shall be at the Bidder's risk and responsibility.

If any person contemplating submitting a Proposal is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he shall request a written interpretation or corrections thereof, from the CITY.

Every request for such interpretation must be in writing, and to receive consideration, must be delivered to the CITY at least five (5) days prior to the date fixed for the opening of Proposals.

Any and all such interpretations and any other supplemental instructions will be in the form of written addenda to the Contract Documents which, if issued, will be mailed by certified mail with return receipt requested to all prospective Bidders at the addresses furnished for such purpose, not later than three days prior to the date fixed for the opening of Proposals. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligations under his Proposal as submitted.

The CITY will not be responsible for any other explanations or interpretations of the Contract Documents.

Any addenda issued during the time of bidding or forming a part of the Contract Documents shall be included in the Proposal and shall be made a part of the Contract Documents. Receipt of each Addendum shall be acknowledged in the Proposal.

7. SURVEY INFORMATION

At the start of work the Contractor will be provided CAD files to be used for layout work. The used files will require a waiver form to be submitted to City Engineering.

8. TIME

Time is of the essence in the performance of this Contract. The work to be done shall be started upon receipt of the Notice to Proceed and shall be prosecuted expeditiously for completion at the earliest possible date prior to the completion date or dates so specified in the contract documents.

9. PROPOSAL GUARANTY

Each Proposal shall be accompanied by a cashier's check, certified check, money order or a bid bond by a recognized surety company, in an amount of five percent (5%) of the total amount of the Proposal, payable to the CITY. In the event a Bid Bond is used, it must be on the form prescribed by the City of Sault Ste. Marie. The prescribed "Bid or Proposal Bond" form may be obtained by calling (906) 632-5730. The Proposal guaranty may be forfeited to the CITY in case of failure on the part of the successful Bidder to enter into the attached form of Agreement to do the work covered by the Proposal at the price and within the time stated therein.

In the event a Certified or Cashier's Check is used for the Bid Bond amount and dated more than 10 days prior to the Bid Opening (Letting) date, the Bid Proposal may be held unresponsive and result in rejection of the Bid Proposal.

10. QUALIFICATIONS OF BIDDERS

It is the intention of the CITY to award this Contract to the Bidder most fully capable, both financially and as regards to experience, to perform and complete all work in a satisfactory manner. Evidence of such competency must be furnished, if desired, including a listing of similar projects which the Bidder has satisfactorily undertaken and completed. This project also requires bidders to be MDOT pre-qualified in the specified category of work as noted in the Advertisement.

11. REQUIREMENT FOR SIGNING PROPOSALS

Proposals which are not signed by the individual making them shall have attached thereto a power of attorney evidencing authority to sign the Proposal in the name of the person for whom it is signed.

Proposals which are signed by a partnership shall be signed by all of the partners or by an attorney-in-fact. If signed by an attorney-in-fact, there shall be attached to the Proposal a power of attorney evidencing authority to sign the Proposal, executed by the partners.

Proposals which are signed for a corporation shall have the correct corporate name thereof and the signatures of the president or other authorized officers of the corporation manually written below the corporate name following the word "By". If such a Proposal is manually signed by an officer other than the president of the corporation, a certified copy of a resolution of the Board of Directors evidencing the authority of such an official to sign the Proposal shall be attached to it. Such a Proposal shall also bear the attested signature of the secretary of the corporation and the impression of the corporate seal.

All Bidders shall complete the enclosed form entitled "Legal Status of Bidder". (See Pg-18)

12. EXECUTION OF AGREEMENT

The Bidder to whom an award is made will be required to enter into a written Agreement in the form hereto annexed, within twenty (20) days, Sundays and legal holidays excepted, after being notified of the acceptance of his Proposal and receipt by him of copies of the Contract Documents to be executed.

In case of failure to comply with this requirement, he shall be considered to have abandoned all rights and interest in the award, his Proposal guaranty may be declared forfeited to the CITY and the Contract may be awarded to another.

13. <u>INSURANCE AND BONDS</u>

The successful Bidder will be required to carry insurance in the amounts and kinds specified in Section I 1-2 of the Bid Documents. Such insurance must be with companies and in a form satisfactory to the CITY, and certificates of such insurance must be attached to each copy of the executed Contract Documents.

The successful Bidder will be required to furnish for each set of the executed Contract Documents and conformed copies thereof, an original conformed Performance Bond and Labor and Material (Payment) Bond on the form attached hereto with a surety acceptable to the CITY, as follows:

a. Performance Bond, Labor and Material (Payment) Bond each in the amount of One Hundred percent (100%) of the Contract Price to insure the completion of the entire Project according to the Contract Documents and to secure Payment of all labor, materials and Subcontractors according to the statutes of the State at that time in effect.

14. PERMITS AND LOCAL CODES

The successful Bidder shall obtain, at his expense, all required local and state construction permits and shall comply with all local and state building, electrical and plumbing codes and inspection requirements as applicable to this project.

15. NONDISCRIMINATION

Contracts for work under this Proposal will obligate the contractors and subcontractors not to discriminate in employment practices.

Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the contract.

Successful Bidders must, if requested, submit a list of all subcontractors who will perform work on the project and written signed statements from authorized agents of the labor pools with which they will or may deal for employees on the work together with supporting information to the effect that said labor pools practices and policies are in conformity with Executive Order No. 11246, as amended, and that said labor pools will affirmatively cooperate in or offer no hindrance to the recruitment, employment, and equal treatment of employees seeking employment and performing work under the contract or, a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish same prior to the award of the contract.

16. <u>HEALTH AND SAFETY</u>

The successful Bidder shall comply with the Health and Safety Regulations, Chapter XVII of Title 29 CFR, Part 1926, as promulgated by the Department of Labor, and/or applicable state and local Safety and Health Regulations. All questions regarding compliance and enforcement, as well as requests for the Regulations, should be directed to the Department of Labor and/or local agencies.

17. EXISTING INFORMATION

Any notations shown on the plans are for general information purposes only and are not intended to relieve the Contractor of his responsibility of investigating all local conditions affecting the work. Such locations of public utilities as are shown on the plans are taken from sources believed to be reliable. The CITY will not be responsible for any omissions of, or variations from, the indicated location of existing utilities which may be encountered in the work.

No plea of ignorance of conditions which exist or which may hereafter exist, or of any difficulties which may be encountered will be accepted as the basis for any failure or omission on the part of the Contractor to fulfill all of the requirements of this Contract, nor will such failure or omission be accepted as the basis for any claims of any nature for extra compensation or extension of time. The submission of a bid shall be considered as prima facia evidence of compliance with this section.

18. <u>EMPLOYMENT OF LOCAL LABOR</u>

In accordance with the goal of the City to increase employment opportunities wherever possible within our community, Bidders should be aware that one factor in considering bid award shall be the amount of local (Chippewa County) labor to be hired by the contractor and subcontractor. Each bidder is required to estimate the total man hours to be expended on the "on-site" construction of the project, and the percentage of those man hours which will involve local labor. Penalties for non-compliance will be agreed to prior to bid award.

The payrolls maintained by the CONTRACTOR shall include address, and shall be furnished to the City of Sault Ste. Marie upon request in order to assure compliance.

Bidders estimate as to total man hours to be expended in "on-site"

1 N/A 0/
Labor <u>N/A</u> %

(INFBID-C 8/2020)

CITY OF SAULT STE. MARIE

BRIDGE PREVENTATIVE MAINTENANCE <u>B-06-24</u>

Project Summary

BRIDGE PREVENTATIVE MAINTENANCE for six (6) bridges; Fort St, Spruce St, W. Portage Ave, Riverside Dr, Bingham Ave, and Johnstone St. Work on each of the bridges includes routine repairs to extend the life of these structures including deck cleaning, joint work and other miscellaneous repairs.

MISS DIG (800-482-7171) shall be notified prior to beginning excavation at each location.

Proper traffic control procedures in accordance with the current MMUTCD shall be strictly adhered to. In particular, traffic regulators (flaggers) shall be used in applicable situations.

The City of Sault Ste. Marie Engineering Department will provide construction observation of the project during construction.

BID FORM FOR BRIDGE PREVENTATIVE MAINTENANCE BID NUMBER B-06-24

FOR CITY OF SAULT STE. MARIE, MICHIGAN

To the City of Sault Ste. Marie (herein referred to as CITY):

The undersigned as Bidder hereby declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that he/she has read and examined the Advertisement, Information for Bidders, Agreement, Forms for Bonds (where applicable), Specifications and plans, as prepared by the CITY, and understands all of the same; that he/she or his/her representative has informed himself/herself fully with regard to the conditions to be met in the execution of the Contract, and the undersigned proposes to furnish all labor, materials, tools, power, transportation and construction equipment necessary for completing this project as herein specified for the CITY and perform related work in full accordance with aforesaid Contract Documents, including any and all Addenda officially issued; the receipt of which is hereby acknowledged:

Addendum No.	Date	Signature

Bid Price: The Bidder agrees to complete the Work required for this construction project in accordance with the Contract Documents for the following unit prices and or lump sums as indicated starting on page BF-3.

NAME, ADDRESS, LEGAL STATUS, AND SIGNATURE OF BIDDER

This Bi	d is	s su	bmitted in the name of:
(Print)			
directio	ns	or	ned hereby designates below his/her business address to which all notices, other communications may be served or mailed:
State			Zip Code
The un	deı	sig	ned hereby declares that he/she has the legal status checked below:
	[]	INDIVIDUAL
	[]	INDIVIDUAL DOING BUSINESS UNDER AN ASSUMED NAME
	[]	CO-PARTNERSHIP The Assumed Name of the Co-Partnership is registered in The County of, Michigan CORPORATION INCORPORATED UNDER THE LAWS OF THE STATE OF, The
			Corporation is,
	[]	LICENSED TO DO BUSINESS IN MICHIGAN
	[]	NOT NOW LICENSED TO DO BUSINESS IN MICHIGAN
			itles and home addresses of all persons who are officers or Partners in the are as follows:
I	NA	ME	AND TITLE HOME ADDRESS

BID FORM

CITY OF SAULT STE. MARIE, MICHIGAN

B-06-24

Project Title: BRIDGE PREVENTATIVE MAINTENANCE Reconstruction

Location: Various Locations



ITEM	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	COST (\$)	TOTAL (\$)
1	Bridge Preventative Maintenance	1.000	LSUM		
				TOTAL (\$)	

<u>DESCRIPTION OF WORK:</u> BRIDGE PREVENTATIVE MAINTENANCE for six (6) bridges; Fort St, Spruce St, W. Portage Ave, Riverside Dr, Bingham Ave, and Johnstone St. Work on each of the bridges includes routine repairs to extend the life of these structures including deck cleaning, joint work and other miscellaneous repairs.

The BIDDER agrees to complete all work as des sheets and specifications for the total sum of:	cribed herein and as shown or	n the plar
	Dollars _ (\$)

(Amounts shall be shown in both words and figures; in case of discrepancy, the amount shown in words shall govern. Total will be checked using units & unit prices shown above.)

GENERAL NOTES

Measurement and payment shall be at the Contract Unit Price per pay item in the Proposal.

The undersigned as BIDDER, hereby declares that this Proposal is made in good faith, without fraud or collusion with any person bidding on the same contract.

The undersigned CONTRACTOR and CITY acknowledge for certain public agency construction contracts Michigan Statutes (Act No. 524, Public Acts of 1980) require the

payment of interest on retainage. The parties hereto agree however, to waive the requirements of Act No. 524 (MCLA 125.1561) if a contract is entered into between them to perform the construction improvements. In lieu of application of the Statute, the parties adopt the retainage terms and conditions contained in these contract General Conditions for their mutual convenience. The CITY agrees to pay and the CONTRACTOR agrees to accept the applicable sum as indicated in the following table as a stipulated interest on the retained amounts under the terms and conditions of this contract pursuant to the applicable Statute mentioned above. Such sums shall be paid at completion of the project and will be included in the last payment applicable to the project:

ORIGINAL	CONTRACT	STIPULATED	INTEREST	ON
AMOUNT		RETAINAGE (\$)		
\$0 TO 49,999		25		
50,000 to 99,999		50		
100,000 to 249,000		100		
250,000 to 499,999		150		
500,000 to 749,999		250		
750,000 to 999,999		400		
1,000,000 and Ove	r	Act No 524 will ap	ply	

The undersigned has examined the specifications and other contract documents, and the location of the work described herein and, on the drawings, and is fully informed as to the nature of the work and the conditions relating to its performance and understands that the quantities shown are approximate only and are subject to either increase or decrease.

The undersigned hereby proposes to furnish all necessary equipment, perform all the work including traffic control, furnish all the materials and for the unit prices named in the Bid Form, to complete the work as herein described in accordance with the project plans, specifications (referenced or included), the contract Special Provisions and Supplemental Specifications. All materials used will be in strict conformity with the requirements of the specifications and such other supplemental specifications and Special Provisions as may be a part of the Contract Documents.

The undersigned agrees that if the foregoing BID shall be accepted by the CITY, he/she will within ten (10) days (Sundays and legal holidays excepted) after receiving Notice of Award, enter into a Contract Agreement and will complete the project ready for use, at the prices and within the time stated in this Bid Form, and that he/she will furnish the CITY with satisfactory certificates of insurance coverage, Payment Bond, and Performance Bond in amounts as herein specified.

The undersigned further agrees that should this Bid be accepted by the CITY, he/she will complete work by or before <u>November 15th</u>, <u>2024</u>, including completion of all work items included in this project.

The "completed by" dates as specified has been set with the understanding that the Contract Award is approved through the city commission meeting to be held on **Monday, April 1, 2024.**

The undersigned also agrees that for each and every calendar day that he/she may be in default of substantial completion of the work, within the time specified in this Proposal or within the time to which said time of completion may be extended for good cause shown, the CITY will suffer a damage of two hundred dollars (\$200.00) per day, and said CITY shall be compensated therefore at that rate as liquidated damages in accordance with the Agreement Form.

In submitting this Bid, it is understood that the CITY reserves the right to accept or reject any or all Bids, waive irregularities in any Bid and make the award in any manner deemed for the best interest of the CITY.

Dated and signed at, this the	day of, 2024.
Bidders Name	Official Address
bidders name	Official Address
Ву	
Signature	
TU	
Title	Telephone

BID BOND

KNOW ALL MEN BY TI	HESE PRESENTS, that we, the undersigned,
	as Principal, and
	as Surety, are hereby held and firmly bound
unto THE CITY OF SAL	JLT STE. MARIE, MICHIGAN as Owner in the penal sum of <u>(5%</u>
	<u>m)</u> for the payment of which, well and truly to be made, we rally bind ourselves, our heirs, executors, administrators,
Signed, this	day of

The Condition of the above obligation is such that whereas the Principal has submitted to <a href="https://doi.org/10.1007/jwise-10.1007/jwise

NOW THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulated and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extensions of the time within which the CITY OF SAULT STE. MARIE may accept such Bid; and said Surety does

		4.	•		
hereby	waive	notice	ot anv	' SUCh	extension
,	mand	1101100	O. G ,	CGCII	CALCITOIO

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

		(L.S.)
	Principal	,
	Surety	
By:		

IMPORTANT - Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Michigan.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that

(Name of Contractor)

(Address of Contractor)
a (Corporation, Partnership or Individual) hereinafter called Principal, and

(Name of Surety)

(Address of Surety)
hereinafter called Surety, are held and firmly bound unto:

THE CITY OF SAULT STE. MARIE, MICHIGAN

225 E. Portage Avenue, Sault Ste. Marie, Michigan 49783

hereinafter called OWNER, in the penal sum of: \$______in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the OWNER dated the _____ day of ______, 20____, a copy of which is hereto attached and made a part hereof for BRIDGE PREVENTATIVE MAINTENANCE for six (6) bridges; Fort St, Spruce St, W. Portage Ave, Riverside Dr, Bingham Ave, and Johnstone St. Work on each of the bridges includes routine repairs to extend the life of

these structures including deck cleaning, joint work and other miscellaneous repairs.

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

PROVIDED, FURTHER, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER with or without notice to the Surety, and if the Principal shall satisfy all claims and demand incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise Surety shall make such payments and this obligation to

remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

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

		nent is executed in four (4) counterparts	
_		(Principal)	
	Ву:		<u> </u>
	Its:		_
		(Surety)	
	Ву:		<u> </u>
	Its:		<u> </u>
_		(Witness to Surety)	

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

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list as amended and be authorized to transact business in the State of Michigan.

CITY OF SAULT STE. MARIE

AGREEMENT

bet	we	S AGREEMENT, made as of the day of ween the CITY OF SAULT STE. MARIE, MICHIGAN, CITY, and hereina	hereinafter ca	illed the	e OWNER
For Wo	t S rk	TNESSETH, that whereas the CITY intends to contract St, Spruce St, W. Portage Ave, Riverside Dr, Binghark on each of the bridges includes routine repairs to electures including deck cleaning, joint work and other n	am Ave, and Jo extend the life o	ohnstoi of these	ne St.
The	е рі	project title is "B-06-24 BRIDGE PREVENTATIVE M	AINTENANCE	= ".	
	>	NOW, THEREFORE, THE CITY AND CONTRA hereinafter set forth, agree as follows:	ACTOR for th	ne con	siderations
	toc wo the the	THE CONTRACTOR AGREES to furnish all the necestools and services necessary to perform and complet work required for the complete construction the above the Proposal and in strict compliance with applicable to the Contract Documents herein mentioned, which a Contract, including the following Addenda:	te, in a workma e described wo ocal, state and t	anlike r ork, as s federal	manner, all specified in codes and
	-	ADDENDUM NO. DATED			
	A.	A. Contract Time: Work under this Agreement s CONTRACTOR'S receipt of the executed Agreem the date as specified in the written Notice to Proce the date of the executed Agreement) and the wo to the following schedule:	nent signed by ed (if such dat	the CI ⁻ te is dif	TY or upon ferent from
		Final Completion: November 15th, 2024			

as specified in the Bid Proposal, a copy of which is attached.

- a) If the CONTRACTOR refuses or fails to prosecute the work or any separate part thereof, with such diligence as will insure its completion, ready for use, within the number of consecutive calendar days specified herein, or any extension thereof, or fails to complete said work within such time, the CITY may, by written notice to the CONTRACTOR, terminate his/her right to proceed with the Project or such part of the Project as to which there has been delay. In such event, the CITY may take over the Project and prosecute the same to completion, by contract or otherwise, and the CONTRACTOR shall be liable to the CITY for any excess cost occasioned the CITY thereby. If the CONTRACTOR'S right to proceed is so terminated, the CITY may take possession of and utilize in completing the Project such materials, appliances, and plants as may be on the site of the Project and necessary therefore
- B. Liquidated Damages: The CITY and CONTRACTOR recognize that time is of the essence in fulfilling the requirements of this Agreement and also recognize that the CITY will suffer financial loss if the work is not completed within the times specified in paragraph "A" above, plus any extensions thereof allowed in accordance with Section 23 of the General Conditions. The CITY and CONTRACTOR also recognize the delays, expense and difficulties involved in proving the actual loss suffered by the CITY if the work is not completed on time.

If the CONTRACTOR shall neglect, refuse or fail to complete the required work within the time specified in Paragraph I. A. for completion and readiness for final payment or any proper extension thereof granted by the CITY, the CONTRACTOR shall pay the CITY Two Hundred Dollars (\$200.00) for each calendar day that expires after the time specified in Paragraph "A" until such time as Final Completion is attained; ready for final payment.

- C. Sub-contractors: The CONTRACTOR agrees to bind every sub-contractor by the terms of the Contract Documents. The Contract Documents shall not be construed as creating any contractual relation between any Sub-contractor and the CITY.
- II. THE CITY AGREES to pay, and the CONTRACTOR agrees to accept, in full payment for the performance of this Contract an amount to be determined by the actual constructed quantities and the Unit Prices and Lump Sums set forth in the attached Proposal. This amount is estimated to be:

 ______ Dollars (\$______)
 - A. Progress payments will be made in accordance with the General Conditions of the Contract.
 - 2. The CONTRACTOR and CITY acknowledge that for certain public agency construction contracts Michigan Statues (Act No. 524, Public Acts of 1980) require the payment of interest on retainage. The parties hereto agree however, to waive the requirements of Act No. 524 (MCLA 125.1561) if a contract is entered into between them to perform the construction improvements. In lieu of application of the Statute, the parties adopt the retainage terms and conditions contained in these

contract General Conditions for their mutual convenience. The CITY agrees to pay and the CONTRACTOR agrees to accept the applicable sum as indicated in the following table as a stipulated interest on the retained amounts under the terms and conditions of this contract pursuant to the applicable Statute mentioned above. Such sums shall be paid at completion of the project and will be included in the last payment applicable to the project:

ORIGINAL CONTRACT AMOUNT	STIPULATED INTEREST ON RETAINAGE (\$)
\$ 0 to 99,999	50
100,000 to 249,999	100
250,000 to 499,999	150
500,000 to 749,999	250
750,000 to 999,999	400
1,000,000 and Over	Act No. 524 will apply

- III. CONTRACT DOCUMENTS: The Contract comprises the Contract Documents listed in the General Conditions of the Contract. In the event that any provision of one Contract Document conflicts with the provision of another Contract Document, the provision in the contract Document first listed below shall govern, except as otherwise specifically stated.
 - A. Agreement (this instrument)
 - B. Addenda to Contract Documents
 - C. Legal and Procedural Documents
 - 1. Proposal
 - 2. Information for Bidders
 - 3. Advertisement
 - D. Detailed Special Provisions and Supplemental Specifications
 - E. General Conditions of the Contract
 - F. Project Drawings
 - G. Bonds
 - 1. Proposal Guaranty
 - 2. Payment Bond
 - 3. Performance Bond
- IV. AUTHORITY AND RESPONSIBILITY OF THE CITY: The CITY shall decide all questions which may arise relating to the quality and acceptability of materials furnished and work performed, the manner of performance and the rate of progress of the work, all questions which may arise as to the interpretations of the Plans and Specifications; and all questions as to the acceptable fulfillment of the terms of the Contract. The CITY shall decide all questions as to the rights of different Contractors on the Project.

- V. SUCCESSORS AND ASSIGNS: This Agreement and all of the covenants hereof shall inure to the benefit of and be binding upon the CITY and the CONTRACTOR respectively and his/her partners, successors, assigns and legal representatives. Neither the CITY nor the CONTRACTOR shall have the right to assign, transfer or sublet his/her interests or obligations hereunder without written consent of the other party.
- VI. SPECIAL PROVISIONS: The CITY and the CONTRACTOR mutually agree that this Agreement shall be subject to the included Special Provisions, if any, which shall supersede other conflicting provisions of this Agreement.

IN WITNESS WHEREOF, the parties have made and executed this Agreement, the day and year first above written.

(CONTRACTOR'S COMPANY NAME)	
BY:(SIGNATURE)	
(PRINT)	
TITLE:(PRINT)	
CITY OF SAULT STE. N	MARIE, MICHIGAN
CITY MANAGER (Brian Chapman) Approved	

CITY OF SAULT STE. MARIE PROJECT INSURANCE REQUIREMENTS

The Contractor/Consultant shall not commence work under this contract until he/she has obtained the insurance required as outlined following this paragraph. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverage shall be with the insurance carriers rated A- or better with A. M. Best Company and acceptable to the City of Sault Ste. Marie, Michigan.

 Worker's Compensation Insurance: The Contractor/Consultant shall procure and maintain during the life of this contract, Worker's Compensation and Employers Liability Coverage, including waiver of subrogation in accordance with all applicable Statutes of the State of Michigan. Limits of liability for Employers Liability shall be:

\$500,000 Bodily Injury Each Accident \$500,000 Disease Policy Limit and \$500,000 Disease Each Employee

 Commercial General Liability and Umbrella Liability Insurance: The Contractor/Consultant shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" including a per project aggregate with the following limits:

General Aggregate (other products/completed operations)	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000
Damage to Rented Premises	\$500,000
Medical Expense	\$5,000

The Contractor/Consultant shall continue to carry Completed Operations Liability Insurance for at least three (3) years after either 90 days following Substantial Completion of the Work or final payment to the Contractor on any individual Project, whichever is later. Coverage shall include the following:

- a. Contractual Liability
- b. Products and Completed Operations
- c. Independent Contractors Coverage
- d. Broad Form General Liability Extensions or equivalent
- e. Explosion, Collapse and Underground (XCU) shall not be excluded.
- f. Coverage shall be Primary and Noncontributory

- 3. Business Auto and Umbrella Liability Insurance: The Contractor/Consultant shall procure and maintain during the life of this contract Business Auto Liability Insurance, including Michigan No-Fault Coverage, and if necessary, umbrella liability, with limits of liability of not less than \$1,000,000.00 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles (Symbol 1).
- 4. Additional Insured: Commercial General Liability, Business Auto and Umbrella Insurance, as described above, shall include an endorsement stating the following shall be "Additional Insureds": the City of Sault Ste. Marie, all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. Policies shall contain the following Additional Insured forms (and/or equivalent):
 - a. General Liability: On-Going Operations form CG 2010 07/04 or equivalent, Completed Operations form CG 2037 07/04 or equivalent.
 - b. Business Auto: CA 20 48
- 5. Professional Liability (Errors and Omissions) Insurance (*Professional Architectural and Engineering Services Only*): The Consultant shall procure and maintain during the life of this contract Professional Liability (Errors and Omissions) Insurance, with limits of liability of not less than \$1,000,000.00 per claim.
- 6. Cancellation Notice: Worker's Compensation Insurance, Commercial General Liability Insurance and Business Auto Liability Insurance and Umbrella Liability Insurance, Professional Liability Insurance (if applicable), as described above, shall include an endorsement stating the following: "It is understood and agreed that Thirty (30) days Advance Written Notice of Cancellation, Non-Renewal, Reduction and/or Material Change shall be sent to:

City Clerk City of Sault Ste. Marie 225 E. Portage Ave. Sault Ste. Marie, MI 49783

- 7. Waiver of Subrogation: Contractor/Consultant shall obtain and provide waiver of subrogation on Commercial General Liability, Auto Liability, Workers Compensation and Umbrella in favor of City of Sault Ste. Marie with respect to losses arising out of or in connection with the work.
- 8. Proof of Insurance Coverage: The Contractor/Consultant shall provide the City of Sault Ste. Marie at the time the contracts are returned by him/her for execution, certificates and policies as listed below:

a. Two (2) copies of Certificate of Liability Insurance (ACORD 25) for Worker's Compensation Insurance, Commercial General Liability Insurance, Business Auto Liability Insurance and Umbrella Liability Insurance. This Certificate shall cite the specific endorsement(s) relative to the "Additional Insured" and "Cancellation Notice" as required above.

If <u>any</u> of the above coverages expire during the term of this contract, the Contractor/Consultant shall deliver renewal certificates and/or policies to the City of Sault Ste. Marie at least ten (10) days prior to the expiration date.

The Contractor/Consultant shall not cancel or reduce the coverage of any insurance without providing written notice to the City and consent of the City. The Consultant shall cease operations immediately on the occurrence of any such reduction or cancellation and shall not resume operations until new insurance, approved by the City, is in force.

Contractors/Consultants on City projects shall furnish certificates of insurance **before** work has begun.

Revised 11/17/2023

NOTICE OF AWARD

To:				
PROJECT NAME: The OWNER has consproject. You are hereby as: This project will pavement, concrete custe. Marie, in the total	sidered your BID day notified that your lentail the complete ontail the gomplete ontail and gutter, and	sub-base and base restoration work loca	for the above refect for the WORK does construction, bit	uminous
You are required CONTRACTOR'S cert Bond in the amount spetthe date of this Notice signature, will be sent to PROCEED will not executed Agreement from the contract requirement from the contract requirement.	ificates of Insurance ificates of Insurance ified in the contract if the contract is the contract if the contract if the contract is the contract if the contract if the contract is the contract in the contract is the contr	ct documents withinged copies of the Agraess days of this Notice CITY receives the required and until such do	nt Bond, and Perfo ten (10) calendar d eement, prepared ce of Award. The uired Bonds, Insura cuments are in acc	ormance ays from for your NOTICE ance and
You are require		owledged copy of th OWNER.	is NOTICE OF AW	/ARD to
Dated this		day of		_, 20
		of Sault Ste. Marie		
BY:	David S. Boyle,	P.E. – City Enginee	r	
Receipt of the		NCE OF NOTICE OF AWARD is hereb	y acknowledged	
this	da	y of	, 20	
	By:(SIG	NATURE)		
	(F	PRINT)	_	

NOTICE TO PROCEED

TO:				DATE:			
				PROJECT:		PREVENTATIV IANCE B-06-24	
You dated the WORK <u>November</u>	in accord	<u>, 20</u> , dance with t	to comme on or befo the Agree	ence WORK in ore ment to ensure	accordance , 20 , and that the pro	with the Agree you are to con pject is complet	ement nplete ted by
You the OWNE		red to returr	n an ackno	owledged copy (of this NOTI	CE TO PROCE	ED to
		<u>CITY O</u>		STE. MARIE, N Owner	MICHIGAN		
		David	d S. Boyle	BY: P.E. – City En	gineer		
		A	CCEPTA	NCE OF NOTIC	CE		
Red	eipt of the	e above NC	TICE TO	PROCEED is h	nereby ackn	owledged by:	
		(COI	NTRACTO	ORS COMPANY	/ NAME)		
th	nis the	BY:	day of __			_, 20 _,	
			, , , , , , , , , , , , , , , , , , , ,	(SIGNATURE)			
				(PRINT)			
		TITLE:		(PRINT)			

CITY OF SAULT STE. MARIE, MICHIGAN SUPPLEMENTAL CONDITIONS

City of Sault Ste. Marie

01/2022

General

Conditional Requirements

1. Before bid opening, the Bidder must have paid all current water, sewer, personal property taxes, and other charges owed to the City of Sault Ste. Marie on any account no matter how arising. Any Bidder who at the time of opening the bid is not current on all such charges may be rejected by the City as ineligible to bid. In the alternative, if the City of Sault Ste. Marie chooses to award the bid notwithstanding such delinquency, the Contract payments shall be set off in an amount sufficient to pay all such accounts. The method and time of such set off shall be at the discretion of the City Manager.

CITY OF SAULT STE. MARIE, MICHIGAN SPECIAL PROVISION FOR TAXES

The Contractor shall include, and will be deemed to have included, in its 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. To the extent of any conflict, this Special Provision controls over Section 107.01 of the 2020 MDOT "Standard Specifications for Construction".

PROGRESS CLAUSE

City of Sault Ste. Marie 1 of 1 02/2024

The Engineer anticipates that construction can begin no earlier than:

10 calendar days after award or as directed by the Engineer

In no case shall any work be commenced prior to receipt of formal notice of award by the City.

The Contractor shall prepare and submit a complete, detailed, signed Progress Schedule to the Engineer.

The entire project must be completed by the final completion date of **November 15th**, **2024**.

Unless specific pay items are provided in the contract any extra costs incurred by the Contractor due to cold-weather protection and winter grading will not be paid for separately but will be included in the payment of other pay items in the contract.

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.

Failure by the Contractor to meet interim completion, open to traffic, and/or final completion dates will result in the assessment of liquidated damages in accordance with subsection 108.10.C.1 and 108.10.C.2 of the Standard Specifications for Construction.

SPECIAL PROVISION FOR UTILITY COORDINATION - MODIFIED

City of Sault Ste. Marie

01/2022

A. **DESCRIPTION**

1. This work shall be done in accordance with Sections 104.08, 107.12 and other applicable sections of the *Michigan Department of Transportation* (MDOT) 2020 Standard Specifications for Construction, except as follows. The following Utilities have or may have facilities located within the right-ofway:

NAME	LOCAL PHONE
AT&T	906-253-1595
Cloverland Electric Cooperative	906-635-6800
DTE Energy/Michigan Consolidated Gas Company	906-632-3347
Spectrum	866-874-2389
City of Sault Ste. Marie Water and Sewer Utilities	906-632-3531
ON ALL PROJECTS THREE WORKING DAYS BEFOR	
"MISS DIG" TOLL FREE AT 1-800-482-7171.	·

The owners of public or private utilities which will not interfere with the completed project and which do not constitute a hazard to the public or an extraordinary hazard to the Contractor's operations will not be required to move their facilities on or from the right-of-way.

Work stoppages by employees of utility companies which delay utility revisions on any portion of this project and which directly affect the CONTRACTOR'S operations may be considered as a basis of claim for an extension of time for project completion.

It will be the CONTRACTOR'S responsibility to obtain permission from the utility companies when working within the limits of their right-of-way.

B. **CONSTRUCTION METHODS** N/A

C. **MATERIALS** N/A

D. **MEASUREMENT AND PAYMENT**

1. Payment for this work shall be considered as having been included in the contract unit prices bid for other contract items. When utilities which are not shown on the plans must be moved to new locations, no additional compensation will be paid to the CONTRACTOR nor will extensions of time be granted for reasonable delays beyond the control of the City of Sault Ste. Marie.

SPECIAL PROVISION FOR PROJECT CLEANUP - MODIFIED

City of Sault Ste. Marie

01/2022

3. **DESCRIPTION**

1. This work shall be done in accordance with Section 209 and other applicable sections of the *Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction*, except as follows.

4. **CONSTRUCTION METHODS**

- Project cleanup shall also include removal of all construction debris from the project construction area including areas affected at the ends of the project, as directed by the ENGINEER. Bituminous pavements shall be cleaned prior to opening the pavement surfaces to traffic or notification by the CONTRACTOR that the work is completed, whichever occurs first.
- 2. During the entire construction phase of the project, the CONTRACTOR shall be required to provide cleanup operations along and on roadways where dirt and/or debris have been deposited due to construction activities and/or related work. As a minimum, cleanup will be performed on a daily basis; additional cleanup will be performed as deemed necessary by the ENGINEER.

5. **MATERIALS** N/A

6. **MEASUREMENT AND PAYMENT**

1. Payment for this work shall be considered as having been included in the contract unit prices bid for other contract items.

CITY OF SAULT STE. MARIE

FOR OTHER PROJECTS IN THE VICINITY

SSM 1 of 1 02/2024

The Contractor shall coordinate his operations with Contractors performing work on other projects within, or adjacent to the Construction Influence Area (CIA) to avoid conflicts in maintaining traffic, construction signing, and progression of construction activities. These projects include but are not limited to:

- City of Sault Ste. Marie Power Canal Trail
- Cloverland Electric Cooperative Power Canal Maintenance Project
- City of Sault Ste. Marie Meridian Street Reconstruction
- City of Sault Ste. Marie Easterday Avenue Reconstruction
- City of Sault Ste. Marie Carbide Dock Rehabilitation

The Contractor's attention is called to the requirements of cooperation with others as covered in Article 104.08 of the Michigan Department of Transportation Standard Specifications for Construction. No claim for extra compensation or adjustments in contract unit price will be allowed on account of delay or failure of others to complete work units as scheduled

CITY OF SAULT STE. MARIE

SPECIAL PROVISION

FOR MAINTAINING TRAFFIC FOR BRIDGE PREVENTATIVE MAINTENANCE

SSM 1 of 4

- **a. Description.** This special provision consists of the requirements and restrictions to maintain traffic on Fort Street, W Portage Avenue, Riverside Drive, Bingham Avenue, Spruce Street, and Johnston Street in the City of Sault Ste. Marie, Chippewa County.
- **b. General.** Traffic shall be maintained in accordance with the standard specifications, typicals, supplemental specifications, and as specified herein.

The Contractor shall notify the City of Sault Ste. Marie a minimum of 72 hours prior to the implementation of any road closures, or lane closures and major traffic shifts.

The project will be open to local traffic within the specified construction limits during the specified contract times. All areas within the Construction Influence Area (CIA) shall have local traffic maintained at all times throughout the duration of the project, except as noted within this special provision. The property owners and emergency vehicles shall be assured of access to all properties. At no time shall the project be closed down to local traffic (temporary or permanent) without prior approval from the City of Sault Ste. Marie, other than as specified within this special provision. Any changes to the construction signing, CIA or construction staging shall be approved by the City of Sault Ste. Marie prior to implementation.

The Contractor shall be responsible for notifying emergency services throughout construction regarding lane closures, direction of access, etc.

- **c.** Construction Influence Area (CIA). The CIA includes the right-of-way of the following roadways, within the approximate limits described below:
 - **a.** On Fort St, W Portage Ave, Riverside Dr, Bingham Ave, Spruce St, and Johnston St within the work zone and approximately 1/4 mile in advance of the work zone on either end.
 - **b.** In addition, the CIA includes the right-of-way of any designated detour route or alternate route, and any intersecting roads and ramps adjacent to the work zone as far as the construction or detour signing extends.
- **d. Traffic Restrictions.** Maintain traffic in accordance with the Maintaining Traffic Typicals contained herein, except as noted below. Changes or adjustments to the Maintaining Traffic

Typicals may be necessary to fit field conditions, subject to approval of the City or as determined by the City.

- a. Utilize the following Maintaining Traffic Typicals:
 - 100-GEN-KEY
 - 101-GEN-SPACING-CHARTS
 - 102-GEN-NOTES
 - 103-GEN-SIGN
 - 107-GEN-SPEED
 - 110-TR-NFW-2L
 - 124-NFW-2(R+L)LC-SHIFT
 - 127-NFW-SHIFT-OLC
 - 136-CLT-SHIFT-(R+L)
 - WZD-100-A
 - WZD-125-E
- **b.** Do not work, deliver material, or close lanes during the holiday periods as defined in Table 1.

Table 1: 2024 Holiday Periods

Holiday	Start Date and Time	End Date and Time
Memorial Day	3:00 p.m. Friday, May 24 th	6:00 a.m. Tuesday, May 28 th
Independence Day	3:00 p.m. Wednesday, July 3 rd	6:00 a.m. Friday, July 5 th
Labor Day	3:00 p.m. Friday, August 30 th	6:00 a.m. Tuesday, September 3 rd

- **c.** Work hours are Monday-Friday, 7:00am to 7:00pm. Any additional work, including weekend work, done contradicting this schedule must be approved by the City.
- **d.** Maintain a minimum of two (2) lanes of traffic, one (1) in each direction, at all times on, W Portage Ave, Riverside Dr. and Bingham Ave. Maintain a minimum of one (1) lane of traffic on Fort, Johnston, and Spruce St. in alternating directions at all times.

- **e.** Maintain driveway access to all businesses and residences during construction. Prior to any temporary closures, coordinate with affected owners during construction.
- **f.** Maintain access to all sidewalks and ramps during construction or as directed by the Engineer.
- g. Once work is initiated that includes any lane restrictions, continue until that work is completed. Remove any lane restrictions where no work has taken place for more than 1 week. No additional payment will be made for removal or replacement of lane restrictions resulting from a lack of work.

e. Traffic General.

- **a.** For any lane open to traffic, provide a minimum lane width of 10 feet with 2 feet of shy distance on both sides.
- **b.** Do not close lanes or utilize traffic regulation sequences where work can be accomplished with a shoulder closure. Do not occupy any part of the active traffic lane with personnel or equipment when utilizing a shoulder closure.
 - **c.** A speed reduction will not be used.

f. Traffic Regulator Control

- **a.** Maintain two-way traffic at all times on Fort, Spruce St., and Johnston using traffic regulator control. A traffic regulator sequence is allowed to cover the maximum length of the project. Place the arrow panel, signs and channelizing taper for the traffic regulator operation at locations approved by the Engineer for adequate visibility by oncoming traffic.
- **b.** Crossroads must remain open to traffic at all times. Use intermediate traffic regulators at each intersection approach and commercial driveways within the closure limits, as directed by the Engineer. Use traffic regulator control as directed by the Engineer for cross street traffic while paving through intersections.
- g. **Traffic Control Devices.** Ensure all traffic control devices are in accordance with the *MMUTCD* and must meet the "acceptable" criteria as defined in the *ATSSA* publication entitled "Quality Guidelines for Temporary Traffic Control Devices and Features" at the time of initial deployment and after each major stage change.
 - **a.** During non-working periods, place applicable advance signs and channelizing devices at specific locations, as directed by the Engineer, at no additional cost to the Department.

- **b.** Notify the Engineer 24 hours in advance of when traffic control devices are being delivered to the project site, to allow for initial inspection of devices to take place.
- **c.** Remove from the project site all traffic control devices (including detour signing) no longer needed for a particular operation and equipment for construction within 14 calendar days of reopening the shoulder/lane/roadway.
 - d. Channelizing Devices.
 - A. Ensure all devices have sufficient ballast to prevent moving or tipping. If moving or tipping occurs, place additional ballast, as directed by the Engineer, at no additional cost to the Department. No more than two ballasts are allowed on each channelizing device.
 - B. Do not use caution tape on this project.
 - C. Space channelizing devices at 45 feet for tapers and 90 feet for tangents or tighter as directed by the Engineer.

h. Pedestrian or Non-Motorized Facilities.

- **a.** Close any pedestrian or non-motorized facilities that are impacted by the work using pedestrian barricades.
- **b.** Keep sidewalk areas clear of any equipment or materials if sidewalks are open to pedestrian traffic.
- i. **Measurement and Payment.** All work for maintaining traffic is included in the lump sum contract amount.

Any additional signing or maintaining traffic devices required to expedite the construction will be at the Contractor's expense.

Contractor shall be responsible for staking the locations of the construction signs, for Miss Dig notification and for the setting of the signs.

TYPICAL NUMBER KEY

CODES

AB = ARROW BOARD AW = ADVANCE WARNING

C = CLOSURE

CLT = CENTER LEFT TURN LANE

CROSS = CROSSOVER

CruSha = CRUSH AND SHAPE

EM = EARLY MERGE ENR = ENTRANCE RAMP

 $E \times R = E \times I \setminus R \wedge M P$

FW = FREEWAY

GEN = GENERAL INFORMATION GORE = FREEWAY GORE AREA

IN = INSIDE

INT = INTERSECTION

L = LANE(L) = LEFT

LC = LANE CLOSURE

LD = LONG DURATION

LO = LANE OPEN

O = OUTSIDE (LANE CLOSURE)

OUT = OUTSIDE OF SHOULDER

MID = MIDDLE OF INTERSECTION OR ROAD

NFW = NON-FREEWAY

PARK = PARKING LANE

PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

(R) = RIGHT

ROLL = ROLLING ROADBLOCK

RUM = RUMBLE STRIP

SD = SHORT DURATION

SHL = SHOULDER CLOSURE

SIGN = SIGN

SP = SPECIAL

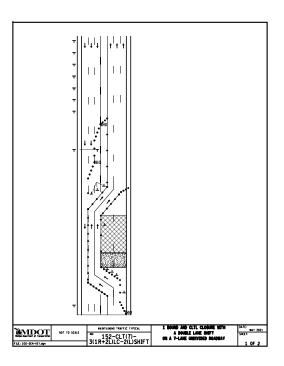
SPEED = SPEED

STA = STOPPED TRAFFIC ADVISORY

TR = TRAFFIC REGULATOR

TS = TEMPORARY SIGNAL

ZIP = ZIPPER MERGE



100 - GENERAL NOTES

110 - TRAFFIC REGULATORS

120 - NON-FREEWAY

130 - CENTER LEFT TURN (CLT) LANES

140 - PARKING LANES

150 - CLT 7 LANE SECTIONS

160 - SIGNAL WORK

200 - FREEWAY CLOSURES

210 - FREEWAY LANE SHIFTS

220 - FREEWAY ENTRANCE RAMPS

230 - FREEWAY EXIT RAMPS

300 - ADVANCE WARNINGS

310 - CROSSOVER CLOSURE

320 - CRUSH AND SHAPE

340 - MERGE SYSTEMS

350 - GORE LOCATIONS

360 - ROLLING ROADBLOCK

4000 - MAINTENANCE

5000 - SURVEY

EXAMPLE TYPICAL

CODE: 152-CTL(7)-3(1R+2L)LC-2(L)SHIFT

152 - TYPICAL NUMBER

CTL(7) = CENTER LEFT TURN LANE, 7 LANES TOTAL.

3(1R+2L)LC = 3 LANES CLOSED, (1 RIGHT LANE AND 2 LEFT LANES).

2(L)SHIFT = 2 LANES SHIFTED TO THE LEFT.

NOT TO SCALE



FILE: 100-GEN-KEY.dgn

NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

100-GEN-KEY

TYPICAL NUMBERING KEY

DATE: DECEMBER 2021 SHEET:

DISTANCE BETWEEN TRAFFIC SIGNS, "D"

"D"			POST	ED SPEE	D LIMIT,	MPH (P	RIOR TO	WORK A	AREA)		
DISTANCES	25	30	35	40	45	50	55	60	65	70	75
D (FEET)	250	300	350	400	450	500	550	600	650	700	750

GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE, "B"

"B"		SPEED, MPH (PRIOR TO WORK AREA)										
LENGTHS	20	25	30	35	40	45	50	55	60	65	70	75
B (FEET)	33	50	83	132	181	230	279	329	411	476	542	625

^{*} POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.

MINIMUM MERGING TAPER LENGTH, "L" (FEET)

OFFSET	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
(FEET)	25	30	35	40	45	50	55	60	65	70	75
1	11	15	21	27	45	50	55	60	65	70	75
2	21	30	41	54	90	100	110	120	130	140	150
3	32	45	62	80	135	150	165	180	195	210	225
4	42	60	82	107	180	200	220	240	260	280	300
5	53	75	103	134	225	250	275	300	325	350	375
6	63	90	123	160	270	300	330	360	390	420	450
7	73	105	143	187	315	350	385	420	455	490	525
8	84	120	164	214	360	400	440	480	520	560	600
9	94	135	184	240	405	450	495	540	585	630	675
10	105	150	205	267	450	500	550	600	650	700	750
1 1	115	165	225	294	495	550	605	660	715	770	825
12	125	180	245	320	540	600	660	720	780	840	900
13	136	195	266	347	585	650	715	780	845	910	975
1 4	146	210	286	374	630	700	770	840	910	980	1050
15	157	225	307	400	675	750	825	900	975	1050	1125

NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NOT TO SCALE

SHEET:

SHEET:

SHEET:

AMAY 2021

SHEET:

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

" " = W X S

WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

L = MINIMUM LENGTH OF MERGING TAPER

S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA

W = WIDTH OF OFFSET

TYPES OF TAPERS

UPSTREAM TAPERS

MERGING TAPER SHIFTING TAPER SHOULDER TAPER

2 TO 1 LANE ROAD TAPER

TAPER LENGTH

L - MINIMUM 1/2 L - MINIMUM

1/3 L - MINIMUM 100' - MAXIMUM

DOWNSTREAM TAPERS

(USE IS RECOMMENDED)

100' (PER LANE)

MAXIMUM SPACING FOR CHANNELIZING DEVICES

WORK ZONE	DRUM AND 42" DEN	/ICE SPACING (FT)	NIGHTTIME 42" DEVICE SPACING (FT)			
SPEED LIMIT	SPEED LIMIT TAPER TANGENT		TAPER	TANGENT		
< 45 MPH	1 × SPEED LIMIT	2 x SPEED LIMIT	25 FEET	50 FEET		
≥ 45 MPH	50 FEET	100 FEET	25 FEET	50 FEET		

SIGN OUTLINE KEY

DASHED OUTLINES INDICATE A SIGN THAT DASHED OUTLINES INDICATE A SIGN THAT SOLID OUTLINES INDICATE A SIGN THAT EXISTS ON SITE, AND NEEDS TO BE COVERED. IS TO BE PLACED ON THE PROJECT



SOLID OUTLINES INDICATE A SIGN THAT



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FILE: 101-GEN-SPACING-CHARTS.dgn

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101-GEN-SPACING-CHARTS

MAINTAINING TRAFFIC TYPICAL

"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING SIGN BORDER KEY AND ROLL-AHEAD SPACING

DATE: MAY 2021 SHEET:

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES - TEST LEVEL 2

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5.5 TONS (STATIONARY)	40 MPH OR LESS	25 FT

^{*} ROLL-AHEAD DISTANCES ARE CALCULATED USING A 4,410 POUND IMPACT VEHICLE WEIGHT.

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES - TEST LEVEL 3

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5 TONS	45 MPH	100 FT
(MOBILF)	50-55 MPH	150 FT
	60-75 MPH	175 FT
12 TONS	45 MPH	25 FT
(STATIONARY)	50-55 MPH	25 FT
	60-75 MPH	50 FT

^{*} ROLL-AHEAD DISTANCES ARE CALCULATED USING A 10,000 POUND IMPACT VEHICLE WEIGHT.

MAINTAINING TRAFFIC TYPICAL

NOT TO SCALE

SHEET:

CHANNELIZING DEVICE SPACING

SPACING—CHARTS

SIGN BORDER KEY AND ROLL AHEAD SPACING

3 OF 3

THE FOLLOWING NOTES APPLY IF CALLED FOR ON THE TRAFFIC TYPICAL

GENERAL NOTES

- G1: SEE GEN-SPACING-CHARTS FOR COMMON VALUES INCLUDING:
 D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES
 L = MINIMUM LENGTH OF TAPER

 - B = LENGTH OF LONGITUDINAL BUFFER
 - ROLL AHEAD DISTANCE
- G2: DISTANCE BETWEEN SIGNS, "D", THE VALUES FOR WHICH ARE SHOWN IN TYPICAL GEN-KEY ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND ALL LEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING MUST MEET NATIONAL COOPERATIVE HIGHMAY RESEARCH PROGRAM REPORT 350 (NCHRP 350) TEST LEVEL 3, OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) TL—3 AS WELL AS THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.
- G4: DO NOT STORE EQUIPMENT, MATERIALS OR PERFORM WORK IN ESTABLISHED BUFFFR ARFAS.
- G5: ALL EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH EITHER PROPOSED CHANGES IN TRAFFIC PATTERNS OR PROPOSED TEMPORARY TRAFFIC MARKINGS SHALL BE REMOVED BEFORE ANY CHANGE IS MADE IN THE TRAFFIC PATTERN. EXCEPTION WILL BE MADE FOR TRAFFIC PATTERNS FOR WORK LESS THAN THREE DAYS THAT ARE ADEQUATELY DELINEATED BY OTHER TRAFFIC CONTROL DEVICES.

SIGN NOTES

- S1: ALL NON-APPLICABLE SIGNING WITHIN THE CIA MUST BE MODIFIED TO FIT CONDITIONS, COVERED, OR REMOVED. FOR GUIDANCE SEE THE WORK ZONE SAFETY AND MOBILITY MANUAL, SECTIONS 6.01.09 AND 6.01.10.
- S2: R5-18b SIGNS ARE ONLY REQUIRED ON FREEWAY PROJECTS WITH A DURATION OF 15 DAYS OR LONGER OR NON-FREEWAY PROJECTS WITH A DURATION OF 90 DAYS OR LONGER. TO APPLY THIS TYPICAL WITHOUT R5-18b SIGNS, REMOVE THE SIGNS AND CONSOLIDATE THE SEQUENCE AS APPROPRIATE.
- R5-18c IS ONLY REQUIRED IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. OMIT THIS SIGN IN SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE.
- S4: ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W20-5 SIGNS.
- S5: PLACE ADDITIONAL SPEED LIMIT SIGNS REFLECTING THE WORK ZONE SPEED AFTER EACH MAJOR CROSSROAD THAT INTERSECTS THE WORK ZONE, OR AFTER EACH ENTRANCE RAMP THAT COMES ONTO THE FREEWAY WHERE THE REDUCED SPEED IS IN EFFECT. PLACE ADDITIONAL SPEED LIMIT SIGNS AT INTERVALS ALONG THE ROADWAY SUCH THAT NO SPEED LIMIT SIGNS ARE MORE THAN 2 MILES APART.
 WHEN REDUCED SPEED LIMITS ARE UTILIZED IN THE WORK AREA, PLACE ADDITIONAL
 SPEED LIMIT SIGNS RETURNING TRAFFIC TO ITS NORMAL SPEED BEYOND THE LIMITS OF THE WORK AREA AS INDICATED. IF PERMANENT SIGNS DISPLAYING THE CORRECT SPEED LIMIT ARE POSTED, OMIT ALL W3-5b AND R2-1 SIGNS AND REDUCE SPACING ACCORDINGLY.
- S6: FABRICATE SPECIAL SIGNS IN ACCORDANCE WITH CURRENT SIGNING DESIGN STANDARDS.
- S7: PLACE ADDITIONAL R8-3 SIGNS AT A MAXIMUM 500' SPACING THROUGHOUT THE WORK ZONE.
- S8: WHEN SPEED LIMIT SIGNS CANNOT BE PLACED SIDE BY SIDE AS SHOWN, PLACE THEM "D" DISTANCE APART.
- S9: STOP SIGNS NOT REQUIRED IF SIGNALS ARE ON 4-WAY FLASHING RED. STOP AHEAD SIGNS ARE NOT REQUIRED IF THERE IS ADEQUATE VISIBILITY THE STOP SIGN OR IF SIGNALS ARE BEING USED TO CONTROL TRAFFIC.
- S10: PLACE REDUCED SPEED ZONE AHEAD SIGN (W3-5b) HERE WHEN USING A SPEED REDUCTION IN THIS DIRECTION.
- S11:THE NUMBER OF W1-6 SHIFT SIGNS TO PLACE FOR A SHIFT IS AS FOLLOWS: SHIFTS 4FT OR LESS, PLACE ONE W1-6(R)(L) SHIFTS 5FT TO 12FT, PLACE TWO W1-6(R)(L) SHIFTS MORE THAN 12FT, PLACE THREE OR MORE W1-6(R)(L) SIGNS DEPENDING UPON LENGTH OF SHIFT AND AS PER THE ENGINEER.
- S12: PLACE R2-1 SIGNS AS DETAILED IN NOTE S5 WHEN THERE IS A SPEED REDUCTION IN THIS DIRECTION

TRAFFIC REGULATOR NOTES

- TR1:TRAFFIC REGULATORS MUST FOLLOW ALL THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS, THE CURRENT VERSIONS OF THE TRAFFIC REGULATOR'S INSTRUCTION MANUAL AND THE VIDEO "HOW TO SAFELY REGULATE TRAFFIC IN MICHIGAN". THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS IS DETERMINED BY THE ROADWAY ADT, GEOMETRICS, AND AS DIRECTED BY THE ENGINEER.
- TR2: PROVIDE APPROPRIATE BALLOON LIGHTING TO SUFFICIENTLY ILLUMINATE TRAFFIC REGULATOR'S STATIONS WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS.
- TR3: PROVIDE EITHER A STOP/SLOW AFAD OR A RED/YELLOW LENS AFAD, MEETING THE REQUIREMENTS OF THE MMUTCD

TEMPORARY TRAFFIC CONTROL DEVICE NOTES

- TCD1: THE MAXIMUM DISTANCE IN FEET BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD NOT EXCEED 1.0 TIMES THE WORK ZONE SPEED LIMIT IN MPH FOR ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT LESS THAN 45 MPH AND SHOULD NOT EXCEED 50 FEET ON ROADWAYS WITH A POSTED WORK ZONE SPEED OF 45 MPH OR GREATER. THE SPACING FOR 42 INCH CHANNELIZING DEVICE TAPERS ARE NOT TO EXCEED 25 FEET AT NIGHT.
- TCD2: THE MAXIMUM DISTANCE IN FEET BETWEEN CHANNELIZING DEVICES IN A TANGENT SHOULD NOT EXCEED TWICE THE WORK ZONE SPEED LIMIT IN MPH FOR ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT LESS THAN 45 MPH AND SHOULD NOT EXCEED 100 FEET ON ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT OF 45 MPH OR GREATER. THE SPACING FOR 42 INCH CHANNELIZING DEVICE TANGENTS ARE NOT TO EXCEED 50 FEET AT NIGHT.
- TCD3: TYPE III BARRICADES MUST BE LIGHTED FOR OVERNIGHT CLOSURES.
- TCD4: WHEN THE HAUL ROAD IS NOT IN USE, PLACE LIGHTED TYPE III BARRICADES WITH "ROAD CLOSED" EXTENDING COMPLETELY ACROSS THE HAUL ROAD.
- TCD5: USE OBJECT MARKER SIGNS IN LIEU OF THE TYPE B HIGH INTENSITY LIGHT SHOWN IN THE STANDARD PLAN FOR TEMPORARY CONCRETE BARRIER (R-53, AND R-126) WHEN USED WITH A TEMPORARY SIGNAL SYSTEM. THE OBJECT MARKERS MUST BE A MINIMUM OF 12 INCHES IN WIDTH AND 36 INCHES IN HEIGHT AND HAVE ORANGE AND WHITE RETROREFLECTIVE SHEETING. THE RETROREFLECTIVE SHEETING MUST HAVE ALTERNATING DIAGONAL ORANGE AND WHITE STRIPES SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION VEHICULAR TRAFFIC IS TO PASS.
- TCD6: PLACE LIGHTED ARROW PANELS AS CLOSE TO THE BEGINNING OF TAPERS AS PRACTICAL, BUT NOT IN A MANNER THAT WILL OBSCURE OR CONFUSE APPROACHING MOTORISTS WHEN PHYSICAL LIMITATIONS RESTRICT PLACEMENT. IN CURBED SECTIONS, IF ARROW BOARD CANNOT BE PLACED BEHIND CURB, PLACE ARROW BOARD IN THE CLOSED LANE AS CLOSE TO THE BEGINNING OF TAPER AS POSSIBLE.
- TCD7: ADDITIONAL TYPE III BARRICADES MAY BE REQUIRED TO COMPLETELY CLOSE OFF ROAD FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
- TCD8: WHERE THE SHIFTED SECTION IS SHORTER THAN 600 FEET, A DOUBLE REVERSE CURVE SIGN (W24-1) CAN BE USED INSTEAD OF THE FIRST REVERSE CURVE SIGN, AND THE SECOND REVERSE CURVE SIGN CAN BE OMITTED.
- TCD9: RUMBLE STRIPS ARE TO BE PLACED AS SPECIFIED IN THE CONTRACT. RUMBLE STRIPS ARE TO BE PLACED AS SPECIFIED IN THE CUNTRACT. IF NOT SPECIFIED IN THE CONTRACT, PLACE RUMBLE STRIPS AS SHOWN, AND IN ACCORDANCE WITH THE RUMBLE STRIP MANUFACTURER'S RECOMMENDATIONS. AN ARRAY OF RUMBLE STRIPS CONTAINS THREE RUMBLE STRIPS. PLACE THE RUMBLE STRIPS IN THE ARRAY AT A CONSISTENT DISTANCE, BETWEEN 10' AND 20' APART.
- TCD10: SEE THE WORK ZONE SAFETY AND MOBILITY MANUAL, PORTABLE CHANGEABLE MESSAGE SIGN GUIDELINES FOR RECCOMENDED AND CORRECT PCMS MESSAGING. STAGGER PCMS THAT ARE ON OPPOSING SIDES OF THE ROAD 1000 FEET FROM EACH OTHER.

RAMP NOTES

- RMP1: WHEN CONDITIONS ALLOW, E5-1 SIGNS MUST BE REMOVED OR COVERED AND CHANELIZING DEVICES MUST BE POSITIONED TO ENABLE RAMP TRAFFIC TO DIVERGE IN A FREE MANNER
- RMP2: STOP AND YIELD CONDITIONS SHOULD BE AVOIDED WHENEVER PRACTICAL. WHEN CONDITIONS SHOULD BE AVOIDED WHENEVER PRACTICAL. WHEN CONDITIONS WARRANT, R1-1 SIGNS MAY BE USED IN PLACE OF R1-2 SIGNS. WHEN R-1 SIGNS ARE USED, W3-1 SIGNS MUST BE USED IN PLACE OF W3-2 SIGNS. CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP TO COMPLETE WORK TO ALLOW AN ADEQUATE MERGE DISTANCE. WORK SHOULD BE EXPEDITED TO AVOID THE STOP AND/OR YIELD CONDITIONS.

FILE: 102-GEN-NOTES.dgn

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MAINTAINING TRAFFIC TYPICAL

102-GFN-NOTFS

TRAFFIC TYPICALS NOTE SHEET

DATE: MAY 2022 SHEET:

THE FOLLOWING NOTES APPLY IF CALLED FOR ON THE TRAFFIC TYPICAL

SIGNAL NOTES

- SIG1: EXISTING SIGNAL MUST BE EITHER 4-WAY FLASHING RED, BAGGED, OR TURNED OFF
- SIG2: SIGNAL IS IN OPERATION.
- SIG3: DELINEATE THE WORK ZONE AREA WITH 28 INCH CONES FOR DAYTIME WORK, OR 42 INCH CHANNELIZING DEVICES FOR NIGHTTIME WORK.
- SIG4: THE CONTRACTOR MUST HAVE A DESIGNATED SPOTTER IF THE AERIAL BUCKET TRUCK IS LOCATED OVER ACTIVE TRAVEL LANES.
- SIGS: THE LOWEST POINT OF THE BUCKET MAY NOT TRAVEL BELOW 14 FOOT VERTICAL CLEARANCE. THE CONTRACTOR MUST UTILIZE AN ALTERNATE SET UP, OR PLACE THE INTERSECTION IN A 4 WAY STOP IF THE 14 FOOT VERTICAL CLEARANCE IS COMPROMIZED. USE TRAFFIC REGULATORS TO CONTROL TRAFFIC THROUGH THE INTERSECTION WHEN TRAFFIC IS PLACED IN A 4 WAY STOP.
- SIG6: DELINEATE THE TRUCK WITH CHANNELIZING DEVICES. THE POSITION OF THE TRUCK MAY BE MOVED TO FACILITATE WORK.

MAINTENANCE AND SURVEYING NOTES

- MS1: WHENEVER STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE SHADOW VEHICLES SHOULD MAINTAIN THE RECOMENDED DISTANCE FROM THE WORK AREA AND PROCEED AT THE SAME SPEED. THE SHADOW VEHICLE SHOULD SLOW DOWN AND TRAVEL AT A FARTHER DISTANCE TO PROVIDE ADEQUATE SIGHT DISTANCE IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES.
- MS2: WORKERS OUTSIDE OF VEHICLES SHOULD WORK WITHIN 150' OF WORK VEHICLES WITH AN ACTIVATED BEACON, BETWEEN THE "BEGIN WORK CONVOY" SIGN AND THE "END WORK CONVOY" SIGN, OR BETWEEN THE "WORK ZONE BEGINS" AND "END ROAD WORK" SIGN.
- MS3: WORK OR SHADOW VEHICLES WITH OR WITHOUT A TMA MAY BE USED TO SEPARATE THE WORK SPACE FROM TRAFFIC. IF USED, THE VEHICLES SHOULD BE PARKED ACCORDING TO THE ROLL AHEAD DISTANCE TABLES
- MS4: WORK AND SHADOW VEHICLES SHALL BE APPROPRIATELY EQUIPPED WITH AN ACTIVATED AMBER BEACON.
- MS5: WHEN WORKERS ARE OUTSIDE THEIR VEHICLES IN AN EXISTING LANE WHILE A MOBILE OPERATION IS OCCURRING DURING THE NIGHTTIME HOURS, CHANNELIZING DEVICES TO DELINEATE OPEN OR CLOSED LANES AT 50 FT SPACING MUST BE USED. AN EXAMPLE OF AN OPERATION (BUT NOT LIMITED TO) IS THE LAYOUT OF CONCRETE PATCHES.
- MS6: W21-6 AND W20-1 SIGNS MAY BE SUBSTITUTED AS DETERMINED BY THE TYPE OF WORK TAKING PLACE AS PER THE ENGINEER.

ENDOT
Michigan Department of Transportation

FILE: 102-GEN-NOTES.dgn

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MAINTAINING TRAFFIC TYPICAL

102-GEN-NOTES

TRAFFIC TYPICALS
NOTE SHEET

DATE: MAY 2022 SHEET:

SIGN NUMBER KEY **EXIT EXIT EXIT EXIT** 20 END ROAD WORK ROAD WORK A OPEN CLOSED **30 MPH** ONLY MPH NEXT XX MILES E5-2a G20-1 G20-2 F5-2 E5-3 F13-1P F13-1aP 60" x 24" 48" x 24" 48" x 36" 48" x 36" 48" x 36" VAR x 24" 36" x 24" 48" x 48" 60" x 48" XX BUSINESS BUSINESS PILOT CAR Χ̈́X XΧ̈́X FOLLOW ME G20-4 I-6a 18" × 18' 24" × 24" 30" × 30' M1-336" x 18" 18" x 18" 24" x 24" 36" x 36" 22.5" x 18" 30" x 24" 45" x 36" 18" x 18" 24" x 24" 36" x 36" 22.5" × 18" 30" × 24" 45" × 36" 18" x 18" 24" x 24" 36" x 36" 22.5" x 18" 30" x 24" 45" x 36" 48" x 48" 48" x 48" 48" x 48" 60" x 48" XX XX XXX EAST North BARAGA X X X M1-6 22.5" x 18" 30" x 24" M1-5 M3-1 M3-2 M1-6 18" × 18" 24" × 24" M1-4 M1-4 12" x 6" 18" x 9" 12" x 6" 18" x 9" 18" × 18" 24" × 24" 36" × 36" 48" × 48" 18" × 18" 24" × 24" 30" × 30" 36" × 36" 22.5" × 18" 18" x 18" 24" x 24" 30" x 24" 45" x 36" 24" x 12" 30" x 15" 24" x 12" 30" x 15" 36" x 18" 60" x 48" 36" x 18' **SOUTH** WEST TO TRUCK ALTERNATE ALT BY-PASS BUSINESS M4-1 M4-1a M4-2 M4-3 M4-4 M4-5 M3-3 M3-4 12" x 6" 18" x 9" 24" x 12" 30" x 15" 12" X 6" 18" x 9" 24" X 12" 30" X 15" 36" X 18" 12" x 6" 18" x 9" 12" × 6" 18" × 9" 12" x 6" 18" x 9" 24" x 12" 30" x 15" 12" x 6" 18" x 9" 12" x 6" 18" x 9" 18" x 9" 24" x 12" 30" x 15" 36" x 18" 24" x 12" 30" x 15" DETOUR DETOUR END END END DETOUR TEMPORARY TEMP DETOUR M4-8b 24" x 12" M4-7 M4-7a M4-8 M4-8d 24" × 18" M4 - 6M4-9L 30" x 24" 48" x 36" 60" x 48" 12" x 6" 18" x 9" 24" x 12" 30" x 15" 36" x 18" 36" x 18" 36" x 18" DETOUR DETOUR DETOUR DETOUR DETOUR o≸to • + **→** M4-9j 30" x 24" 48" x 36" 60" x 48" M4-9kL M4-9kR M4-9mL M4-9mR M4-9dL M4-9e 30" x 30" 48" x 42" 12" x 18" 12" x 18 12" x 18 60" x 54" 60" x 54" 60" x 54" 60" x 54" фb A **| |** አ FOLLOW DETOUR DETOUR END **|+**| |→| | ♠ | END M4-11a M4-10I M4-10R 12" X 6' M4-9f M4-9h M4-9i M4-9gL M4-9gR 18" x 9" 12" x 18" 12" x 18" 12" x 24" 12" x 18" 24" X 12" 30" X 15" 36" X 18" M5-11 M5-2L M5-2R 12" x 9" 21" x 15" 12" x 9" 21" x 15" 12" x 9" 18" x 12" 21" x 15" 12" × 9" 21" × 15" 30" × 21" 12" x 9" 21" x 15" 30" x 21" 12" x 9" 21" x 15" 12" × 9" 18" × 12" 21" × 15" 12" x 9" 18" x 12" 21" x 15" 30" x 21" 30" x 21" 30" x 21" M6-6L 12" × 9" 18" × 12" 21" × 15" M6-2R 12" x 9" M6-7L 12" × 9" M6-7R 12" x 9" M6-3 12" × 9" 18" × 12" 21" × 15" M6-4 M6-5 12" x 9" M6-6R 12" x 9" 12" x 9" 18" x 12" 21" x 15" 30" x 21" SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS DATE: MAINTAINING TRAFFIC TYPICAL JUNE 2021 NOT TO SCALE TRAFFIC TYPICALS SHEET: SIGN SHEET 103-GEN-SIGN FILE: 103-GEN-SIGN.dgn 1 OF 5















R1-1a 18" x 18" 24" x 24"









36" x 48"





24" x 24" 30" x 30" 36" x 36" x 48"



24" x 24" 30" x 30" 36" x 36" 48" x 48"



24" x 24" 36" x 36" 24" x 24" 30" x 30" 36" x 36" 48" x 48' x 48"







48" x 60"







MUST TURN RIGHT R3-7R 30" x 30" 36" x 36"







R4-1 12" × 18" 18" × 24" 24" x 30" 36" x 48" 48" x 60"









18" x 24" 24" x 30" 36" x 48" 48" x 60"



18" × 24" 24" × 30" 36" × 48" 48" × 60"



RIGHT LANE

30" × 30" 36" × 36" 48" × 48"

WRONG R5-1a 30" x 18" 36" x 24" 42" x 30"





48" x 48"





R5-18e 72" x 12"



48" x 60"

FORM ONE RIGHT R5-18q









R6-2L 12" x 16" 18" × 24" 24" × 30" 36" × 48" 48" x 60"



12" × 16" 18" × 24" 24" × 30" 36" × 48"



R8-3 12" x 12" 18" x 18" 24" x 24" 36" x 36"



SIDEWALK CLOSED R9-9 24" × 12" 30" × 18"





24" x 12" 48" x 36"



24" x 12" 48" x 36"



R9-11al 24" x 12" 48" x 24"

SIDEWALK CLOSED CROSS HERE

R9-11aR 24" x 12" 48" x 24"



ROAD **CLOSED** R11-2

RAMP CLOSED R11-2a 48" x 30"

EXIT CLOSED R11-2b 48" x 30"



R11-2c

60" x 30"

ROAD CLOSED IO MILES AHEAD LOCAL TRAFFIC ONLY R11-3a



ROAD CLOSED THRU TRAFFIC



60" x 30" 60" x 30" SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



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NO: 103-GEN-SIGN

MAINTAINING TRAFFIC TYPICAL

TRAFFIC TYPICALS SIGN SHEET

DATE: JUNE 2021 SHEET:



18" x 18" 24" x 24"





18" × 18" 24" × 24" 30" × 30" 36" × 36" 48" × 48"











24" x 24" 30" x 30" 36" x 36" 48" x 48"

18" x 24" 24" x 30"



30" x 30" 36" x 36" 48" x 48"



18" × 18" 24" × 24" 30" x 30" 36" x 36"

18" × 18" 24" × 24" 30" × 30" 36" × 36" 48" × 48"



24" x 24" 30" x 30" 36" x 36"

48" x 48"

W24-1bL 30" x 30" 36" x 36"

18" × 18" 30" × 30"

36" x 36"



18" × 18" 24" × 24" 30" x 30" 36" x 36" 48" x 48"

24" x 24" 30" x 30" 36" x 36"

48" x 48"

W24-1bR

30" x 30" 36" x 36"

BE

PREPARED

JO STOP

W3-4 30" × 30" 36" × 36" 48" × 48"

60" x 60"

48" x



24" × 24" 30" × 30" 36" × 36"

24" × 12" 36" × 18" 48" × 24" 60" × 30" 96" × 48"

48"



36" x 36" 48" x 48"





W1-3L 18" × 18" 24" × 24" 30" × 30" 36" × 36" 48" × 48"







18" × 18" 24" × 24"

30" x 30" 36" x 36"

48"







24" x 24" 30" x 30" 36" x 36"

48" x 48"



12" × 18" 18" × 24" 24" × 30" 30" × 36" 36" x









36" × 36" 48" × 48"



W3-5a 30" x 30" 36" x 36" 48" x 48" 60" x 60"



W3-5b 30" x 30" 36" x 36" 48" x 48"





18" × 18" 24" × 24" 30" × 30" 36" × 36" 48" × 48"























24" x 24" 30" x 30" 36" x 36"















30" x 30" 36" x 36" 48" x 48"







24" × 24" 30" × 30" 36" × 36" 48" × 48"





SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



FILE: 103-GEN-SIGN.dgn

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103-GEN-SIGN

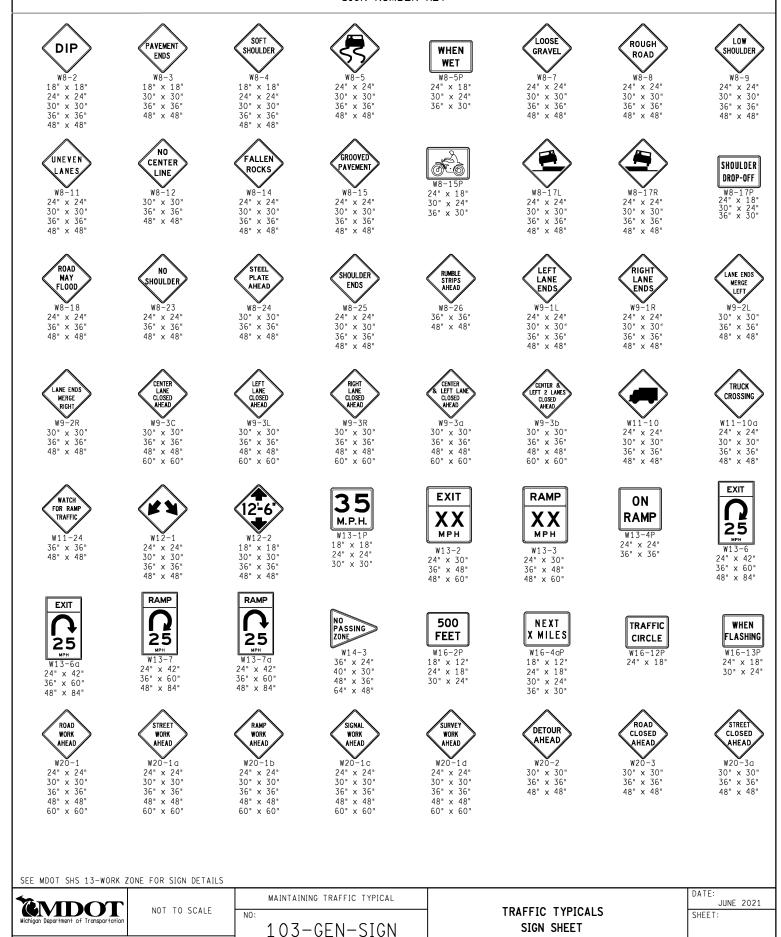
MAINTAINING TRAFFIC TYPICAL

TRAFFIC TYPICALS SIGN SHEET

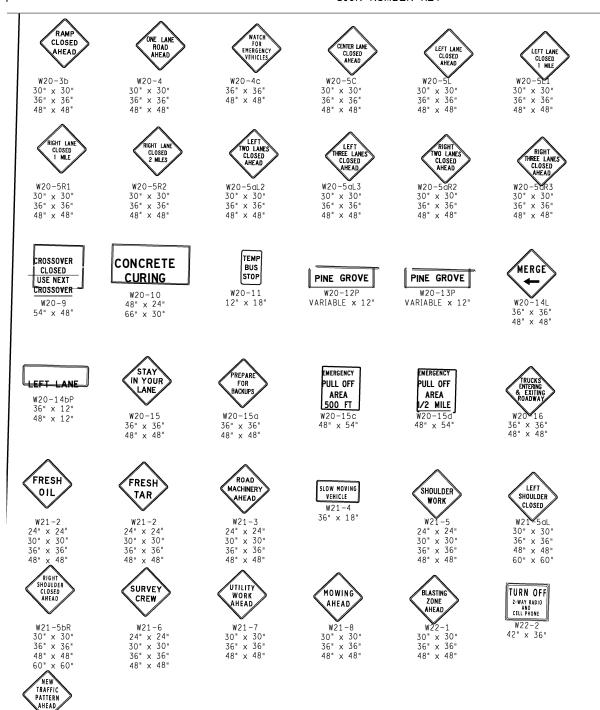
DATE: JUNE 2021 SHEET:

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FILE: 103-GEN-SIGN.dgn



W23-2 36" x 36" 48" x 48"



LEFT LANE CLOSED 2 MILES

W20-

30" × 30" 36" × 36"

48" x 48"

30" x 30" 36" x 36"

MERGE

W20-14R

36" x 36" 48" x 48"

> EXIT OPEN AHEAD

W201

36" x 36" 48" x 48"

RIGHT

SHOULDER

CLOSED

W2 SaR

30" x 30" 36" x 36"

48" x 48" 60" x 60"

END

BLASTING

ZONE

36" x 30" 42" x 36"

x 48"

48"



NO SPEED REDUCTION THROUGH WORK ZONE SHOULDER SHOULDER 1/3 L REMAINING SIGNING SEQUENCE PER APPROPRIATE TYPICAL WORK AREA VARIES D 2D 100' SPEED WORK ROAD END ZONE WORK ROAD WORK **BEGINS** G20-2 R5-18c R2-1 EXISTING SPEED REDUCED SPEED THROUGH WORK 70NE SHOULDER SHOULDER 1/3 L REMAINING SIGNING SEQUENCE PER APPROPRIATE TYPICAL D D WORK AREA VARIES 100'-WORK ROAD END ZONE WORK ROAD WORK XX XX REGINS G20-2 R5-18c R2-1 R2-1 REDUCED EXISTING SPEED SPEED REDUCED SPEED THROUGH WORK ZONE USING "WHERE WORKERS PRESENT" SHOULDER SHOULDER 1/3 L REMAINING SIGNING SEQUENCE PER APPROPRIATE TYPICAL WORK AREA VARIES 100'-PLACE R2-1 AND R2-1g SIGNS SIDE BY SIDE. WHEN PHYSICAL LIMITATIONS RESTRICT PLACEMENT AS INDICATED, SPEED LIMIT SPEED LIMIT WORK ROAD WORK END XXXX ZONE THE R2-1g SIGN SHALL BE PLACED ADDITIONAL DISTANCE "D" AFTER THE XX ROAD WORK 45 **BEGINS** AHEAD G20-2 R2-1 R2-1 SIGN. EXISTING REDUCED SPEED NOT TO SCALE DATE: MAINTAINING TRAFFIC TYPICAL MAY 2021 NOT TO SCALE SPEED LIMIT LAYOUT SHEET: 107-GEN-SPEED FILE: 107-GEN-SPEED.dgn 1 OF 2

REDUCED SPEED FROM 75 TO 60 THROUGH WORK ZONE SHOULDER SHOULDER 1/3 L REMAINING SIGNING SEQUENCE PER APPROPRIATE TYPICAL WORK AREA VARIES 100' XXXX XXXX SPEED LIMIT SPEED WORK ROAD END

60

R2-1

REDUCED

SPEED

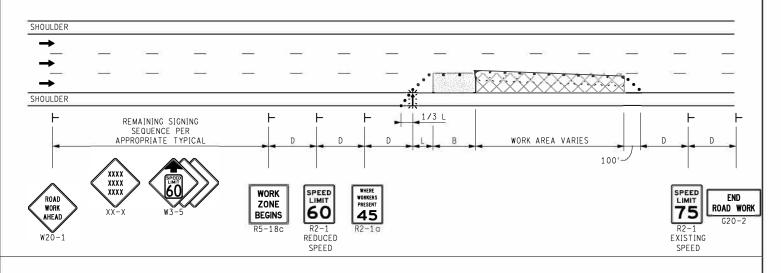
ZONE

BEGINS

R5-18c

WORK

REDUCED SPEED FROM 75 TO 45 WWP THROUGH WORK ZONE

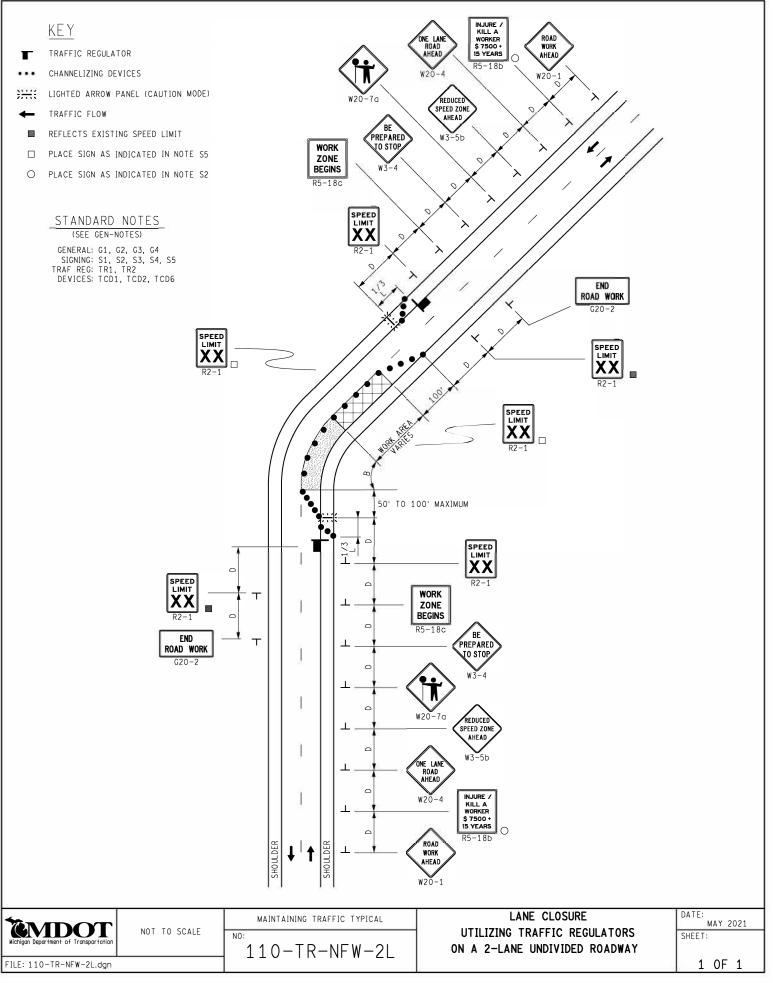


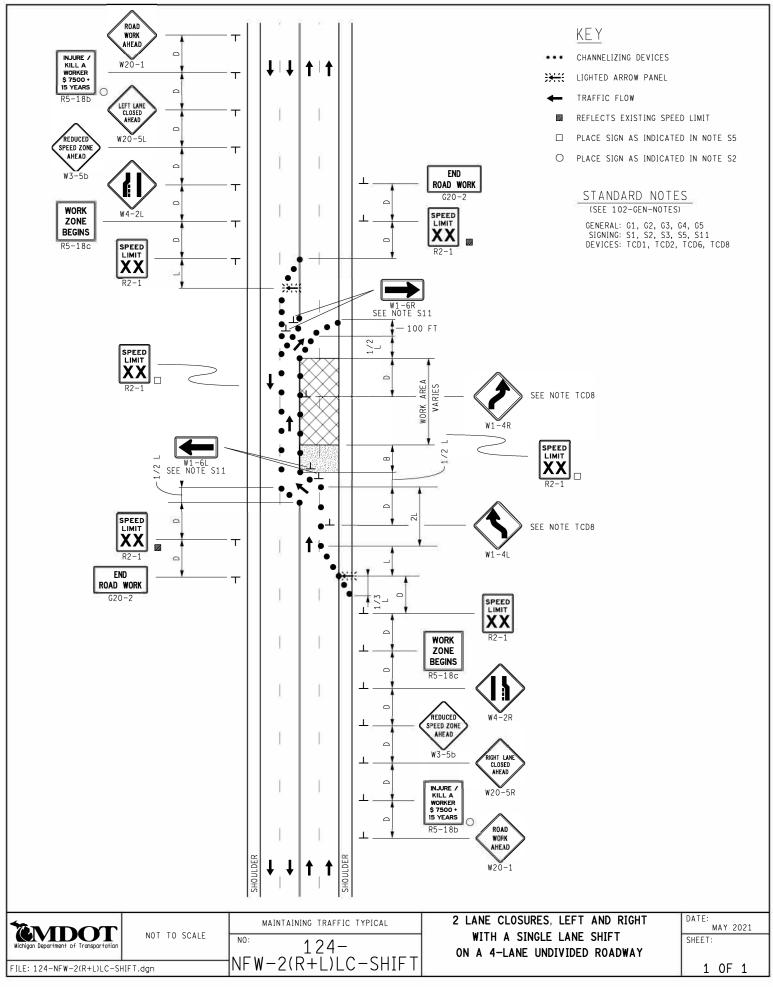
NOT TO SCALE DATE: MAINTAINING TRAFFIC TYPICAL MAY 2021 NOT TO SCALE SPEED LIMIT LAYOUT NO: SHEET: 107-GEN-SPEED FILE: 107-GEN-SPEED.dgn 2 OF 2

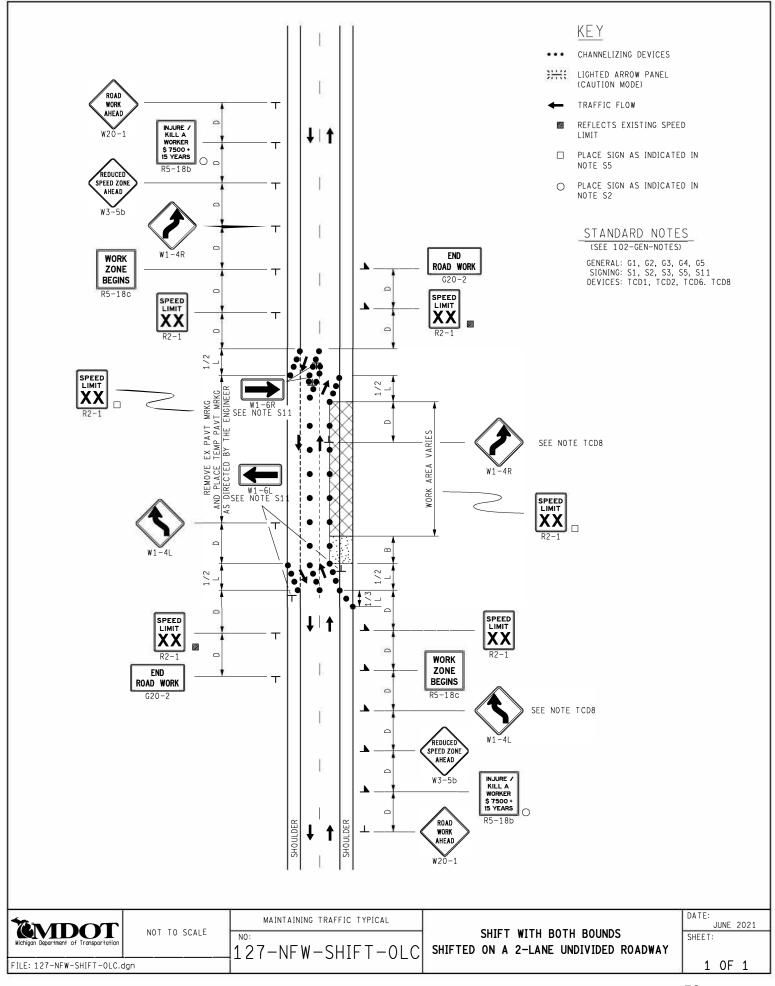
ROAD WORK

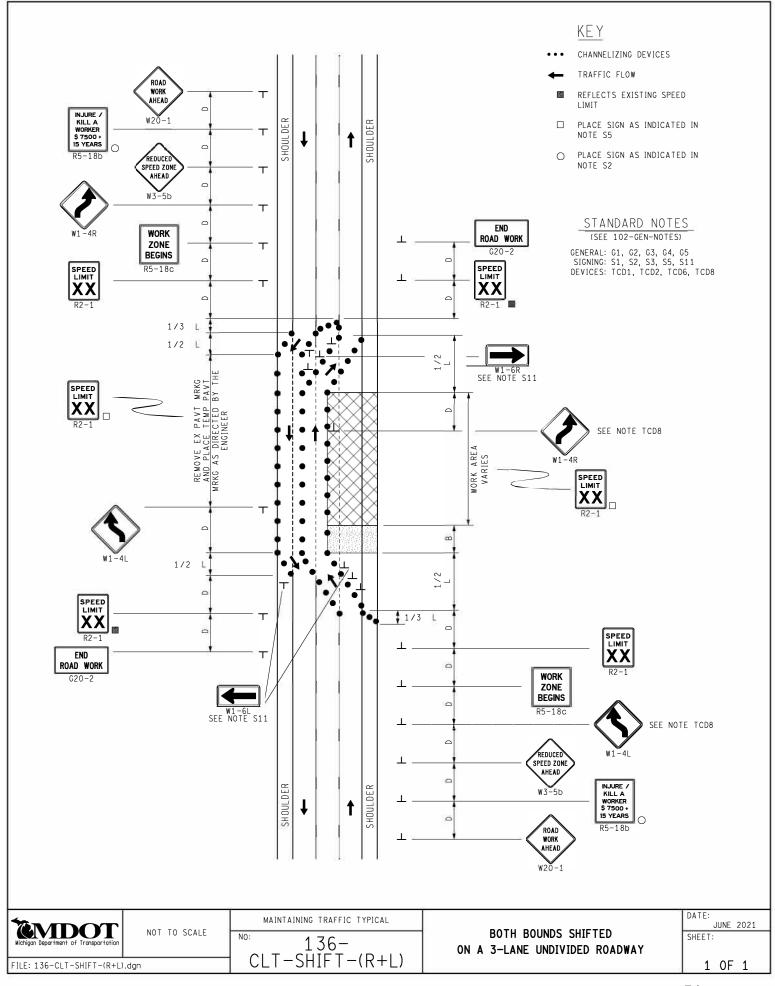
G20-2

EXISTING









SIGN MATERIAL SELECTION TABLE

	SIGN MATERIAL TYPE						
SIGN SIZE	TYPE I	TYPE II	TYPE III				
≤ 36" X 36"		X	X				
>36" X 36" ≤ 96" TO WIDE		X					
> 96" WIDE TO 144" WIDE	X	X					
> 144" WIDE	X						

TYPE I TYPE II TYPE III ALUMINUM SHEET

ALUMINUM EXTRUSION PLYWOOD

ROUNDING OF CORNERS IS NOT REQUIRED FOR TYPE FOR ITSIGNS. VERTICAL JOINTS ARE NOT PERMITTED. HORIZONTIAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE NOT PERMITTED.

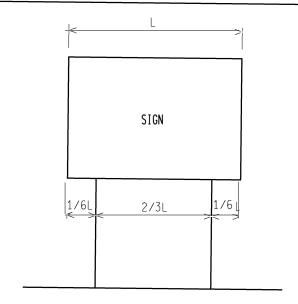
POST SIZE REQUIREMENTS TABLE

	POST TYPE						
SIGN AREA (ft²)	U-CHANNEL STEEL	SQUARE TUBULAR STEEL	WOOD				
≤9	1 - 3 lb/ft*	1 - 2" 12 or 14 GA*	N/A				
9 ≤ 20	2 - 3 lb/ft	2 - 2" 12 or 14 GA	1 - 4" X 6"*				
> 20 ≤ 30	N/A	N/A	2 - 4" X 6"				
> 30 ≤ 60	N/A	N/A	2 - 6" X 8"				
> 60 ≤ 84	N/A	N/A	3 - 6" X 8"				

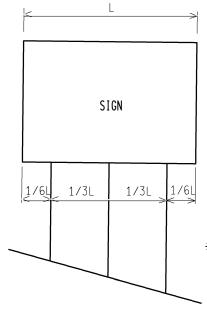
*SIGNS 4 FEET AND GREATER IN WIDTH REQUIRE 2 POSTS. SIGNS GREATER THAN 8 FEET IN WIDTH REQUIRE 2 OR 3 WOOD POSTS DEPENDING ON AREA OF SIGN. A MAXIMUM OF 2 POSTS WITHIN A 7' PATH IS PERMITTED.

EMDOT	DEPARTMENT DIRECTOR Kirk T. Steudle		N DEPARTMENT EAU OF DEVELOPMENT	OF TRANSPORTAT STANDARD PLAN FOR	ION
PREPARED BY DESIGN DIVISION	APPROVED BY:	GRC SUPPOI	0110 0111	VEN SIGN TEMP SIGN	•
DRAWN BY: CON/ECH CHECKED BY: AUG	APPROVED BY:	F.H.W.A. APPROVAL	11/2/2017 PLAN DATE	WZD-100-A	SHEET 1 OF 11

2 POST SIGN SUPPORT SPACING



3 POST SIGN SUPPORT SPACING



* FOR ALL 11' AND 12' LONG SIGNS ON 3 WOOD SUPPORTS, SPREAD POSTS SO AS TO HAVE A 8'MIN. TO 9'MAX. DISTANCE BETWEEN OUTSIDE POSTS.

PLAN DATE

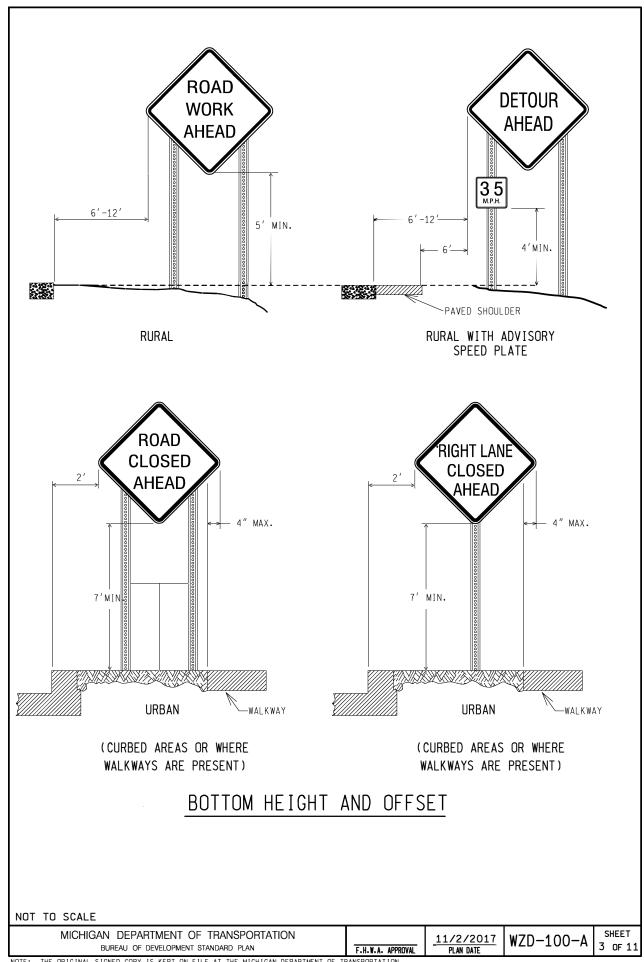
NOT TO SCALE

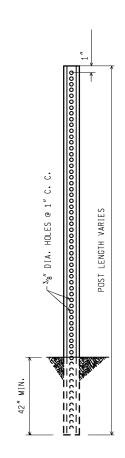
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN

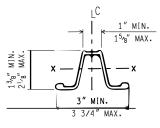
11/2/2017 F.H.W.A. APPROVAL

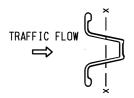
WZD-100-A

SHEET 2 OF 11









WEIGHT = 3 lbs/ft SECT. MOD. X.-X. = 0.31 CUBIC INCHES MIN.

3 Ib. U - CHANNEL STEEL POST (NO SPLICE)

MOUNT SIGN ON OPEN FACE OF U - CHANNEL STEEL POST

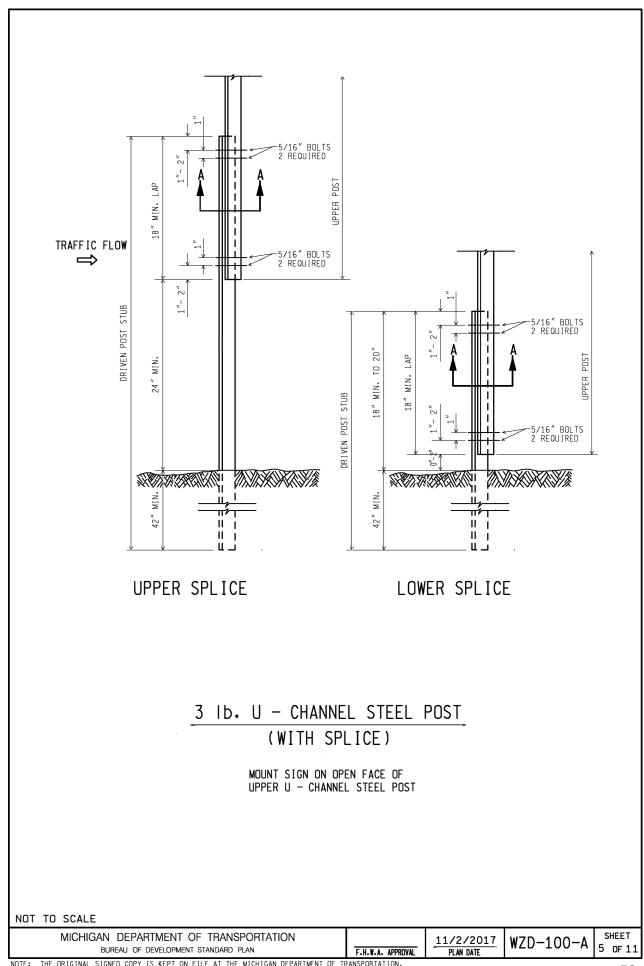
NOT TO SCALE

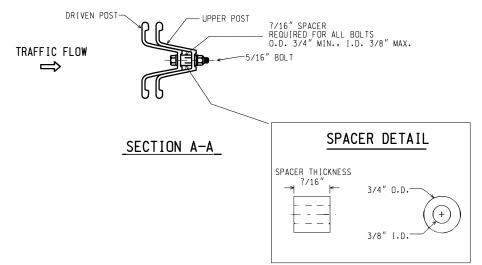
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN

F.H.W.A. APPROVAL

11/2/2017 WZD-100-A

SHEET 4 OF 11





NOTES:

- 1. THE SPACER THICKNESS SHALL BE 1/16" LESS THAN THE GAP BETWEEN THE POST WHEN POSITIONED IN THE UNBOLTED CONFIGURATION.
- 2. THE EXTERIOR BOLT (CLOSEST TO LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN A PREPUNCHED HOLE 1" to 2" FROM THE END OF THE LAP.
- 3. THE INTERIOR BOLT (FARTHEST FROM LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN THE NEXT PREPUNCHED HOLE.
- 4. THE DRIVEN POST SHALL ALWAYS BE MOUNTED IN FRONT OF THE UPPER POST WITH RESPECT TO THE ADJACENT ONCOMING TRAFFIC, REGARDLESS OF THE DIRECTION THE SIGN IS FACING.
- 5. THE SPLICE LAP SHALL BE FASTENED BY FOUR-5/16" DIA. GALVANIZED A449 BOLTS (SAE J429 GRADE 5) OR GALVANIZED A325 BOLTS.

3 Ib. U - CHANNEL STEEL POST (WITH SPLICE)

NOT	TΩ	SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN

BUREAU OF DEVELOPMENT STANDARD PLAN

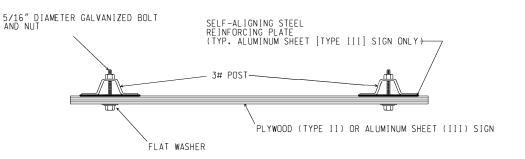
BUREAU OF DEVELOPMENT STANDARD PLAN

F.H.V.A. APPROVAL

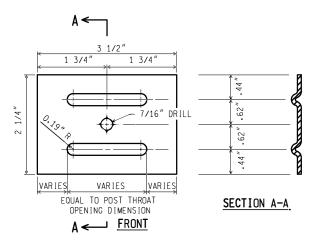
11/2/2017
PLAN DATE

WZD-100-A

SHEET
6 OF 11



SIGN TO 3 Ib. POST CONNECTION



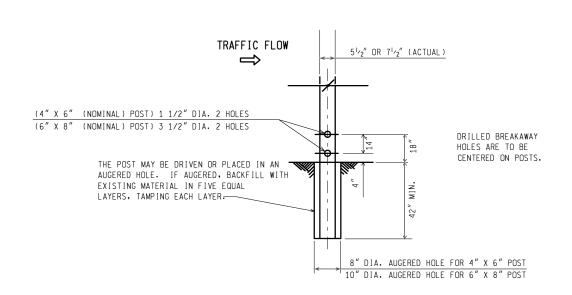
NOTES: (FOR STEEL SIGN REINF' PLATE)

- 1. MATERIAL: 12 GAUGE CARBON STEEL.
- 2. TOLERANCE ON ALL DIMENSIONS ± 0.0625"
- 3. FINISH-AFTER STAMPING AND PUNCHING, GALVANIZE ACCORDING TO CURRENT SPECIFICATIONS FOR ZINC (HOT GALVANIZE) COATINGS ON PRODUCTS FABRICATED FROM PLATES OR STRIPS

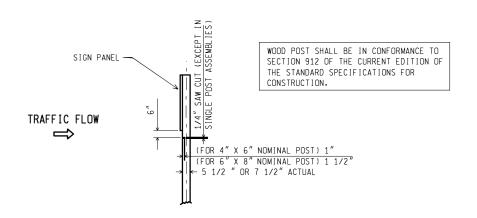
STEEL SIGN REINFORCING PLATE REQUIRED FOR TYPE III SIGNS ONLY

3 Ib. U - CHANNEL STEEL POST SIGN CONNECTION

NOT TO SCALE				
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN	F.H.W.A. APPROVAL	11/2/2017 PLAN DATE	WZD-100-A	SHEET 7 OF 11



WOOD POST BREAKAWAY HOLES/ DIRECT EMBEDMENT DETAILS



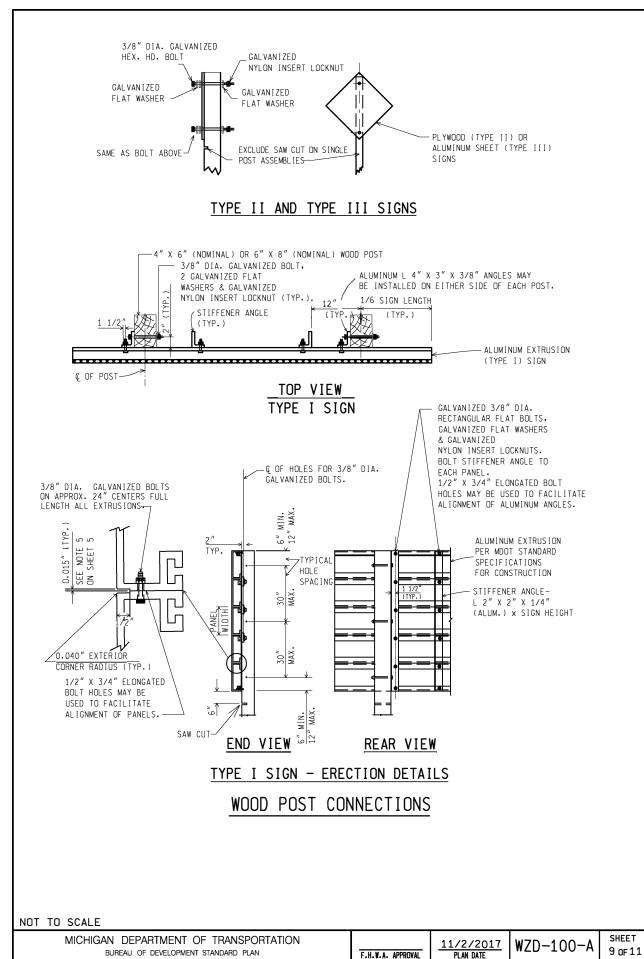
SAW CUT DETAIL (MULTIPLE POST INSTALLATIONS)

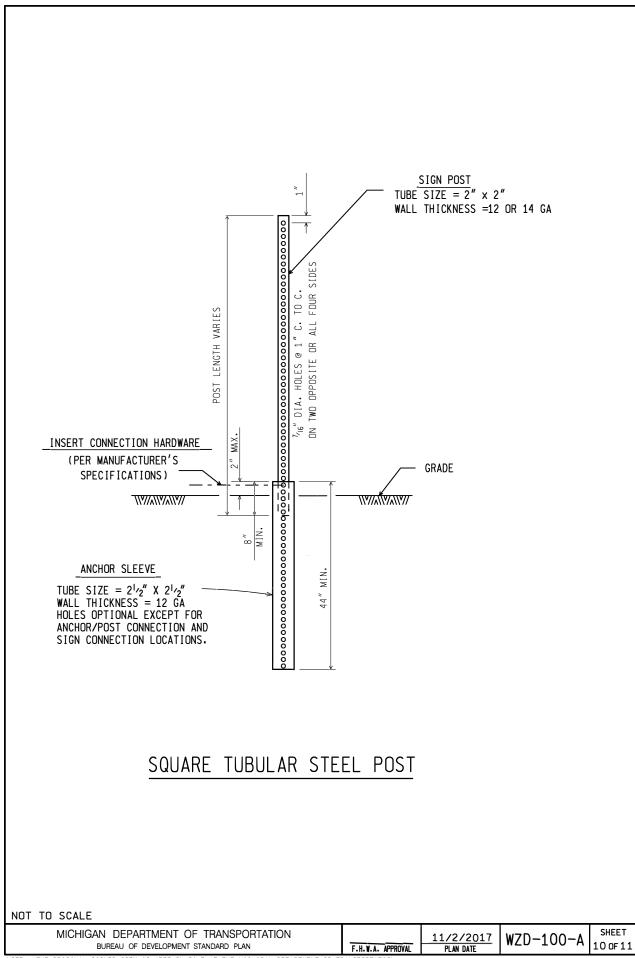
WOOD POST DETAILS

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION 11/2/2017 WZD-100-A 8 of 11 BUREAU OF DEVELOPMENT STANDARD PLAN F.H.W.A. APPROVAL PLAN DATE

SHEET



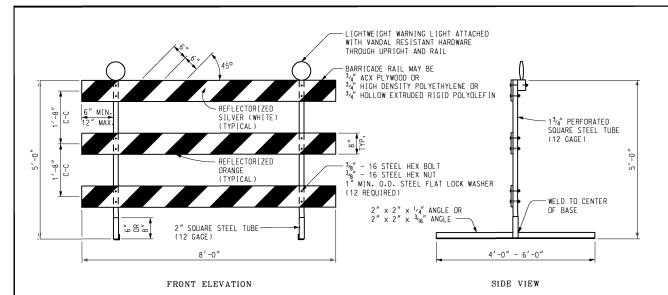


GENERAL NOTES:

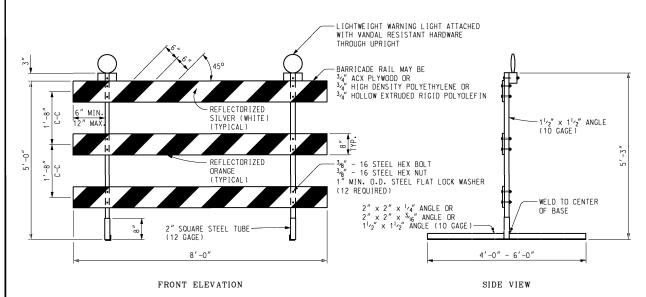
- 1. A MAXIMUM OF TWO POSTS WITHIN A 7 FOOT PATH IS PERMITTED.
- 2. ALL SIGN POSTS SHALL COMPLY WITH NCHRP 350.
- 3. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 42".
- 4. BRACING OF POST IS NOT PERMITTED.
- 5. SIGN SHALL BE LEVEL, AND UPRIGHT FOR THE DURATION OF INSTALLATION.
- 6. ERECT POSTS SO THE SIGN FACE AND SUPPORTS DO NOT VARY FROM PLUMB BY MORE THAN 3/16" IN 3'. PROVIDE A CENTER-TO-CENTER DISTANCE BETWEEN POSTS WITHIN 2 PERCENT OF PLAN DISTANCE.
- 7. NO MORE THAN ONE SPLICE PER POST, AS SHOWN, WILL BE PERMITTED.
- 8. POST TYPES SHALL NOT BE MIXED WITHIN A SIGN SUPPORT INSTALLATION.
- 9. NO VERTICAL JOINTS ARE PERMITTED IN SIGN. NO HORIZONTIAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE PERMITTED IN SIGN
- 10. REMOVE SIGN POSTS AND/OR POST STUBS IN THEIR ENTIRETY WHEN NO LONGER REQUIRED.
- 11. ALL LABOR, MATERIALS, AND EQUIPMENT, INCLUDING TEMPORARY SUPPORTS REQUIRED TO INSTALL, MAINTAIN, RELOCATE, AND/OR REMOVE THE TEMPORARY SIGN, INCLUDING SUPPORTS, ARE CONSIDERED TO BE INCLUDED IN THE COST OF THE TEMPORARY SIGN.
- 12. SAW CUTS IN WOOD POSTS ARE TO BE PARALLEL TO THE BOTTOM OF THE SIGN.
- 13. POSTS SHALL NOT EXTEND MORE THAN 4" ABOVE TOP OF SIGN.
- 14. TEMPORARY WOOD SUPPORTS DO NOT REQUIRE PRESERVATIVE TREATMENT.

NOT TO SCALE

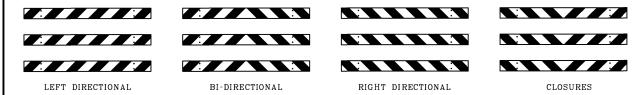
F.H.W.A. APPROVAL



PERFORATED SQUARE STEEL TUBE OPTION



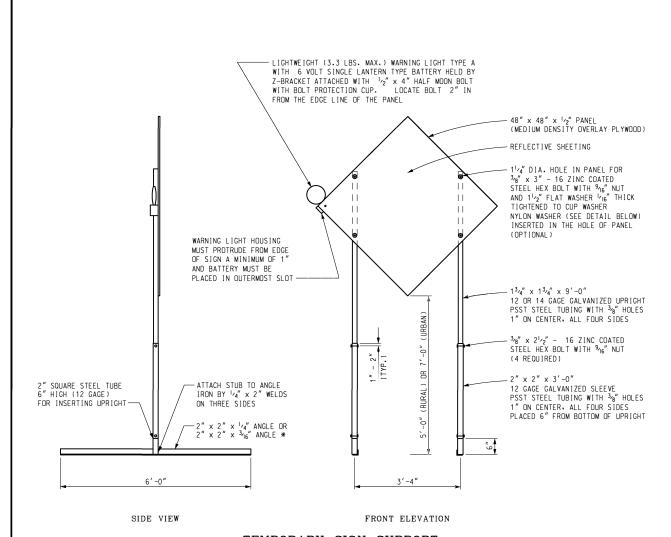
ANGLE IRON OPTION



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 $http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm$

EMDOT Radagen Department of Transpartetion	DEPARTMENT DIRECTOR Paul C. Ajegba	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL FOR		
PREPARED BY OPERATIONS FIELD SERVICES	APPROVED BY:	Temporary Traffic Control Devices		
DRAWN BY: _ECH	APPROVED BY: (SPECIAL DETAIL) DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT	F.H. V.A. APPROVAL 6/16/22 WZD-125-E SHEET 186 3		

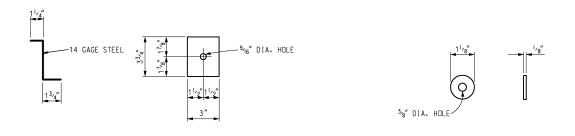


TEMPORARY SIGN SUPPORT

(WARNING LIGHT PLACED ON SIDE CLOSEST TO TRAFFIC)

* SIGN STAND IS BALLASTED WITH FOUR OR MORE 35 LB SANDBAGS. A MINIMUM OF ONE ON EACH END.

UPRIGHTS SHALL NOT EXTEND ABOVE THE SIGN PANEL.

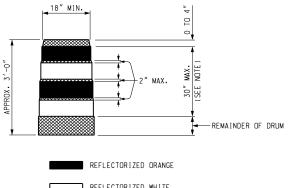


Other temporary sign supports meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

OPTIONAL NYLON WASHER

Z-BRACKET DETAIL



☐ REFLECTORIZED WHITE

NON REFLECTORIZED ORANGE

NOTE:
DRUMS SHALL HAVE AT LEAST 4 HORIZONTAL REFLECTORIZED
STRIPES (2 DRANGE AND 2 WHITE) OF 6" UNIFORM WIDTH,
ALTERNATING IN COLOR WITH THE TOPMOST REFLECTORIZED
STRIPE BEING DRANGE, NON REFLECTORIZED SPACES BETWEEN
THE HORIZONTAL REFLECTORIZED ORANGE AND WHITE STRIPES SHALL BE ORANGE IN COLOR AND EQUAL IN WIDTH.

PLASTIC DRUM

NOTES:

 $2^{\prime\prime}$ PERFORATED SQUARE STEEL TUBES MAY BE USED TO FABRICATE THE HORIZONTAL BASE OF THE TYPE 111 BARICADE.

WARNING LIGHTS SHALL BE PLACED ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ALL OTHER PROVISIONS IN THE CONTRACT ON TYPE III BARRICADES.

SEE ROAD STANDARD PLANS R-113-SERIES FOR TEMPORARY CROSSOVERS FOR DIVIDED ROADWAY, AND R-126-SERIES FOR TYPICAL LOCATION AND SPACING OF PLASTIC DRUMS FOR PLACEMENT OF TEMORARY CONCRETE BARRIER.

SIGNS, BARRICADES, AND PLASTIC DRUMS SHALL BE FACED WITH PRESSURE-SENSITIVE REFLECTIVE SHEETING ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SANDBAGS SHALL BE USED WHEN SUPPLEMENTAL WEIGHTS ARE 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.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL

(SPECIAL DETAIL) F.H.W.A. APPROVAL 6/16/22 PLAN DATE

WZD-125-E

SHEET ³68 ³

CITY OF SAULT STE. MARIE

NOTICE TO BIDDERS FOR

UTILITY COORDINATION

SSM 1 of 1 3/2024

- a. **Description.** The contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the Michigan Department of Transportation Current Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the Michigan Department of Transportation Current Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 108.09 of the Michigan Department of Transportation Current Standard Specifications for Construction.
- **b. Public Utilities.** The following Public Utilities have facilities located within and/or adjacent to the project CIA:

UTILITY COMPANY	CONTACT PERSON(S)	PHONE NO.
CITY OF SAULT STE. MARIE	Kirk Tews	906-632-8981
Water & Sewer Department	989-631-0285 (cell)	
1200 E. Easterday Avenue Sault Ste. Marie, MI 49783	Brian Masterson	
Sault Ste. Marie, Mi 49765	(906) 322-7422 (cell)	
DTE ENERGY / MICH CON GAS	Rich Ackerman	906-632-3330
co.	906-630-1066 (cell)	
Local Office:	richard.ackerman@dteenergy.com	906-632-3347
1125 E. Easterday Avenue	Justin Fisher	
Sault Ste. Marie, MI 49783	DTE Permit Staff	
	Justin.fisher@dteenergy.com	
	906.630.2133	
Large Gas Service Requests	Zachary Kerfoot	Work: 231-932-284
		Cell: 231-499-
		7331
Small Gas Service Requests	Jeannine Najmowicz	Work: 989-356-2499
		Cell: 734-564-
		8618
Main Office: (Plan Reviews	Matt Logan	
Precon Mtgs.)	231-492-7479 (cell)	
1250 Mich Con Lane, S.W.	matthew.logan@dteenergy.com	
PO Box 279		
Kalkaska, MI 49646	look Fimillor	
CLOVERLAND ELECTRIC	Josh Eimiller	
COOPERATIVE	System Engineer	
2916 W. M-28	906.632-5153 (phone) 906-440-4257 (cell)	
Dafter, MI 49724	jeimiller@cloverland.com	
	Johanna Wiltfong	906-632-5191
	Easements & Permits	906-632-3191
	Lasements & Fernits	300-440-7371
	jwiltfong@cloverland.com	

	Megan Atkinson Staking Technician 906.632.5157 (phone) 906.203.5501 (cell) matkinson@cloverland.com Jacob Mitchell Staking Technician 906.632.5149 (phone) 906.440.7573 (cell) jmitchell@cloverland.com	
AT&T (SBC Ameritech) 310 W. 7th Avenue	Mike Anderson	906-632-9901
Sault Ste. Marie, MI 49783	(906) 440-4478 (cell) MA1421@att.com	Retiring end of April
	Jeff Collard 514 E Mitchell St Petoskey MI 49770 (586)764-8260 Email - <u>JC7632@att.com</u>	
CHARTER COMMUNICATIONS CO. 2682 Ashmun Street Sault Ste. Marie, MI 49783	Matt Claycomb Const. Supervisor Cell (231) 463-1903 matt.claycomb@charter.com	989-671-7255
(Plan Reviews and Precon Mtgs.)	Craig Purple Const. Coor. II 906-440-1005 (cell) craig.purple@charter.com	
Main Office 359 U.S. 41 EastNegaunee, MI 49866	Kyle Adams U.P. Supervisor kyle.adams@charter.com	906-748-8469 – Office 616-607-4916 – Cell
Peninsula Fiber Network (PFN) 9984 W. State St. Brimley, MI 49715	Ron Deneve (906) 248-3211 rdeneve@jamadots.net Rejean Houle (906) 353-6644 rhoule@up.net	

Peninsula Fib 1901 W. Ridg	er Network (PFN) ge St., Suite 2	Jon French-Project Manager 906-353-6644 work	
Marquette, N	ЛІ 49855-2485	jfrench@up.net	

Owners of Public Utilities will not be required by the City/Department 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.